

**UNIVERSITAS INDONESIA**

**KEPENTINGAN INDONESIA TERHADAP ALIH  
TEKNOLOGI DALAM UPAYA PENURUNAN EMISI DI  
DALAM KERANGKA KERJA PERSERIKATAN BANGSA-  
BANGSA MENGENAI PERUBAHAN IKLIM**

**SKRIPSI**

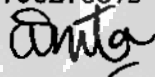
**Diajukan sebagai salah satu syarat untuk memperoleh gelar Sarjana Hukum**

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JANUARI, 2012**

**HALAMAN PERNYATAAN ORISINALITAS**

Skripsi ini adalah hasil karya saya sendiri,  
dan semua sumber baik yang dikutip maupun dirujuk  
telah saya nyatakan dengan benar.

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Dalam Upaya Penurunan Emisi Di Dalam *United Nations Framework Convention on Climate Change*

Telah berhasil dipertahankan di hadapan Dewan Penguji dan diterima sebagai bagian persyaratan yang diperlukan untuk memperoleh gelar Sarjana Hukum pada Program Studi Ilmu Hukum Fakultas Hukum Universitas Indonesia.

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Depok, Januari 2012

Anita Permatasari

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TUGAS AKHIR UNTUK KEPENTINGAN AKADEMIS**

---

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Yang Menyatakan



(Anita Permatasari)

## ABSTRAK

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Perubahan iklim telah menjadi isu utama dewasa ini. Untuk mencegah dan mengurangi dampak perubahan iklim, pada tahun 1992 negara-negara di dunia bersepakat untuk membentuk Kerangka Kerja Perserikatan Bangsa-Bangsa Untuk Perubahan Iklim. Dalam perkembangannya konvensi ini menciptakan mekanisme penurunan emisi yang menitikberatkan kepada adanya alih teknologi dari negara maju ke negara berkembang. Alih teknologi ini diharapkan akan membantu negara berkembang dalam menerapkan ketentuan-ketentuan konvensi. Indonesia sebagai negara berkembang memiliki kepentingan akan alih teknologi di dalam mekanisme Kerangka Kerja Perserikatan Bangsa-Bangsa Mengenai Perubahan Iklim. Terdapat beberapa kasus alih teknologi di dalam mekanisme Kerangka Kerja Perserikatan Bangsa-Bangsa Mengenai Perubahan Iklim di beberapa negara berkembang. Alih teknologi menjadi kepentingan negara berkembang untuk membangun negara dengan prinsip pembangunan berkelanjutan. Oleh karena itu peraturan internasional dan nasional akan alih teknologi dalam upaya penurunan emisi di dalam Kerangka Kerja Perserikatan Bangsa-Bangsa Mengenai Perubahan Iklim harus jelas, adil dan bertanggungjawab.

Kata Kunci:

Indonesia, Alih Teknologi, Penurunan Emisi, Kerangka Kerja Perserikatan Bangsa-Bangsa Mengenai Perubahan Iklim

## ABSTRACT

Name : Anita Permatasari  
Study Program : Legal Studies  
Title : Indonesia's Interest against Technology Transfer in Emission Reduction Effort under the United Nations Framework Convention on Climate Change

Climate change has been the main issue nowadays. To prevent and reduce the impacts of climate change, in 1992 countries in the world agreed to form the United Nations Framework Convention on Climate Change. During the development, the convention has created emission reduction mechanisms which emphasize technology transfer from developed countries to developing countries. The technology transfer is expected to help developing countries to implement the provisions of the convention. Indonesia as a developing country has interests in technology transfer within the mechanism of the United Nations Framework Convention on Climate Change. There are several cases of technology transfer within the mechanism of the United Nations Framework Convention on Climate Change in some developing countries. Technology transfer has become an interest of developing countries to develop their countries with sustainable development principles. Therefore, international and national regulations of technology transfer in the effort of reducing emission within United Nations Framework Convention on Climate Change have to be clear, fair, and responsible.

Keywords:

Indonesia, Technology transfer, Emission reduction, United Nations Framework Convention on Climate Change



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10. *Project report of Sustainable Forestry for Rural Development Lao-Finland*

## DAFTAR SINGKATAN



|          |   |
|----------|---|
| AAU      | : <i>Assigned Amount Unit</i>                                 |
| ADB      | : Asian Development Bank                                      |
| AWG LCA  | : <i>Ad Hoc Working Group on Long-term Cooperative Action</i> |
| BAPA     | : <i>Buenos Aires Plan of Action</i>                          |
| BAPPENAS | : Badan Perencanaan Pembangunan Nasional                      |
| BBF      | : Bahan Bakar Fosil   |
| BPPT     | : Badan Pengkajian dan Penerapan Teknologi                    |
| CCS      | : Carbon Capture Storage                                      |
| CDM      | : <i>Clean Development Mechanism</i>                          |
| CEFPF    | : <i>Clean Energy Financing Partnership Facility</i>          |
| CER      | : <i>Certified Emission Reduction</i>                         |
| COP      | : <i>Conference of the Parties</i>                            |
| CTCN     | : <i>Climate Technology Centre and Network</i>                |
| CTF      | : <i>Clean Technology Fund</i>                                |
| DFID     | : Department of International Development                     |
| ERU      | : <i>Emission Reduction Unit</i>                              |
| ESCO     | : Perusahaan Jasa Energi                                      |
| ESDM     | : Energi dan Sumber Daya Mineral                              |
| ESTs     | : <i>Environmentally Sound Technologies</i>                   |
| EU ETS   | : <i>European Union Emission Trading Scheme</i>               |
| FDI      | : Foreign Direct Investment                                   |
| FRIS     | : <i>Forest Resource Information System</i>                   |
| GEF      | : <i>Global Environmental Facility</i>                        |
| GRK      | : Gas Rumah Kaca  |



|            |   |
|------------|---|
| GTZ        | : Gesellschaft für Technische Zusammenarbeit                    |
| GW         | : Giga Watt   |
| HKI        | : Hak Kekayaan Intelektual                                      |
| IAL        | : Investasi Asing Langsung                                      |
| ICCTF      | : <i>Indonesia Climate Change Trust Fund</i>                    |
| ICSU       | : <i>International Council of Scientific Unions</i>             |
| INC        | : <i>International Negotiating Committee</i>                    |
| INCAS      | : <i>Indonesia's National Carbon Accounting System</i>          |
| IPCC       | : <i>Intergovernmental Panel on Climate Change</i>              |
| IPP        | : Independent Power Producer                                    |
| JBIC       | : Japan Bank for International Cooperation                      |
| JI         | : <i>Joint Implementation</i>                                   |
| JICA       | : Japan International Cooperation Agency                        |
| KOMNAS MPB | : Komite Nasional untuk Mekanisme Pembangunan Bersih            |
| KTT        | : Konferensi Tingkat Tinggi                                     |
| LDCF       | : <i>Least Developed Country Fund</i>                           |
| LFG        | : Liquid Flammable Gas  |
| LSM        | : Lembaga Swadaya Masyarakat                                    |
| MDB        | : <i>Multilateral Development Bank</i>                          |
| MEAs       | : <i>Multilateral Environmental Agreements</i>                  |
| MNC        | : <i>Multi National Company</i>                                 |
| MOP        | : <i>Meeting of the Parties</i>                                 |
| NEDO       | : New Energy and Industrial Technology Development Organization |
| NEXI       | : Nippon Export and Investment Insurance                        |
| NGO        | : Non-Governmental Organization                                 |



|              |  |
|--------------|--|
| NSI          | : Sistem Inovasi Nasional  |
| NTIS         | : Sistem Teknologi Informasi Nasional  |
| ODA          | : <i>Overseas Development Assistance</i>   |
| ODSs         | : <i>Ozone Depleting Substance</i>   |
| OECD         | : <i>Organization of Economic Co-operation and Development</i>                               |
| PBB          | : Perserikatan Bangsa-Bangsa   |
| PDD          | : <i>Project Design Document</i>   |
| PEN          | : Pasokan Energi Nasional  |
| PLN          | : Perusahaan Listrik Negara  |
| PMA          | : Penanaman Modal Asing  |
| PPP          | : <i>Public Private Partnerships</i>   |
| R & D        | : <i>Research and Development</i>  |
| RAN          | : Rencana Aksi Nasional  |
| REDD         | : Reducing Emission from Deforestation and Forest Degradation                                |
| RPJPM        | : Rencana Pembangunan Jangka Panjang dan Menengah  |
| RUPTIL       | : Rencana Pembangunan Penyediaan Tenaga Listrik  |
| SBI          | : <i>Subsidiary Body for Implementation</i>  |
| SBS          | : Subsidiary Bodies  |
| SBSTA        | : <i>Subsidiary Body for Scientific and Technological Advice</i>                             |
| SCCF         | : <i>Special Climate Change Fund</i>   |
| SGP-GEF UNDP | : Small Grants Programme Global Environment Facility<br>United Nations Development Programme |
| SUFORD       | : <i>Sustainable Forestry for Rural Development Project</i>                                  |
| TEC          | : <i>Technology Executive Committee</i>  |
| TNAs         | : <i>Technology Needs Assessments</i>  |
| TNC          | : Trans National Company   |



- TRIPs : *Trade Related Intellectual Property Rights*
- UNCTAD : *United Nations Conference on Trade and Development*
- UNEP : *United Nations Development Programme*
- UNEP : *United Nations Environment Programme*
- UNFCCC : *United Nations Framework Convention on Climate Change*
- UU : Undang-Undang
- WMO : *World Meteorological Organization*
- WTO : *World Trade Organization*



# BAB I

## PENDAHULUAN

### 1.1 Latar Belakang

Perubahan iklim adalah suatu fenomena alam yang sudah tidak dapat dipungkiri lagi. Namun demikian, banyak terjadi berbagai kesalahpahaman dalam memahami fenomena alam ini. Perubahan iklim adalah fenomena global yang dipicu oleh kegiatan manusia terutama yang berkaitan dengan penggunaan bahan bakar fosil (BBF) dan kegiatan alih-guna lahan. Kegiatan tersebut dapat menghasilkan emisi yang makin lama makin banyak jumlahnya di atmosfer.<sup>1</sup> Emisi yang diklarifikasi oleh Konvensi Kerangka Kerja Perserikatan Bangsa-Bangsa mengenai perubahan iklim (*United Nations Framework Convention on Climate Change*, UNFCCC) sebagai penyebab perubahan iklim diantaranya adalah Karbon Dioksida (CO<sub>2</sub>), Metana (CH<sub>4</sub>), Dinitrogen Oksida (N<sub>2</sub>O), Sulfur Heksafluorida (SF<sub>6</sub>), Hidrofluorokarbon (HFC) dan Perfluorokarbon (PFC).<sup>2</sup> Emisi tersebut memiliki sifat seperti kaca yang meneruskan radiasi gelombang pendek atau cahaya matahari, tetapi menyerap dan memantulkan radiasi gelombang panjang atau radiasi balik yang dipancarkan bumi yang bersifat panas sehingga suhu atmosfer bumi makin meningkat.<sup>3</sup> Emisi tersebut memberikan pengaruh yang dikenal dengan nama efek rumah kaca, yang menjadikan suhu di dalam lebih panas dibandingkan dengan suhu diluar. Efek rumah kaca yang berlebihan yang menjadi penyebab timbulnya pemanasan global dan perubahan iklim.

Pemerintah dari berbagai negara berusaha menanggulangi fenomena alam ini dengan mengadopsi UNFCCC dalam pertemuan KTT Bumi di tahun 1992 di Rio de Janeiro, Brasil. Konvensi ini menjadi suatu titik temu dari permasalahan skala internasional ini. Setiap tahunnya UNFCCC mengadakan pertemuan negara-negara yang dikenal dengan nama *Conference of the Parties* (COP).

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<sup>1</sup> Daniel Moerdijarso, *Protokol Kyoto: Implikasinya Bagi Negara Berkembang*, (Jakarta : Kompas, 2007), hal. 10.

<sup>2</sup> Gas Rumah kaca dibawah Protokol Kyoto.

<sup>3</sup> Daniel Moerdijarso, *Protokol Kyoto: Implikasinya Bagi Negara Berkembang*, (Jakarta : Kompas, 2007), hal. 5.

Pertemuan negara-negara yang terbesar terjadi saat dilahirkannya Protokol Kyoto yang berisi tentang skema-skema kooperasi negara dalam perdagangan karbon yang selanjutnya digunakan untuk menurunkan emisi negara-negara maju yang dikenal sebagai *Annex I*. Negara berkembang dalam konvensi dikenal dengan sebutan negara *Non-Annex I*. Selain adanya pembedaan grup untuk menentukan beban penurunan emisi, dalam negosiasi perubahan iklim dikenal adanya koalisi-koalisi antar negara-negara untuk memperjuangkan kepentingan para pihak agar mendapat dukungan pihak lain yang memiliki kepentingan yang serupa.

Dalam perkembangannya pertemuan negara-negara banyak menghasilkan mekanisme baru dalam upaya menurunkan emisi global. Di antara skema-skema penurunan emisi yang diadopsi dalam pertemuan-pertemuan negara-negara, skema yang paling terkenal adalah skema yang dituang dalam Protokol Kyoto yaitu:

1. *Emission Trading* (Perdagangan Emisi)
2. *Joint Implementation* (Implementasi Bersama)
3. *Clean Development Mechanism* (Mekanisme Pembangunan Bersih)<sup>4</sup>

Perdagangan Emisi menitikberatkan kepada perdagangan karbon antara negara maju yang memiliki emisi dibawah jatah yang diizinkan dengan negara maju yang tidak dapat menurunkan emisi sesuai kewajibannya, dengan adanya pembatasan jumlah emisi yang dapat dibeli sehingga negara maju tetap harus melakukan penurunan emisi. Maka, singkat kata, perdagangan emisi tidak boleh dijadikan cara satu-satunya dalam menurunkan emisi, melainkan sebagai cara yang mengiringi mekanisme lain. Dalam perdagangan emisi, komoditas yang diperdagangkan berupa Unit Jatah Emisi (*Assigned Amount Unit, AAU*).

Skema kedua dari Protokol Kyoto adalah *Joint Implementation (JI)*. Protokol Kyoto tidak menyebutkan secara eksplisit mengenai terma pasar karbon ini, namun dijelaskan dalam Protokol Kyoto adanya unit pengurangan emisi (*Emission Reduction Unit, ERU*) yang diperoleh dari kegiatan antara negara maju ke negara maju. Pada awal perundingan mengenai JI, banyak terjadi pertentangan

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<sup>4</sup>*Ibid*, hal. 15.

saat adanya kemungkinan untuk memasukkan negara berkembang dalam skema tersebut.

Setelah melalui berbagai perdebatan, muncullah suatu mekanisme terakhir dari pasar karbon yang dikenal dengan Mekanisme Pembangunan Bersih (*Clean Development Mechanism*). Mekanisme ini adalah buah dari pemikiran Norwegia yang menginginkan partisipasi seluruh negara dalam JI, yang ditolak oleh negara berkembang dengan berbagai alasan, salah satunya adalah biaya yang tinggi.<sup>5</sup> Berbeda dengan skema lainnya, skema ini melibatkan negara maju dan berkembang untuk secara bersama-sama menurunkan emisi dalam suatu aktivitas tertentu. Mekanisme pembangunan bersih adalah kerangka multilateral yang memungkinkan negara maju melakukan investasi di negara berkembang untuk mencapai target penurunan emisi melalui suatu kegiatan proyek yang dapat menghasilkan pengurangan emisi yang disertifikasi (*Certified Emission Reduction, CER*).<sup>6</sup>

Dalam pelaksanaan mekanisme penurunan emisi dibawah UNFCCC, negara berkembang membutuhkan pelaksanaan alih teknologi, yang berasal dari negara maju yang dinilai memiliki teknologi yang lebih maju dan canggih. Pelaksanaan alih teknologi ini dituangkan dalam Konvensi, yang mewajibkan negara maju untuk mengalihkan teknologi penurunan emisi untuk membantu negara berkembang dalam menurunkan emisinya. Alih teknologi dinilai dapat membantu negara berkembang mengimplementasi ketentuan-ketentuan dalam UNFCCC.

Mengembangkan *Environmentally Sound Technologies* (ESTs) dinilai menjadi suatu kegiatan yang dapat menjadi suatu solusi yang efektif terhadap tantangan lingkungan, seperti tertulis dalam Agenda 21. Teknologi menjadi inti dari tantangan perubahan iklim yang dikarenakan peningkatan konsentrasi Gas Rumah Kaca (GRK), sebagai sarana untuk mengurangi emisi dan dampak dari emisi dan juga sebagai landasan bagi pembangunan ekonomi. Pada dasarnya, alih teknologi menjadi dasar dan katalis bagi perubahan global menuju pembangunan

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<sup>5</sup> Daniel Moerdijarto, *CDM: Mekanisme Pembangunan Bersih*, (Jakarta : Kompas, 2007), hal.3.

<sup>6</sup> *Ibid*, hal. 16.

rendah karbon. Sederhananya, tantangan perubahan iklim global tidak bisa diatasi tanpa alih teknologi. Pengalihan ESTs dan *know-how*, sebagaimana ditetapkan dalam Pasal 4 ayat 5 UNFCCC, adalah salah satu kunci yang berarti untuk mengurangi (atau memperlambat pertumbuhan) emisi GRK dan untuk menstabilkan konsentrasi emisi tersebut. Perubahan akan teknologi memiliki potensi untuk secara signifikan sebagai pilihan mengurangi biaya untuk memenuhi tujuan perubahan iklim. Alih teknologi menciptakan peluang untuk pertumbuhan ekonomi, inovasi adalah pondasi untuk pembangunan industri, membantu menciptakan atau memperluas pasar untuk produk dan jasa, serta menghasilkan pekerjaan.<sup>7</sup>

Setelah dibentuknya konvensi UNFCCC di Rio de Janeiro, dikenal suatu peraturan internasional yang bernama Protokol Kyoto yang juga mengatur mengenai alih teknologi terutama dalam kegiatan CDM. Dalam pertemuan negara-negara yang ke-4 setelah diadopsinya Protokol Kyoto, dibuat suatu kerangka mengenai alih teknologi di Buenos Aires yang dinamakan Rencana Aksi Buenos Aires (*Buenos Aires Plan of Action*). Rencana Aksi ini didasarkan kepada ketentuan dalam UNFCCC mengenai kepentingan negara berkembang untuk mendapatkan pengetahuan mengenai teknologi dari negara maju dalam upaya mengimplementasi skema-skema penurunan emisi dalam UNFCCC.

Dalam perkembangannya, kebutuhan akan alih teknologi dalam upaya penurunan emisi terutama di negara berkembang semakin besar. Ini ditunjukkan

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<sup>7</sup> *Global Environmental Facility menyimpulkan bahwa: Developing, demonstrating, deploying, and diffusing environmentally sound technologies (ESTs) are activities in the critical path toward an effective global response to environmental challenges, as highlighted in Agenda 21. Technology lies at the core of the climate change challenge as the source of greenhouse gas (GHG) emissions, as a means to reduce such emissions and address impacts, and as a foundation for economic development. In essence, technology and its transfer provide both the basis and the catalyst for a global shift toward low-carbon development. Simply put, the global climate change challenge cannot be addressed without technology transfer. The transfer of ESTs and know-how, as enshrined in Article 4.5 of the United Nations Framework Convention on Climate Change (UNFCCC), is one of the key means to reduce (or slow the growth in) GHG emissions and to stabilize their concentrations. Also, technological change has the potential to significantly reduce the cost of options to meet the climate change goals. Technology transfer creates opportunities for economic growth: innovation is a foundation for industrial development, helping to create or expand markets for products and services, and generating jobs.* Global Environment Facility (GEF), *Implementation of the Poznan Strategic Program on Technology Transfer*, (Washington DC: GEF, 2010) hal. 1.

dengan dituangkannya alih teknologi dalam perjanjian-perjanjian internasional yang dihasilkan oleh COP. Salah satu perjanjian besar yang dinilai memiliki arti penting sebagai petunjuk pelaksanaan alih teknologi adalah Rencana Aksi Bali (*Bali Action Plan*) yang dihasilkan dalam pertemuan pihak UNFCCC di Bali pada tahun 2007. Rencana Aksi Bali dalam Pasal 1 butir d menekankan pelaksanaan alih teknologi untuk membantu negara berkembang melakukan aksi mitigasi dan adaptasi.<sup>8</sup>

Setelah dibentuknya Rencana Aksi Bali di tahun 2007, dibentuk *Poznan Strategic Programme on Technology Transfer* ditahun 2008 sebagai respon dari Rencana Aksi Bali. Dalam keputusan COP 14 tersebut, dikemukakan beberapa kemungkinan pendanaan oleh *Global Environment Facility*, yang merupakan mekanisme pendanaan dalam UNFCCC, menyebutkan pendanaan untuk *Technology Needs Assessments* (TNAs), proyek percobaan yang berhubungan dengan TNAs, dan *Environmentally Sound Technologies* (ESTs).<sup>9</sup>

Alih teknologi dalam proyek-proyek yang dilakukan dalam upaya penurunan emisi terutama di negara berkembang nyatanya masih sangat sulit dilakukan. Berbagai upaya penurunan emisi yang dilakukan oleh negara-negara terutama dalam proyek CDM, masih belum menunjukkan adanya signifikansi pelaksanaan alih teknologi oleh negara maju. Oleh karenanya penulis ingin lebih lanjut membahas mengenai pelaksanaan alih teknologi dalam berbagai kerjasama internasional yang merujuk kepada UNFCCC dan mengaitkannya dengan perjanjian internasional di bawah UNFCCC.

<sup>8</sup> Pasal 1 butir d dalam *Bali Action Plan* menyatakan:

“Enhanced action on technology development and transfer to support action on mitigation and adaptation, including, inter alia, consideration of:

- (i) Effective mechanisms and enhanced means for the removal of obstacles to, and provision of financial and other incentives for, scaling up of the development and transfer of technology to developing country Parties in order to promote access to affordable environmentally sound technologies;
- (ii) Ways to accelerate deployment, diffusion and transfer of affordable environmentally sound technologies;
- (iii) Cooperation on research and development of current, new and innovative technology, including win-win solutions;
- (iv) The effectiveness of mechanisms and tools for technology cooperation in specific sectors.”

<sup>9</sup> Global Environment Facility (GEF), *Implementation of the Poznan Strategic Program on Technology Transfer*, (Washington DC: GEF, 2010) hal. 5.

Berdasarkan penjelasan diatas, penulis tertarik untuk melakukan penelitian lebih lanjut mengenai alih teknologi dalam negosiasi perubahan iklim dengan judul **“Kepentingan Indonesia Terhadap Alih Teknologi Dalam Upaya Penurunan Emisi Di Dalam Kerangka Kerja Perserikatan Bangsa-Bangsa Mengenai Perubahan Iklim”**.

### **1.1.1 Pokok Permasalahan**

1. Bagaimana bentuk-bentuk alih teknologi dalam hukum internasional yang dapat diterapkan dalam pelaksanaan upaya penurunan emisi?
2. Bagaimana pengaturan mengenai alih teknologi dalam perjanjian-perjanjian internasional di dalam mekanisme UNFCCC?
3. Bagaimana kepentingan Indonesia dalam implementasi dan penerapan alih teknologi dalam upaya penurunan emisi di dalam mekanisme UNFCCC?

## **1.2 Tinjauan Penelitian**

### **1.2.1 Tinjauan Umum**

Penelitian ini dimaksudkan untuk mengetahui penerapan aspek alih teknologi dalam kerjasama negara-negara secara bilateral maupun multilateral dalam upaya penurunan emisi dan implementasi UNFCCC.

### **1.2.2 Tinjauan Khusus**

Selain daripada tujuan utama penelitian, penelitian ini di maksudkan juga untuk:

1. Memaparkan bentuk-bentuk alih teknologi yang dapat diterapkan dalam konteks hukum internasional;
2. Menjabarkan pengaturan yang terkait dengan alih teknologi dalam upaya penurunan emisi di bawah mekanisme UNFCCC; dan
3. Menjelaskan mengenai kepentingan Indonesia dalam implementasi alih teknologi dan penerapan alih teknologi dalam upaya penurunan emisi di bawah mekanisme UNFCCC.

### 1.3 Kerangka Konseptual

Untuk menghindari kesalahan persepsi mengenai istilah yang digunakan dalam melakukan penelitian ini, maka penulis akan memberikan istilah dan definisi yang berkaitan dengan penelitian ini. Adapun istilah-istilah yang digunakan sebagai berikut:

1. *“Climate change” means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.*<sup>10</sup>
2. *“Emissions” means the release of greenhouse gases and/or their precursors into the atmosphere over a specified area and period of time.*<sup>11</sup>
3. *“Conference of the Parties” means the Conference of the Parties to the Convention.*<sup>12</sup>
4. *“Convention” means the United Nations Framework Convention on Climate Change, adopted in New York on 9 May 1992.*<sup>13</sup>
5. *“Technology Transfer” means The broad set of processes covering the flows of knowledge, experience and equipment amongst different stakeholders such as governments, private sector entities, financial institutions, NGOs and research/educational institutions. The broad and inclusive term “transfer” encompasses diffusion of technologies and technology co-operation across and within countries. It comprises the process of learning to understand, utilise and replicate the technology, including the capacity to choose it and adapt it to local conditions.*<sup>14</sup>

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<sup>10</sup> Perserikatan Bangsa-Bangsa, *UNFCCC, Pasal 1 Butir 2.*

<sup>11</sup> *Ibid*, Pasal 1 Butir 4.

<sup>11</sup> *Ibid*, Pasal 1 Butir 5.

<sup>12</sup> Konvensi Perserikatan Bangsa-Bangsa Mengenai Kerangka Kerja Perubahan Iklim. *Protokol Kyoto*. Pasal 1 Butir 1.

<sup>13</sup> *Ibid*, Pasal 1 Butir 2.

<sup>14</sup> Intergovernmental Panel on Climate Change, *Methodological and Technological Issues in Technology Transfer*, (Cambridge: Cambridge University Press, 2000).



#### 1.4 Metode Penelitian

Penelitian ini menggunakan bentuk penelitian yuridis normatif. Penelitian yuridis normatif dilakukan dengan cara meneliti bahan atau sumber pustaka berupa norma hukum tertulis atau hukum positif yang berlaku<sup>15</sup>. Tulisan ini akan membahas mengenai bagaimana penerapan Alih teknologi dalam implementasi negosiasi perubahan iklim dalam upaya penurunan emisi di negara maju dan negara berkembang dikaitkan dengan peraturan internasional yang dihasilkan dari negosiasi perubahan iklim yang sudah berjalan sampai pertemuan ke-17 yang dilakukan di Durban, Afrika Selatan.

Penelitian ini merupakan penelitian eksplanatoris apabila dilihat dari sudut sifatnya karena bertujuan menjelaskan lebih dalam suatu gejala.<sup>16</sup> Penelitian ini bertujuan untuk menjelaskan lebih dalam mengenai aspek-aspek alih teknologi dalam upaya penurunan karbon menurut perjanjian internasional dan peraturan nasional. Penelitian ini juga dikategorikan penelitian evaluatif apabila dilihat dari sudut bentuknya.<sup>17</sup> Peneliti akan memberikan penilaian mengenai penerapan perjanjian internasional dan peraturan perundang-undangan yang berlaku di Indonesia dalam menjalankan alih teknologi dalam aktivitas penurunan emisi.

Adapun alat pengumpulan data yang peneliti gunakan adalah studi dokumen dan wawancara dengan narasumber. Peneliti melakukan pengumpulan data dengan membaca buku, literatur, dan sumber lainnya yang relevan dengan pokok permasalahan. Selain itu peneliti melakukan pengamatan terhadap implementasi alih teknologi di proyek perubahan iklim. Peneliti juga melakukan wawancara dengan narasumber yang ahli dalam bidang alih teknologi dalam negosiasi perubahan iklim. Jadi, penelitian ini akan menggunakan data primer dan data sekunder.

Keberhasilan suatu penelitian sangat dipengaruhi oleh data-data yang didapatkan oleh peneliti. Data primer didapatkan melalui pengamatan. Peneliti menggunakan pengamatan tidak terlibat dalam memperoleh data. Adapun data

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<sup>15</sup> Sri Mamudji *et.al.*, *Metode Penelitian dan Penulisan Hukum*, (Jakarta : Badan Penerbit Fakultas Hukum Universitas Indonesia, 2005), hal.10.

<sup>16</sup> *Ibid.*, hal. 4.

<sup>17</sup> *Ibid.*, hal. 5.

sekunder yang diperoleh dari studi kepustakaan ini terdiri dari bahan hukum primer, bahan hukum sekunder, dan bahan hukum tersier. Bahan hukum primer, yaitu bahan-bahan hukum yang mengikat.<sup>18</sup> Bahan hukum primer ini berupa perjanjian internasional dan peraturan perundang-undangan yang terkait dengan alih teknologi dalam perubahan iklim. Peraturan tersebut, antara lain:

1. Konvensi Kerangka Kerja Perserikatan Bangsa-Bangsa mengenai Perubahan Iklim;
2. Protokol Kyoto;
3. Rencana Aksi Buenos Aires;
4. Rencana Aksi Bali;
5. Perjanjian Cancun;
6. *Trade Related Intellectual Property Rights (TRIPs)*;
7. Undang-Undang No. 6 tahun 1994 mengenai pengesahan Konvensi Kerangka Kerja Perserikatan Bangsa-Bangsa mengenai Perubahan Iklim; dan
8. Undang-Undang No. 17 Tahun 2004 tentang Ratifikasi Protokol Kyoto.

Bahan hukum sekunder, yaitu bahan-bahan yang memberikan informasi atau hal-hal yang berkaitan dengan isi sumber primer serta implementasinya.<sup>19</sup> Bahan hukum sekunder dalam penelitian ini berupa buku, jurnal-jurnal hukum, skripsi, tesis, dan sumber lain yang berkaitan dengan pokok permasalahan yang akan diteliti. Bahan hukum tersier, yaitu bahan-bahan yang memberikan petunjuk maupun penjelasan terhadap sumber primer atau sumber sekunder.<sup>20</sup> Bahan hukum tersier ini berupa kamus dan ensiklopedia yang berkaitan dengan pokok permasalahan.

Data yang diperoleh selanjutnya dianalisis secara kualitatif, yaitu dengan menelusuri data hasil pengamatan yang dikaitkan dengan bahan-bahan hukum, baik primer, sekunder maupun tersier, yang dikumpulkan melalui studi dokumen. Hasil dari data yang dianalisis berbentuk deskriptif analitis, yaitu berupa

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<sup>18</sup> Soerjono Soekanto, *Pengantar Penelitian Hukum*, cet. 3, (Jakarta: Penerbit Universitas Indonesia (UI-Press), 1986), hal. 52.

<sup>19</sup> Sri Mamudji *et. al.*, *Metode Penelitian dan Penulisan Hukum*, hal. 31.

<sup>20</sup> *Ibid*, hal. 32.

pemaparan secara mendalam mengenai pelaksanaan alih teknologi dalam implementasi konvensi perubahan iklim.

### **1.5 Sistematika Penulisan**

Bab 1 merupakan pendahuluan skripsi. Bab ini terdiri dari latar belakang yang berkaitan dengan permasalahan yang menjadi topik penulisan, pokok-pokok permasalahan yang akan dibahas, tujuan penelitian yang terbagi menjadi tujuan umum dan tujuan khusus, definisi operasional yang memaparkan istilah-istilah yang akan sering digunakan dalam penulisan skripsi ini, metode yang digunakan dalam melakukan penelitian, dan sistematika penulisan ini sendiri.

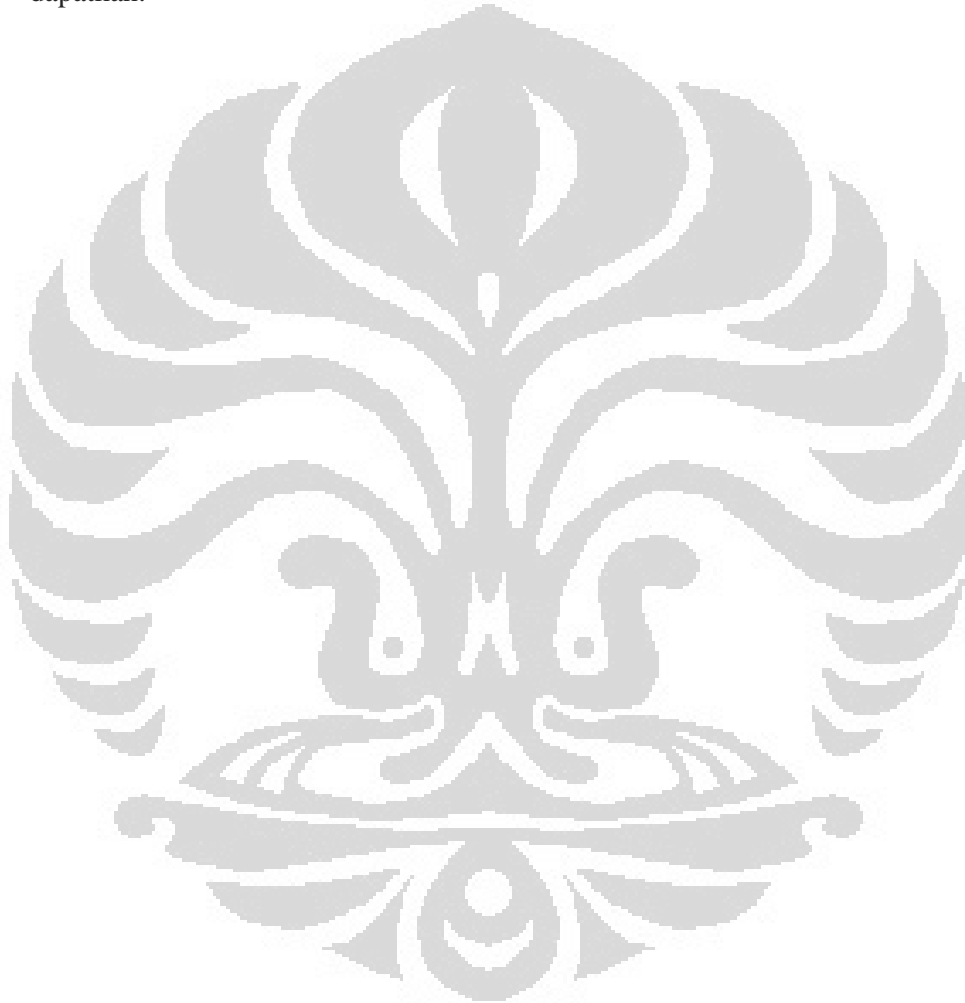
Bab 2 akan menjelaskan mengenai alih teknologi dalam konteks hukum internasional. Dalam bab ini akan dijelaskan bentuk-bentuk Alih teknologi yang dikenal dalam hukum internasional seperti mekanisme UNFCCC, TRIPs, dan Transaksi Bisnis Internasional yang dapat diterapkan dalam upaya penurunan emisi yang terkait dengan skema-skema dibawah Konvensi Kerangka Kerja PBB mengenai Perubahan Iklim.

Bab 3 membahas mengenai alih teknologi dalam mekanisme penurunan emisi dibawah Kerangka Konvensi Perserikatan Bangsa-Bangsa Mengenai Perubahan Iklim seperti Konvensi Perserikatan Bangsa-Bangsa Mengenai Perubahan Iklim, mekanisme penurunan karbon menurut UNFCCC, pengertian alih teknologi menurut UNFCCC, subjek alih teknologi dalam UNFCCC, tujuan alih teknologi dalam UNFCCC dan landasan hukum dalam UNFCCC mengenai alih teknologi dan posisi alih teknologi dalam perundingan-perundingan perubahan iklim.

Bab 4 menjelaskan lebih jauh mengenai analisis kepentingan Indonesia akan pelaksanaan alih teknologi dalam kerjasama pengurangan emisi melalui bantuan sistem informasi dalam REDD antara Indonesia dan Jepang, kerjasama dalam *Clean Development Mechanism*, pihak-pihak dalam kerjasama, perjanjian antara Jepang (*JICA*) dan Indonesia (Kementerian Kehutanan), tujuan kerjasama antara Jepang dan Indonesia, akibat penerapan perjanjian internasional dibawah UNFCCC dalam kerjasama. Selain itu bab ini akan memaparkan mengenai implementasi alih teknologi dalam mekanisme UNFCCC termasuk dalam

mekanisme pendanaan alih teknologi dalam *Green Climate Fund*. Bab ini pun akan memberikan pemaparan mengenai kepentingan Indonesia dalam isu perubahan iklim khususnya dalam alih teknologi.

Bab 5 merupakan bab terakhir dalam tulisan ini. Bab ini berisi kesimpulan yang merupakan jawaban dari pokok permasalahan yang penulis ajukan. Kemudian, bab ini juga memuat saran-saran atas hasil penelitian yang penulis dapatkan.



**BAB II**

**ALIH TEKNOLOGI DALAM INVESTASI ASING LANGSUNG, HAK  
KEKAYAAN INTELEKTUAL DAN MULTILATERAL  
ENVIRONMENTAL AGREEMENTS**

**2.1 Konsep Alih Teknologi**

2.1.1 Konsep dan Karakteristik Alih Teknologi

Teknologi dalam alih teknologi memiliki karakteristik tersendiri dalam implementasinya. Karakteristik tersebut umumnya berwujud dan tidak berwujud. Bentuk alih teknologi yang berwujud seperti mesin dan peralatan. Sedangkan yang tidak berwujud seperti informasi baik teknis dan komersial, juga kemampuan manusia dalam hal ini pekerja profesional atau teknisi. Berikut merupakan karakteristik alih teknologi:

*Technology transfer is the intentional 'passing-on' of technology or know-how from one party to another, commonly by purchase, investment or agreements for cooperation. There are three distinct components of technology that can be transferred:*

1. *physical assets, such as industrial plants, machinery, and equipment;*
2. *information, both technical and commercial, relating to process know-how, choice of technology, engineering design and plant construction, organization and operating methods, quality control, and market characteristics; and*
3. *human skills, especially those possessed by specialized professionals and engineers.*<sup>21</sup>

Sedangkan di Indonesia sendiri, Undang-Undang Nomor 18 Tahun 2002 tentang Sistem Nasional Penelitian, Pengembangan dan Penerapan Ilmu Pengetahuan dan Teknologi (UU Sisnas Teknologi), teknologi diartikan sebagai cara atau metode serta proses atau produk yang dihasilkan dari penerapan dan pemanfaatan berbagai disiplin ilmu pengetahuan yang menghasilkan nilai bagi pemenuhan kebutuhan, kelangsungan, dan peningkatan mutu kehidupan

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<sup>21</sup> S.O. Andersen , K.M Sarma, dan Kristen Taddonio, *Technology Transfer for the Ozone Layer: Lessons for Climate Change*, (London: Earthscan Publications,2007) hal. 6.

manusia.<sup>22</sup> Teknologi yang dialihkan dalam kegiatan alih teknologi, diambil dari definisi teknologi berdasarkan Undang-Undang Sisnas Teknologi berunsurkan:

- a. Pengetahuan;
- b. Sistematis;
- c. Untuk berproduksi, atau aplikasi proses, atau pemberian jasa; dan
- d. Berguna bagi kesejahteraan atau kenyamanan hidup atau kegunaan praktis lain.<sup>23</sup>

Teknologi terbagi menjadi dua bagian besar. Pertama, teknologi yang dilindungi dengan paten, sedangkan yang kedua tidak dapat dipatenkan termasuk keahlian (*skill*) dan keterampilan (*technical know-how*).

Beberapa penulis mendefinisikan alih teknologi sebagai alih pengetahuan teknis dari satu tempat ke tempat lain. Lainnya, seperti IPCC, secara luas mendefinisikan sebagai alih pengetahuan teknis dan yang pemanfaatan, penyebaran dan difusi. Indikasi definisi alih teknologi meliputi:

Definisi menurut United Nations Conference on Trade and Development (UNCTAD) adalah *“the process by which commercial technology is disseminated. This involves the communication, by the transferor, of the relevant knowledge to the recipient.”*<sup>24</sup>

Definisi menurut Keith Maskus dalam buku *International Public Goods And Transfer Of Technology Under A Globalized Intellectual Property Regime* ialah *“any process by which one party gains access to a second party’s information and successfully learns and absorbs it into his production function.”*

Sedangkan IPCC mendefinisikan alih teknologi sebagai:

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<sup>22</sup>Indonesia, *Undang-Undang Tentang Sistem Nasional Penelitian, Pengembangan Dan Penerapan Ilmu Pengetahuan Dan Teknologi*, UU No. 18 tahun 2002, LN No.84 Tahun 2002, TLN No. 4219, Pasal 1 butir 2.

<sup>23</sup> Prof A. Zen Umar Purba, *Perjanjian TRIPs dan Beberapa Isu Strategis*, (Bandung: Alumni, 2011), hal. 85.

<sup>24</sup> United Nations Conference on Trade and Development, *Transfer of Technology*, (Jenewa: United Nations, 2001).

*as a broad set of processes covering the flows of know-how, experience and equipment for mitigating and adapting to climate change amongst different stakeholders such as governments, private sector entities, financial institutions, non-governmental organizations (NGOs) and research/education institutions. It comprises the process of learning to understand, utilize and replicate the technology, including the capacity to choose it and adapt it to local conditions and integrate it with indigenous technologies.*<sup>25</sup>

Undang-Undang Sisnas Teknologi mendefinisikan alih teknologi dalam Pasal 1 butir 1 sebagai berikut:

Alih teknologi adalah pengalihan kemampuan memanfaatkan dan menguasai ilmu pengetahuan dan teknologi antar lembaga, badan, atau orang, baik yang berada di lingkungan dalam negeri maupun yang berasal dari luar negeri ke dalam negeri dan sebaliknya.<sup>26</sup>

Secara umum, alih teknologi mengacu pada transmisi kepada pihak lain, merujuk difusi teknologi untuk sejauh mana teknologi digunakan (dengan kata lain jumlah orang atau perusahaan yang telah mengadopsi teknologi), dan teknologi komersialisasi mengacu pada transisi teknologi dari tahap perkembangan ke pasar. Beberapa penulis mengacu pada komersialisasi teknologi sebagai alih teknologi vertikal.<sup>27</sup>

Alih teknologi telah menjadi bagian penting dari transaksi bisnis internasional. Alih teknologi dan bisnis internasional menunjukkan bahwa salah satu kebutuhan utama dalam bisnis internasional di era ini adalah alih teknologi. Alih teknologi telah menjadi suatu kebutuhan bagi negara berkembang untuk meningkatkan kemampuan dalam berbagai bidang seperti peningkatan kegiatan industri dan proteksi lingkungan. Teknologi telah menjadi kunci dari pembangunan ekonomi dan sosial seluruh dunia, tetapi tidak semua negara

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<sup>25</sup> IPCC , *Methodological and technological issues in technology transfer. A special report of the Intergovernmental Panel on Climate Change (IPCC) Working Group III*, (Cambridge: Cambridge University Press, 2000), hal. 3.

<sup>26</sup> Indonesia, *Undang-Undang Tentang Sistem Nasional Penelitian, Pengembangan Dan Penerapan Ilmu Pengetahuan Dan Teknologi*, UU No. 18 tahun 2002, LN No.84 Tahun 2002, TLN No. 4219, Ps 1 butir 11.

<sup>27</sup> S.O. Andersen , K.M Sarma, and Kristen Taddonio, *Technology Transfer for the Ozone Layer: Lessons for Climate Change*, (London: Earthscan Publications,2007), hal. 7.

memiliki kapasitas untuk mengembangkan dan memelihara teknologi yang mereka butuhkan.

Ada sejumlah model konseptual yang mengidentifikasi tahap-tahap yang terlibat dalam pengembangan teknologi dan alih teknologi. IPCC mengidentifikasi lima tahap utama berikut:

1. *Technology assessment* (Penilaian Teknologi),
2. *Technology agreement* (Perjanjian Teknologi),
3. *Technology implementation* (Implementasi Teknologi),
4. *Technology evaluation and adjustment* (Evaluasi dan Penyesuaian Teknologi) dan,
5. *Technology replication*. (Replikasi Teknologi).<sup>28</sup>

Tahapan menurut IPCC ini menjelaskan bahwa, penilaian teknologi, menjadi tahap pertama di mana negara wajib mengidentifikasi teknologi apa yang dibutuhkan. Setelah itu negara melakukan perjanjian dengan pemangku kepentingan lain seperti negara, lembaga swadaya masyarakat, organisasi internasional, perusahaan dan lainnya. Setelah dilakukan perjanjian, tahapan berikutnya yaitu mengimplementasi perjanjian tersebut, dan selanjutnya melakukan evaluasi dan penyesuaian teknologi yang sudah diimplementasi. Tahapan terakhir dari identifikasi IPCC adalah replikasi teknologi.

Selain metode IPCC, Davidson menjelaskan tahapan yang lebih komprehensif atas kegiatan alih teknologi yaitu:

1. Pertimbangan akan rencana pembangunan nasional untuk mengidentifikasi tujuan pembangunan berkelanjutan,
2. Penilaian akan kebutuhan teknologi berdasarkan tujuan pembangunan berkelanjutan,
3. Pemilihan teknologi menggunakan kemampuan dalam dan identifikasi akan kesenjangan-kesenjangan yang dapat diisi dengan teknologi impor,
4. Penyatuan kemampuan dalam dengan teknologi impor untuk mengembangkan teknologi,

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<sup>28</sup> IPCC, *Methodological and technological issues in technology transfer. A special report of the Intergovernmental Panel on Climate Change (IPCC) Working Group III*, (Cambridge: Cambridge University Press, 2000), hal. 5.



5. Mengoperasikan teknologi dalam performa yang sudah didesain,
6. Memproduksi atau memodifikasi peralatan yang sesuai dengan kondisi lokal, dan
7. Mengembangkan teknologi yang dapat bersaing secara internasional.<sup>29</sup>

Tahapan pertama alih teknologi menurut Davidson ialah mempertimbangkan rencana pembangunan nasional untuk mengidentifikasi tujuan pembangunan berkelanjutan. Setelah menentukan tujuan pembangunan nasional, dilakukan penilaian akan kebutuhan teknologi berdasarkan tujuan pembangunan berkelanjutan. Tahapan ketiga menurut Davidson yaitu memilih teknologi dengan menggunakan kemampuan dalam negeri dan mengidentifikasi akan kesenjangan-kesenjangan yang dapat diisi dengan teknologi impor. Setelah tahapan tersebut, diperlukan untuk menyatukan kemampuan dalam negeri dengan teknologi impor yang bertujuan untuk mengembangkan teknologi. Tahapan berikutnya yaitu mengoperasikan teknologi tersebut dalam performa yang sudah didesain. Tahapan berikutnya ialah memproduksi atau memodifikasi peralatan yang sesuai dengan kondisi lokal, dan pada akhirnya diharapkan untuk mengembangkan teknologi yang dapat bersaing secara internasional.

Pengembangan teknologi dan alih teknologi berhubungan dengan ada dan munculnya termasuk teknologi dan difusi teknologi, dan kerjasama teknologi yang berkaitan dengan peralatan, *know-how* dan perangkat lunak serta sistem manajemen yang terkait. Transaksi ini dapat terjadi melalui kemitraan antara pemerintah-pemerintah, sektor publik-swasta atau sektor swasta-swasta. Alih teknologi tidak hanya mengenai pasokan *hardware* yang melintasi batas nasional atau internasional, tetapi juga tentang proses kompleks dalam berbagi pengetahuan dan mengadaptasi teknologi untuk memenuhi kondisi lokal, bersama dengan tuntutan manajemen yang terkait. Alih teknologi mencakup berbagai kegiatan, baik komersial dan politik, yang melibatkan aliran internasional penelitian ilmiah, pelatihan, proses, teknik, dan peralatan. Pada tingkat internasional, alih teknologi dapat dilakukan dari kegiatan yang kompleks hingga sederhana, mulai dari peningkatan kapasitas seperti beasiswa pascasarjana dan

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<sup>29</sup> O.R Davidson, *CDM in African Perspective*.

penelitian dan pengembangan untuk sekolah lokal dan penyediaan peralatan hemat energi, hingga teknik reboisasi.

Di masa lalu, alih teknologi secara umum dipandang sebagai pengalihan mesin dan peralatan dari produsen yang umumnya adalah negara maju kepada pengguna yaitu negara berkembang melalui perdagangan, bantuan dan lisensi atau Investasi Asing Langsung (IAL). Namun, telah ditunjukkan bahwa transaksi alih teknologi dapat melibatkan pembayaran dan teknologi yang tertanam dalam lembaga-lembaga sosial dan politik yang mempengaruhi penyerapan teknologi. Juga, kini menjadi jelas bahwa teknologi hanya dapat diserap oleh negara penerima jika ada beberapa tingkat kapasitas domestik. Jadi beberapa negara, terutama di Asia dan Amerika Latin, tidak hanya menyerap teknologi tapi telah menciptakan kemampuan untuk mengoperasikan dan memodifikasi teknologi yang diimpor secara efisien dan bahkan berinovasi dan mengembangkan teknologi baru. Oleh karena itu, beberapa negara berkembang telah mampu bersaing di pasar sebagai hasil pembelajaran dan penguasaan teknologi. Namun demikian, banyak negara berkembang tidak memiliki kapasitas manusia dan kelembagaan serta infrastruktur yang dibutuhkan untuk pengalihan yang efektif dan penyerapan teknologi inovatif.

Dalam beberapa tahun terakhir, perubahan besar telah terjadi bahwa teknologi mempengaruhi pembangunan. Ini termasuk peningkatan intensitas pengetahuan, munculnya persaingan yang berbasis inovasi melalui liberalisasi pasar, globalisasi perdagangan dan berkembangnya kekhawatiran terhadap lingkungan. Beberapa negara berkembang telah mampu mengatasi dengan perubahan dan agar terintegrasi ke dalam ekonomi global karena mereka memperlakukan alih teknologi sebagai proses pembelajaran teknologi, pembangunan kapasitas domestik dan inovasi. Namun, mayoritas negara-negara berkembang belum mampu mencapai kemajuan teknologi.<sup>30</sup>

Aspek yang akan ditunjukkan untuk pembangunan yang efektif dan alih teknologi meliputi:

- a. Pengembangan sumber daya manusia,

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<sup>30</sup> United Nations, *Climate Change: Technology Development And Technology Transfer*, (New York: United Nations, 2007), hal. 6.

- b. Pengembangan institusional,
- c. Pengembangan informasi,
- d. Kemitraan dan jaringan, dan
- e. Riset dan pembangunan yang kolaboratif.<sup>31</sup>

Dalam aspek pengembangan sumber daya manusia, tenaga kerja yang terlatih dan teknis, bisnis dan staf manajerial penting untuk beradaptasi, mengoperasikan dan mengelola teknologi. Pengalaman dari beberapa negara-negara berkembang telah menunjukkan bahwa kapasitas domestik yang memadai untuk mencapai keberhasilan ekonomi dan mempertahankan pertumbuhan ekspor dapat mengubah ekonomi tertinggal ke dalam ekonomi modern yang dinamis. Pelatihan adalah kegiatan jangka panjang dan harus dimonitor untuk efektivitas melalui upaya berkelanjutan oleh semua pihak.

Dalam pengembangan institusional, terdapat beberapa strategi untuk mengembangkan dan memperkuat institusi untuk membangun kapasitas domestik dalam pengembangan teknologi mencakup sejumlah fungsi, seperti fungsi pertama untuk *technology and business assessments*, adalah kegiatan yang memungkinkan penerima teknologi untuk membuat keputusan yang tepat pada pemilihan teknologi berbasis sumber daya lokal dan kendala bersama dengan kondisi regional dan global. Kegiatan ini memerlukan kerjasama dengan bisnis dan teknologi R & D pusat dan mencakup:

- a. Sumber dan evaluasi teknologi;
- b. Pengujian, demonstrasi dan sertifikasi teknologi;
- c. Ramalan dan pelacakan teknologi;
- d. Mengelola sistem informasi efektif;
- e. Jasa penasehat teknologi;
- f. Dukungan untuk sistem penghargaan termasuk paten; dan
- g. Ramalan bisnis.<sup>32</sup>

Sumber dan evaluasi teknologi diperlukan dalam menentukan teknologi yang dibutuhkan. Selain itu, dengan maksud untuk membuat keputusan yang tepat akan

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<sup>31</sup> *Ibid*, hal. 6.

<sup>32</sup> *Ibid*, hal. 7.

teknologi yang digunakan dibutuhkan pengujian akan teknologi yang digunakan, aktivitas demonstrasi teknologi dan sertifikasi teknologi. Ramalan dan pelacakan teknologi pun memiliki peran dalam menentukan keputusan yang tepat. Selain itu dibutuhkan untuk mengelola sistem informasi efektif, dan jasa penasehat teknologi. Dukungan untuk sistem penghargaan termasuk paten termasuk salah satu kegiatan yang dinilai penting agar dapat memacu inovasi-inovasi baru dalam bidang teknologi. Ramalan bisnis di tahun-tahun mendatang pun memiliki peran penting dalam membuat keputusan akan teknologi yang digunakan.

Fungsi kedua dalam pengembangan institusional yaitu *technology policy research* melibatkan penelitian mutakhir yang berkaitan dengan teknologi ramah lingkungan, serta penelitian kebijakan untuk membantu pemerintah dalam perumusan undang-undang yang sesuai, yang sangat penting bagi kemajuan teknologi. Elemen ini penting ketika pemodelan jangka panjang menjadi suatu tuntutan dalam mempertimbangkan masalah-masalah perubahan iklim. Namun, mengingat tingginya tingkat migrasi ilmuwan, insinyur dan teknologi untuk negara-negara maju, retensi personil yang memadai merupakan tantangan utama yang dihadapi negara-negara berkembang. Paket insentif dan program bimbingan menarik bagi peneliti muda dan mendatang dapat membantu.

Fungsi ketiga yaitu *technology and business incubation centres* adalah fasilitas yang meningkatkan pemasaran teknologi. Tidak adanya pusat-pusat tersebut untuk pengembangan teknologi dan pengalihan di kebanyakan negara berkembang mengarah pada pemborosan sumber daya dan ketertekanan di kalangan pemangku kepentingan. Pekerjaan seperti lembaga harus terdiri dari permintaan akan kegiatan yang terkait dengan peluang bisnis dan menyediakan klien dengan fungsi seperti:

- a. Evaluasi akan resiko investasi,
- b. Hubungan dengan teknologi internasional dan pusat bisnis,
- c. Eksposisi dan demonstrasi teknologi,
- d. Investasi teknologi dan saran manajemen,
- e. Kebutuhan akan ramalan teknologi,
- f. Peningkatan teknologi,
- g. Bantuan teknis dan finansial untuk pasar teknologi setempat,

- h. Hubungan dengan pusat riset dan pembangunan lokal dan eksternal.<sup>33</sup>

Evaluasi akan resiko investasi, yakni mengevaluasi akan resiko-resiko yang mungkin datang pada saat berinvestasi menjadi sangat penting bagi perusahaan untuk memantapkan langkah dalam berinvestasi. Selain itu dibutuhkan hubungan dengan teknologi yang diakui secara internasional dan pusat bisnis dunia. Eksposisi dan demonstrasi teknologi, juga investasi teknologi dan saran akan manajemen yang sebaiknya dijalankan tak kalah penting dalam meyakini investor. Di masa yang akan datang, dibutuhkan ramalan mengenai kebutuhan teknologi dan peningkatan teknologi yang digunakan. Kegiatan lain dalam membangun kapasitas yaitu bantuan teknis dan finansial dalam pasar lokal, serta hubungan yang kuat dengan pusat riset dan juga pembangunan lokal dan eksternal menjadi salah satu kegiatan penting.

Fungsi terakhir yaitu *technology demonstration centres*, dapat mengatasi masalah, yang dihadapi oleh negara-negara berkembang, khususnya negara terbelakang, untuk menunjukkan potensi teknologi pemanfaatan dan mempromosikan kesadaran teknologi secara keseluruhan. Ilmu pengetahuan dan teknologi pameran, baik stasioner dan bergerak, dan sekolah dan program media massa diperlukan jika aspek budaya alih teknologi dan pengembangan ingin ditangani. Negara-negara maju, di mana sebagian besar fasilitas demonstrasi ini berlokasi, dapat membantu negara-negara berkembang dalam upaya ini.<sup>34</sup>

Dalam aspek yang ketiga yaitu pengembangan informasi, terdapat peran yang sangat penting dan oleh karena itu diperlukan kapasitas untuk memastikan akses ke informasi yang diperlukan untuk mencapai kemampuan teknologi yang memadai. Ada banyak informasi dalam ranah publik yang berguna untuk alih teknologi dan pembangunan. Namun, informasi yang dibutuhkan harus melampaui persediaan dengan biaya yang efisien dan dengan parameter lingkungan, juga harus mencakup data teknis spesifik yang akan memfasilitasi pemilihan teknologi, pengembangan dan penggunaan. Juga, kelangkaan informasi

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<sup>33</sup> *Ibid*, hal. 7.

<sup>34</sup> *Ibid*, hal. 7.

akan investasi menghalangi keterlibatan yang efektif dari sektor swasta. Jadi, selain jumlah yang memadai dari personil terlatih di negara-negara penerima, kapasitas yang diperlukan untuk:

- a. Penilaian dan penyaringan informasi,
- b. Perkembangan akan perantara informasi untuk bertindak sebagai penengah,
- c. Pemaksimalan kegunaan akan sistem elektronik, dan
- d. Perkembangan basis data di negara berkembang dengan hubungan basis data internasional.<sup>35</sup>

Dalam hal ini menilai dan menyaring informasi dapat meningkatkan kemungkinan investasi, juga dengan mengembangkan perantara informasi agar dapat menengahi investasi. Selain itu dinilai perlu untuk memaksimalkan kegunaan akan sistem elektronik. Tak lupa pula untuk mengembangkan data-data di negara berkembang agar terhubung dengan data-data di tingkat internasional.

Aspek yang keempat yaitu kemitraan dan jaringan teknologi, di mana kemitraan antara perusahaan di negara maju dan mereka yang negara-negara berkembang telah sangat efektif dalam pengembangan teknologi dan transfer dan pengembangan pasar, dengan syarat mereka merupakan hubungan dua arah yang melibatkan komitmen jangka panjang dengan tujuan berbagi pengetahuan, meningkatkan kemampuan teknologi, mendorong inovasi dan memperkuat daya saing. Interaksi dan saling ketergantungan, serta risiko dan *cost sharing* antara para mitra, adalah penting. Jaringan terdiri dari sekelompok lembaga atau asosiasi dengan tujuan meningkatkan kapasitas untuk melakukan penelitian dan meningkatkan pelatihan dan pendidikan melalui interaksi. Mitra sehingga dapat membentuk jaringan untuk meningkatkan akses ke ide-ide baru, metode, dan berbagi informasi dan pertukaran materi. Kedua kemitraan teknologi dan jaringan memerlukan tingkat tertentu kompetensi teknis antara mitra.

Kemitraan dan jaringan sangat mudah ditemukan di antara perusahaan-perusahaan di negara-negara maju, sementara jumlah yang melibatkan perusahaan di negara berkembang adalah terbatas namun dengan angka yang selalu tumbuh. Kecenderungan terakhir, yang umum ke beberapa negara berkembang, khususnya

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<sup>35</sup> *Ibid*, hal. 8.

di Asia Selatan dan Timur, menunjukkan bahwa kemitraan dan jaringan dapat mendorong peningkatan teknologi dan perbaikan kualitas produk. Hasil serupa telah diamati untuk negara-negara yang telah menerima IAL yang signifikan. Keberhasilan kemitraan ini tergantung pada bagaimana kebutuhan lokal dan prioritas negara berkembang. Selain itu, pembatasan dan kondisi yang diberlakukan oleh mitra di negara-negara maju dapat mempengaruhi kemitraan. Meskipun kemitraan dan jaringan bukanlah suatu kunci utama untuk membangun kapasitas, mereka dapat memiliki beberapa keuntungan termasuk:

- a. Peningkatan akses pasar di seluruh industri,
- b. Kontribusi terhadap perkembangan akan industri lokal yang kompetitif dan ahli lokal,
- c. Kontribusi terhadap mobilisasi sumber daya dan ahli teknologi untuk meningkatkan infrastruktur yang tertinggal,
- d. Peningkatan akan akses terhadap pasar internasional, dan
- e. Dukungan pada firma dan institusi riset dan pembangunan untuk memanfaatkan aktivitas mereka dan menarik investasi baru.<sup>36</sup>

Dengan adanya kemitraan dan jaringan, dimungkinkan untuk meningkatkan akses pasar di seluruh jenis kegiatan industri, dan juga berkontribusi kepada perkembangan-perkembangan industri lokal dan ahli lokal untuk lebih berkembang. Selain itu kemitraan dan jaringan dinilai mampu berkontribusi pada sumber daya dan ahli teknologi agar termobilisasi untuk meningkatkan infrastruktur dalam negeri yang dinilai tertinggal. Kemitraan dan jaringan juga dinilai dapat meningkatkan akses kepada pasar internasional dan menciptakan investasi baru.

Aspek yang terakhir yaitu penelitian dan pembangunan (*Research and Development*, R&D) yang kolaboratif. Kegiatan R&D kini menjadi sangat kompetitif dan mahal dalam hal sumber daya baik keuangan dan manusia, sehingga kolaborasi diperlukan untuk mengatasi tantangan ini. Selain itu, kolaborasi antara institusi negara negara berkembang dan maju bisa menjadi pilihan yang paling efektif dalam *frontier technology*. Kerjasama seperti

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<sup>36</sup> *Ibid*, hal. 9.

kerjasama internasional memberikan kesempatan untuk berbagi sumber daya dan kegiatan, juga sebagai untuk membuat penggunaan optimal dari fasilitas.

Dinamika perubahan teknologi berarti bahwa, dalam rangka mengatasi iklim perubahan strategis, program teknologi harus mencakup teknologi saat ini dan mereka yang berada di posisi *cutting edge*. Negara-negara berkembang perlu meningkatkan kapasitas mereka untuk menilai, menganalisa dan memilih teknologi berdasarkan kebutuhan dan prioritas pembangunan, dan untuk menyesuaikannya dengan kondisi lokal yang spesifik. Beberapa negara berkembang dan negara dengan ekonomi dalam transisi dapat menggunakan kapasitas sumber daya manusia dan kelembagaan untuk fokus pada kemitraan teknologi dan jaringan. Lembaga internasional dan lembaga bilateral di negara-negara maju harus memobilisasi beberapa kapasitas mereka untuk mengatasi masalah saat ini dibidang lingkungan dan pembangunan berkelanjutan di negara-negara berkembang.<sup>37</sup>

Alih teknologi dapat berupa diwujudkan atau tidak berwujud, dan dilakukan melalui pasar atau oleh non-pasar. Sebuah taksonomi mengenai ini mencatat bentuk berikut alih teknologi sebagai berikut:

1. Pasar:

- a. Perdagangan barang dan jasa.
- b. Investasi asing langsung.
- c. Lisensi.
- d. Usaha patungan.
- e. *Cross-border movement of personnel.*

2. Bukan pasar:

- a. Imitasi dan *reverse engineering*.
- b. Pergantian pekerja.
- c. Informasi yang diterbitkan seperti jurnal, data uji aplikasi paten.<sup>38</sup>

Dari taksonomi yang diidentifikasi oleh Hoekman dan Javorcik ini dapat diketahui bahwa kegiatan alih teknologi dapat dilakukan dalam mekanisme pasar

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<sup>37</sup> *Ibid*, hal. 9.

<sup>38</sup> Bernard Hoekman dan Javorcik, *Global Integration and Technology Transfer*, (New York: World Bank, 2006) hal. 13.



dan bukan pasar. Dalam mekanisme pasar, kegiatan alih teknologi dilakukan dalam bentuk perdagangan barang dan jasa, investasi asing langsung lewat perusahaan multinasional dan transnasional, perjanjian lisensi khususnya antara negara maju dan berkembang, usaha patungan antara negara maju dan berkembang dan *cross-border movement of personnel*. Dalam mekanisme luar pasar, alih teknologi dapat dilakukan dalam kegiatan imitasi, teknik terbalik, pergantian pekerja dan informasi yang diterbitkan seperti jurnal dan lainnya.

## **2.2 Bentuk-Bentuk Alih Teknologi dalam Hukum Internasional**

### **2.2.1 Alih Teknologi dalam Investasi Asing Langsung (*Foreign Direct Investment*)**

Dewasa ini teknologi menjadi kekuatan pendorong bagi pertumbuhan ekonomi dan pembangunan. Seperti negara-negara berkembang yang hanya memiliki akumulasi sumber daya manusia yang terbatas dan modal penting bagi kemajuan teknologi, teknologi yang berasal dari sumber eksternal menjadi sangat penting bagi pembangunan ekonomi. Literatur-literatur dewasa ini telah membahas beberapa prediksi mengenai faktor-faktor yang menghubungkan antara masuknya teknologi asing ke perusahaan-perusahaan domestik melalui perusahaan asing. Pertama, perusahaan-perusahaan multinasional (MNC) pada umumnya memiliki teknologi lebih maju. Ketika perusahaan multinasional memutuskan untuk menembus pasar baru melalui investasi langsung di negara itu, mereka cenderung membawa serta dengan mereka teknologi yang lebih canggih dan praktek manajerial yang unggul untuk bersaing dengan perusahaan lokal yang cenderung lebih dekat dengan keinginan konsumen dan praktek bisnis di pasar lokal.<sup>39</sup> Hal ini menjadi pendorong bagi difusi teknologi dari negara maju untuk diterapkan di negara berkembang. Kedua, hubungan ekonomi dengan perusahaan multinasional memberikan kesempatan belajar bagi perusahaan domestik dan mengurangi biaya inovasi dan imitasi yang akan mempercepat peningkatan

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<sup>39</sup> M. Blomstrom dan F. Sjöholm, *Technology transfer and spillovers: Does local participation with multinationals matter?* European Economic Review 43 1999, hal. 915-923.

produktivitas.<sup>40</sup> Ketiga, pekerja dan manajer yang dipekerjakan dan dilatih oleh perusahaan multinasional memiliki kemungkinan untuk kemudian pindahkan ke perusahaan lokal atau mendirikan usaha sendiri. Dalam kedua kasus, akses pengetahuan untuk mendapatkan hal-hal yang dilakukan di industri dalam negeri akan diperluas. Perusahaan multinasional, melalui afiliasi lokal mereka, dapat memberikan bantuan teknis kepada perusahaan lokal.<sup>41</sup> Akhirnya, masuknya perusahaan multinasional ke pasar domestik akan mengintensifkan persaingan dan mendorong perusahaan lokal untuk meningkatkan efisiensi dan mengadopsi teknologi baru.<sup>42</sup> Dengan demikian keterkaitan antara alih teknologi dan investasi asing atau penanaman modal asing (PMA) menjadi satu hal yang pasti.<sup>43</sup> Alih teknologi memang tidak dapat dilepaskan dari PMA. Sebab menurut Chantal Thomas, alih teknologi adalah ikutan investasi asing.<sup>44</sup> Investasi asing dinilai telah memberikan kontribusi akan teknologi baru yang sebelumnya tidak dimiliki oleh negara berkembang dan negara terbelakang.

Dewasa ini, *intra-firm trade* (perdagangan antara anak perusahaan dan kantor pusat perusahaan multinasional) menyumbang sekitar sepertiga dari total perdagangan dunia dan penjualan anak perusahaan multinasional perusahaan di seluruh dunia melebihi ekspor barang dan jasa.<sup>45</sup> Jadi, IAL adalah saluran yang dominan melalui mana perusahaan melayani pelanggan di pasar luar negeri. Sementara banyak IAL terjadi antara negara-negara industri, negara berkembang

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<sup>40</sup> E. Helpman, *R&D and Productivity: The International Connection*. The Economics of Globalization: Policy Perspectives from Public Economics, Chapter 1. (Cambridge: Cambridge University Press, 1999), hal 17-30.

<sup>41</sup> Sarah Y. Tong dan Angela Youxin Hu, *Do Domestic Firms Benefit from Foreign Direct Investment? Initial Evidence from Chinese Manufacturing*, (Hong Kong: University of Hong Kong, 2003), hal. 3.

<sup>42</sup> A. Kokko, *Productivity Spillovers From Competition Between Local Firms And Foreign Affiliates*. *Journal of International Development* 8 1996, hal. 517-530.

<sup>43</sup> Prof A. Zen Umar Purba, *Perjanjian TRIPs dan Beberapa Isu Strategis*, (Bandung: Alumni, 2011), hal. 83.

<sup>44</sup> *Ibid*, hal. 98.

<sup>45</sup> UNCTAD, *World Investment Report: FDI Policies for Development: National and International Perspectives*, (New York: United Nations, 2003).

menjadi negara tuan rumah semakin penting bagi IAL. Sekitar 33% dari saham global saat ini merupakan IAL di negara berkembang.<sup>46</sup>

Tinjauan sekilas terhadap Indonesia, sebagai satu negara berkembang, perlu dilakukan dalam kaitan antara PMA dan pengembangan sumber daya mengingat esensi peranan sumber daya manusia dalam alih teknologi. Undang-Undang Penanaman Modal menyebutkan 10 asas bagi pelaksanaan modal asing, yakni:

- a. Kepastian hukum;
- b. Keterbukaan;
- c. Akuntabilitas;
- d. Perlakuan yang sama dan tidak membedakan asal negara;
- e. Kebersamaan;
- f. Efisiensi berkeadilan;
- g. Berkelanjutan;
- h. Berwawasan lingkungan;
- i. Kemandirian; dan
- j. Keseimbangan kemajuan dan kesatuan ekonomi nasional<sup>47</sup>

Diantara asas diatas, salah satu asas yang dinilai paling fundamental adalah asas kemandirian. Asas kemandirian, pada Penjelasan Pasal 3 ayat 1 membuktikan bahwa investasi dilakukan dengan tetap mengedepankan potensi bangsa dan negara dengan tidak menutup diri pada masuknya modal asing demi terwujudnya pertumbuhan ekonomi. Makna asas ini lebih jauh ialah, betapapun, modal asing adalah hanya sarana dengan tujuan meningkatkan kapasitas dan kemampuan teknologi nasional. Asas kemandirian dengan demikian mengandung dua hal penting:

1. sebagai dasar masuknya PMA; dan
2. pemanfaatan masuknya PMA untuk pengembangan potensi bangsa.

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<sup>46</sup> *Ibid.*

<sup>47</sup> Prof A. Zen Umar Purba, *Perjanjian TRIPs dan Beberapa Isu Strategis*, (Bandung: Alumni, 2011), hal. 125-127.

Asas kemandirian ini harus kita pegang terus sebab secara strategis, Indonesia harus mengurangi ketergantungan pada investasi asing. Dalam Undang-Undang Penanaman Modal, alih teknologi menjadi suatu kriteria untuk melakukan investasi asing di Indonesia. Hal ini dituliskan dalam Pasal 18 ayat 3 sebagai berikut:

Penanaman modal yang mendapat fasilitas sebagaimana dimaksud pada ayat (2) adalah yang sekurang-kurangnya memenuhi salah satu kriteria berikut ini:

- a. menyerap banyak tenaga kerja;
- b. termasuk skala prioritas tinggi;
- c. termasuk pembangunan infrastruktur;
- d. melakukan alih teknologi;
- e. melakukan industri pionir;
- f. berada di daerah terpencil, daerah tertinggal, daerah perbatasan, atau daerah lain yang dianggap perlu;
- g. menjaga kelestarian lingkungan hidup;
- h. melaksanakan kegiatan penelitian, pengembangan, dan inovasi;
- i. bermitra dengan usaha mikro, kecil, menengah atau koperasi; atau
- j. industri yang menggunakan barang modal atau mesin atau peralatan yang diproduksi di dalam negeri.<sup>48</sup>

IAL menjadi semakin penting sebagai saluran yang menyediakan alih teknologi. Aktivitas multinasional terjadi terutama pada industri yang dicirikan oleh kegiatan R&D yang tinggi untuk penjualan dan saham besar seperti jasa profesional, ilmiah, dan teknis pekerja.<sup>49</sup> Sebuah prinsip dasar dari teori perusahaan multinasional adalah bahwa perusahaan tersebut sangat bergantung pada aktiva tidak berwujud, seperti teknologi unggul dan merek mapan yang ternama untuk mengimbangi kekurangan logistik dan lainnya yang beroperasi di kabupaten serta beberapa lokasi agar dapat bersaing dengan perusahaan-perusahaan lokal yang lebih baik. Pada tahun 1995, dari total seluruh transaksi dalam royalti dan biaya lisensi, transaksi dalam perusahaan yang berjenis IAL terdiri lebih dari delapan puluh persen, sehingga sebagian besar perdagangan yang

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<sup>48</sup> Indonesia, Undang-Undang Penanaman Modal, UU No. 25 Tahun 2007, LN No. 67 Tahun 2007, TLN No. 4724, Ps 18 ayat 3.

<sup>49</sup> Markusen, James R. *The Boundaries of Multinational Enterprises and the Theory of International Trade*. Journal of Economic Perspectives 9 1995 hal. 169.

eksplisit dalam teknologi terjadi dalam perusahaan multinasional (MNC) atau perusahaan transnasional (TNC).<sup>50</sup>

TNC menjadi kontributor utama dalam investasi teknologi di negara berkembang. TNC yang menjadi tempat bernaungnya teknologi yang memiliki peran signifikan untuk dialihkan atau didifusikan, dinilai telah mendominasi pasar internasional. TNC sebagai penggerak IAL memerankan peran penting bagi alih teknologi dan difusi teknologi, seperti dikutip dari UNCTAD sebagai berikut:

*One of the most important contributions that host developing countries seek from TNCs investing in their economies is technology. This is because a large proportion of the generation of commercially significant technology takes place within TNCs that, accordingly, play a significant role in its transfer and diffusion. Indeed, the international market for technology is dominated by such firms. For the present, it is enough to consider the role of FDI undertaken by TNCs in the generation, transfer and diffusion of technology.<sup>51</sup>*

Hampir semua studi empiris menemukan bahwa IAL akan tanaman milik asing di negara berkembang biasanya lebih produktif daripada yang murni domestik. Sebagai contoh, sebuah makalah yang ditulis oleh Arnold dan Javorcik memberikan bukti langsung tentang dampak IAL. Menggunakan data dari Indonesia yang sektor manufaktur selama periode 1983-86, mereka berfokus pada efek dari akuisisi perusahaan lokal oleh asing. Mereka menemukan bahwa kepemilikan asing mengarah ke signifikan perbaikan pada tanaman diperoleh, setelah tiga tahun, tanaman diperoleh mengungguli kontrol kelompok dalam hal produktivitas faktor total sebesar 34% .<sup>52</sup> Alih teknologi melalui IAL dapat berupa horizontal atau vertikal dalam bentuk pelaksanaannya. Ketika horisontal, IAL mengalihkan seluruh teknologi yang dibutuhkan untuk memproduksi barang. Ketika vertikal, yang berbeda adalah tahapan produksi. Proses dibagi di seluruh

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<sup>50</sup> UNCTAD. *World Investment Report: Transnational Corporations, Market Structure, and Competition Policy*. New York: United Nations, 1997.

<sup>51</sup> United Nations Conference on Trade and Development, *Transfer of Technology*, (Jenewa: United Nations, 2001).

<sup>52</sup> Arnold, Jen M. and Beata S. Javorcik, 2005. *Foreign Acquisitions and Plant Productivity in Indonesia*, Mimeo.

negara sehingga hanya teknologi untuk tahap (atau tahap) yang akan diproduksi di negara tuan rumah tempat alih teknologi berlangsung.

Norback menggunakan data Swedia menegaskan bahwa biaya teknologi yang tinggi mencegah pengalihan produksi luar negeri yang mendukung ekspor. Studi seperti Mansfield dan Romeo<sup>53</sup>, dan Smarzynska<sup>54</sup> telah menemukan bahwa teknologi yang lebih baru ditransfer melalui IAL. Pilihan mode yang digunakan mungkin menjadi salah satu cara bahwa perusahaan-perusahaan berusaha untuk mempertahankan keuntungan teknologi mereka dengan menghindari mode dengan difusi teknologi tinggi sampai teknologi menjadi agak tanggal. Pertimbangan moral akan adanya bahaya juga dapat menjadi penting dalam konteks ini. Sebagai contoh, Ramachandran telah menunjukkan bahwa anak perusahaan menerima sumber daya lebih besar dari sebagian lisensi yang dimiliki atau perusahaan independen setelah insentif bagi kedua belah pihak untuk berinvestasi dalam mengalih teknologi yang dipertimbangkan. Strategis insentif juga dapat memacu bahaya dan informasi asimetris pertimbangan, Fosfuri<sup>55</sup> membangun sebuah model dengan fitur yang strategis di perusahaan dengan menggunakan teknologi yang tua untuk mencegah imitasi oleh pemegang lisensi, sehingga teknologi yang lebih baru adalah dialihkan ke afiliasi asing.<sup>56</sup> UNCTAD menjelaskan pemilihan mode yang beragam yang digunakan dalam alih teknologi, ditentukan oleh berbagai pertimbangan seperti dikutip sebagai berikut:

*TNCs can transfer technologies through both FDI and non-equity forms of TNC involvement. Several economic, strategic and policy factors determine the mode of technology transfer: the nature and speed of change of*

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<sup>53</sup> Edwin Mansfield and Anthony Romeo 1980, *Technology Transfer to Overseas Subsidiaries by U.S. Based Firms*, Quarterly Journal of Economics 9 hal. 737-749.

<sup>54</sup> Beata K Smarzynska, *Technological Leadership and the Choice of Entry Mode by Foreign Investors: Evidence from Transition Economies*, 1999, hal. 23.

<sup>55</sup> Andrea Fosfuri, *Patent Protection, Imitation, and the Mode of Technology Transfer*. International Journal of Industrial Organization 18, 2000, hal. 11129-1149.

<sup>56</sup> Vijaya Ramachandran, *Technology Transfer, Firm Ownership, and Investment in Human Capital*. Review of Economics and Statistics 75, 1993, hal. 664-670.

*technology, transfer costs and risks, corporate perceptions of benefits and risks and government policies all play a role.*<sup>57</sup>

Dengan penjelasan UNCTAD, jelaslah bahwa mode yang digunakan dalam kegiatan alih teknologi ditentukan oleh berbagai faktor mulai dari faktor ekonomi, strategi dan kebijakan.

IAL dalam alih teknologi di bidang perubahan iklim telah memainkan peranan penting, ini terjadi khususnya dalam kegiatan CDM. CDM adalah, suatu perdagangan karbon yang bersifat internasional, antara negara maju dan berkembang, yang tak lain merupakan bentuk daripada IAL.<sup>58</sup> Dengan kontribusi IAL dalam alih teknologi, secara tidak langsung dapat memacu kegiatan alih teknologi dalam perubahan iklim lewat IAL di bawah mekanisme UNFCCC yaitu proyek CDM. CDM sebagai suatu sarana perdagangan di bawah mekanisme Protokol Kyoto yang menjadi suatu pilihan satu-satunya bagi negara berkembang diharapkan dapat memicu IAL, untuk dapat lebih lanjut melakukan pengalihan teknologi dari industri negara maju ke negara berkembang.

### **2.2.2 Alih Teknologi dalam Hak Kekayaan Intelektual**

Patel menyebutkan bahwa Sejak 1970an, negara-negara berkembang menyatakan dalam berbagai internasional forum kebutuhan mereka tentang akses ke teknologi asing sebagai sarana dan kemampuan untuk meningkatkan teknologi mereka dan menyempitkan kesenjangan antara Utara-Selatan dalam tingkat pembangunan.<sup>59</sup> Sebagai tanggapan, negara-negara maju berpendapat selama negosiasi Putaran Uruguay yang memperkuat dan memperluas perlindungan hak kekayaan intelektual (HKI) menjadi syarat utama untuk mempromosikan

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<sup>57</sup> Perusahaan transnasional dapat mengalihkan teknologi baik melalui investasi asing langsung dan non-ekuitas sebagai bentuk keterlibatan perusahaan transnasional. Faktor ekonomi dan kebijakan strategis menentukan mode alih teknologi: sifat dan kecepatan perubahan teknologi, transfer biaya dan risiko, persepsi perusahaan akan manfaat dan risiko serta kebijakan pemerintah di mana seluruhnya memainkan peran. UNCTAD, *Foreign Direct Investment, the transfer and diffusion of technology, and sustainable development*, (Jenewa:UNCTAD, 2011).

<sup>58</sup> Enzo Di Giulioa, Stefania Migliavacca and Alessandro Vaglio, *CDM, FDI and Climate Change: Where Foreign Direct Investment Flows and Where They Should Flow*, (Wina: IIASA, 2003).

<sup>59</sup> S. Patel Et Al., *International Technology Transfer: The Origins And Aftermath Of The United Nations Negotiations On A Draft Code Of Conduct* (Den Haag: Kluwer Law International, 2000).

peningkatan arus alih teknologi ke negara berkembang. Argumen ini telah berulang kali disampaikan oleh pihak yang mendukung TRIPs dan industri yang mendapat manfaat dari aturan internasional yang ditetapkan dalam perjanjian TRIPs.<sup>60</sup>

Negara-negara berkembang, bagaimanapun, telah menjadi semakin skeptis tentang adanya hubungan yang baik antara HKI dan alih teknologi. Skeptisisme ini mendasari permintaan negara-negara untuk mendirikan sebuah Kelompok Kerja Perdagangan dan Alih Teknologi di WTO, seperti yang disepakati disepakati oleh Konferensi Menteri Doha, pada bulan November 2001.

Sejumlah penelitian telah dilakukan untuk menilai dampak HKI pada alih teknologi. Namun, bukti yang tersedia terbatas dan ambigu, seperti halnya berkaitan dengan studi tentang implikasi dari rezim HKI pada arus investasi langsung asing. Beberapa negara dengan skema perlindungan HKI yang lemah, seperti Korea Selatan, Taiwan, Brasil, berada di antara peminjam utama teknologi di era pra-TRIPs. Situasi sebaliknya juga dapat ditemukan. Negara (termasuk negara-negara Afrika) dengan standar perlindungan sebanding dengan yang berlaku di negara-negara maju telah mencatat mengenai kemiskinan atau ketidaksignifikanan kinerja sebagai importir teknologi. Penjelasan sederhana adalah bahwa HKI hanyalah salah satu dari banyak faktor dan dapat dikatakan bukan faktor yang paling penting, yang mempengaruhi arus lintas batas teknologi.<sup>61</sup>

Alih teknologi asing, dalam bentuk barang modal, lisensi dan bantuan teknis, telah merupakan sumber penting dari inovasi untuk negara-negara berkembang. Alih teknologi telah, dan akan terus menjadi, salah satu mekanisme utama bagi negara berkembang negara untuk dapat memajukan proses industrialisasi mereka.<sup>62</sup> Bahkan, aliran teknologi asing menjelaskan untuk sebagian besar dinamika nasional inovasi sistem di berbagai tahap

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<sup>60</sup> *Agreement on Trade-Related Aspects of Intellectual Property Rights*, 15 Apr. 1994, *Marrakesh Agreement Establishing the World Trade Organization*, Annex 1C.

<sup>61</sup> Keith Maskus, *Intellectual Property Rights In The Global Economy* (Institute for International Economics 2000).

<sup>62</sup> S. Radosevic, *International Technology Transfer And Catchup In Economic Development* (Edward Elgar Pub, 1999).



industrialisasi.<sup>63</sup> Inovasi adalah kegiatan yang terkait dengan investasi baik di barang modal dan tidak berwujud (misalnya penelitian dan pengembangan, perangkat lunak) dalam kombinasi yang berbeda tergantung pada jenis teknologi yang diterapkan.<sup>64</sup>

Isu HKI menjadi salah satu penyebab utama kegagalan dalam alih teknologi, dilain pihak HKI juga menjadi pemicu untuk para inovator agar mengembangkan kemampuan mereka sehingga dapat dimanfaatkan oleh seluruh dunia. Foray menjelaskan bagaimana pengaruh HKI dalam kegiatan alih teknologi yang dapat berdampak buruk atau baik terhadap alih teknologi sebagai berikut:

*There is a well-known set of arguments based on the theoretical view that IP protection is an incentive mechanism that rewards and motivates innovative activities and as such is an indispensable component of a TT-friendly system. With some nuances, this argument is perfectly plausible and acceptable for the case of developing countries that are clearly catching up. It is likely, however, that such arguments do not apply to the reality of a number of developing countries and particularly LDCs. Export and parallel trade issues would also arise with respect to goods produced under suspension of industrial design protection. Because countries protect industrial design with different legal mechanisms and because a wide spectrum of goods may be protected by industrial design, it is difficult to generalise with respect to the specific type of exhaustion issues that would be presented. If exports were to be undertaken, this would in any event be included within the calculation of the level of suspension.*<sup>65</sup>

Ruang lingkup dari Bali Action Plan memungkinkan adanya langkah-langkah terkait untuk inovasi HKI. Kini sedang dibahas mekanisme keuangan untuk mengatasi hubungan antara HKI dan alih teknologi, serta pedoman mengenai perlindungan HKI untuk teknologi di ranah publik yang didanai. Topik pembahasan lainnya termasuk hadiah dan penghargaan akan inovasi baru muncul sebagai insentif berhubungan dengan iklim inovasi, dan pengaturan kelembagaan

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<sup>63</sup> L. Kim & K. Dahlman, *Technology Policy for Industrialization: An Integrative Framework and Korea's Experience*, 21 RES. POL'Y 437 (1992).

<sup>64</sup> Richard Nelson & Sidney Winter, *An Evolutionary Theory Of Economic Change* (The Belknap Press Of Harvard University Press 1982).

<sup>65</sup> Dominique Foray, *Technology Transfer in the TRIPS Age: The Need for New Types of Partnerships between the Least Developed and Most Advanced Economies*, (Jenewa: ICTSD, 2009), hal. 31.

untuk inovasi terbuka atau kolaboratif. Topik-topik ini dibahas dengan harapan adanya kemudahan dalam proses alih teknologi di bidang perubahan iklim.

### 2.2.2.1 Alih Teknologi dalam Perjanjian TRIPs

Negosiasi Perjanjian TRIPs dihadapkan pada dua pendekatan divergen sehubungan dengan peran HKI. Tujuan utama dari para pihak perjanjian adalah untuk mengamankan hak-hak pemilik properti intelektual untuk tidak dieksploitasi agar aset mereka terlindungi. Sebaliknya, negara-negara berkembang khawatir akan hubungan antara HKI dan akses akan alih teknologi.

Negara-negara berkembang khawatir tentang implikasi dari HKI yang kuat untuk alih teknologi dan keterbatasan selama Negosiasi *Uruguay Round*. Secara keseluruhan, Perjanjian TRIPs mencerminkan paradigma tinggi akan proteksi yang dianjurkan oleh Amerika Serikat. Dengan demikian, Pembukaan dalam Perjanjian tidak berisi referensi untuk alih teknologi. Para Pihak negosiasi menyepakati agar kebutuhan untuk mempromosikan proteksi yang efektif dan seimbang akan hak kekayaan intelektual tetapi tidak untuk mempromosikan pengalihannya.<sup>66</sup>

Namun, Pasal 7 dari Persetujuan itu lebih eksplisit mencerminkan beberapa negara-negara berkembang keprihatinan tentang hal ini, di mana Pasal ini mendukung perlindungan akan hak kekayaan intelektual dapat berkontribusi pada kegiatan alih teknologi, yang disebutkan sebagai berikut:

*The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to the balance of rights and obligation.*<sup>67</sup>

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<sup>66</sup> Penulisan akan “*the need to promote effective and adequate protection of intellectual property rights*” dalam Pembukaan perjanjian TRIPs, Paragraf 1.

<sup>67</sup> Perlindungan dan penegakan hak kekayaan intelektual harus berkontribusi pada promosi inovasi teknologi dan terhadap pengalihan dan diseminasi teknologi, untuk keuntungan bersama antara produsen dan pengguna teknologi dan dengan cara yang kondusif bagi kesejahteraan sosial dan ekonomi, dan keseimbangan hak dan kewajiban. Perjanjian TRIPs, Pasal 7.

Walaupun Pasal 7 menyatakan bahwa HKI harus berkontribusi pada promosi inovasi teknologi dan alih teknologi dan diseminasi teknologi, pada kenyataannya lebih menunjukkan bahwa HKI tidak selalu mempromosikan inovasi dan penyebaran dan alih teknologi.

Selain dalam Pasal 7, alih teknologi dalam TRIPs disebutkan dalam Pasal 8 yang berbunyi sebagai berikut:

1. *Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement.*
2. *Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology.*<sup>68</sup>

Pasal ini memperkuat benang merah antara pengaturan alih teknologi dalam kaitan dengan hak kekayaan intelektual.<sup>69</sup> Pasal ini menyebutkan bahwa pengaturan akan HKI di negara peratifikasi perjanjian harus mengukur adanya kemungkinan penyalahgunaan HKI yang dapat menahan adanya alih teknologi. Selain daripada prinsip dalam TRIPs, alih teknologi dimuat dalam perjanjian ini dalam dua tema lain yaitu perjanjian lisensi dan *technical cooperation*.

Pasal 40 ayat 1 yang merupakan bagian dari TRIPs mengenai perjanjian lisensi mengatur agar hak kekayaan intelektual tidak mengganggu proses alih teknologi dalam perjanjian lisensi seperti yang disebutkan berikut:

*“Members agree that some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology.”*<sup>70</sup>

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<sup>68</sup> *Ibid*, Pasal 8.

<sup>69</sup> Prof A. Zen Umar Purba, *Perjanjian TRIPs dan Beberapa Isu Strategis*, (Bandung: Alumni, 2011), hal. 107.

<sup>70</sup> TRIPs, Pasal 40 ayat 1.

Dalam pengaturan alih teknologi dalam *technical cooperation*, pengaturan alih teknologi diatur dalam Pasal 66 ayat 2 yang menyebutkan bahwa negara maju peratifikasi perjanjian harus menyediakan insentif pada perusahaan atau institusi di wilayahnya agar mempromosikan dan mendorong adanya alih teknologi kepada negara terbelakang agar dapat menciptakan suatu teknologi yang layak.

Pasal tersebut berbunyi:

*Developed country Members shall provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least-developed country Members in order to enable them to create a sound and viable technological base.*<sup>71</sup>

Namun ketentuan ini hanya untuk negara-negara *least developed countries*, di mana menurut klasifikasi TRIPs kelompok negara yang disebut negara terbelakang ini adalah kelompok klasifikasi terakhir setelah negara maju dan negara berkembang.<sup>72</sup>

Pengaturan mengenai alih teknologi dalam TRIPs dewasa ini mempengaruhi implementasi alih teknologi di negara berkembang. Sebuah aspek sentral dari Perjanjian TRIPS adalah bahwa ia tidak hanya menetapkan standar minimum perlindungan IP, tetapi juga menggabungkan fleksibilitas tertentu, yang memungkinkan negara untuk memiliki posisi HKI dalam kebijakan publik, tujuan dan prioritas mereka. Sebagai contoh, Perjanjian TRIPs memungkinkan untuk batasan-batasan tertentu dan pengecualian terhadap perlindungan HKI, serta untuk menentukan di tingkat nasional, metode yang tepat untuk implementasi. Kebijakan ini dikenal dengan “fleksibilitas TRIPs” yang didalamnya diharapkan akan memasukkan alih teknologi dalam konteks perubahan iklim. Masalah fleksibilitas TRIPs sudah muncul dalam diskusi yang sedang berlangsung di UNFCCC, di mana beberapa pihak menyatakan kekhawatiran mereka bahwa fleksibilitas ini mungkin tidak cukup untuk memastikan pengalihan yang cepat dan luas dari teknologi. Namun demikian, hal ini dilakukan untuk mulai melihat jenis ketentuan yang tersedia untuk Anggota WTO, dan dapat berguna dalam

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<sup>71</sup> *Ibid*, Pasal 66 ayat 2.

<sup>72</sup> *Ibid*, Pasal 65 dan 66.

kaitannya dengan iklim yang terkait dengan alih teknologi. Sebagai contoh, beberapa ketentuan pada hak paten eksklusif yang diberikan untuk penemuan yang dianggap relevan untuk meningkatkan alih teknologi ke negara berkembang.<sup>73</sup> Ketentuan ini ialah:

a. Pengecualian untuk paten. Paten mengacu pada batas-batas yang didirikan dalam kaitannya dengan penemuan, produk atau proses yang menawarkan solusi teknis baru untuk masalah, yang memungkinkan untuk dapat dipatenkan. Sebelum Perjanjian TRIPs, negara dapat mengecualikan penemuan jenis tertentu atau di daerah tertentu akan teknologi seperti produk farmasi dan metode pertanian dari paten, berdasarkan prioritas pembangunan dan strategi. Pasal 27 ayat 1 dari Perjanjian TRIPs kini mengharuskan anggota WTO untuk memberikan hak paten untuk semua jenis penemuan di semua bidang teknologi, sepanjang memenuhi kriteria penemuan-penemuan dasar tertentu. Namun, karena Perjanjian TRIPs tidak mendefinisikan kriteria paten tersebut (yaitu kebaruan, langkah inventif dan penerapan industri), beberapa ruang kebijakan penting tetap dalam kaitannya dengan lingkup paten di setiap negara. Definisi luas dari kriteria ini telah menimbulkan kekhawatiran akan diberlakukannya pengecualian ini kepada semua paten yang dihasilkan. Mendefinisikan kriteria paten untuk membatasi ruang lingkup paten, di sisi lain, akan memiliki dampak positif pada inovasi lebih lanjut dengan membatasi kemungkinan konflik dengan paten yang ada. Selain itu, dalam beberapa konteks, juga akan meningkatkan kegiatan alih teknologi. Negara berpenghasilan rendah yang saluran alih teknologinya berbasis pasar seperti investasi dan perizinan, tidak efektif akan dapat menjaga jalur lain untuk mengakses beberapa teknologi terkait dengan iklim, seperti *reverse engineering*.<sup>74</sup>

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<sup>73</sup> ICTSD, *Climate Change, Technology Transfer and Intellectual Property Right*, (Jenewa: ICTSD, 2008), hal. 5.

<sup>74</sup> *Exemptions to patentability. Patentability refers to the boundaries established in relation to what inventions generally, products or processes that offer a new technical solution to a problem may be patented. Prior to the TRIPS Agreement, countries could exclude inventions of certain types or in certain areas of technology such as pharmaceutical products and agricultural methods from patentability, based on their development priorities and strategies. Article 27.1 of the TRIPS Agreement now requires WTO Members to grant patents to all types of inventions in all fields of technology, as long as these inventions meet certain basic criteria. However, because the TRIPS Agreement does not define the patentability criteria (namely novelty, inventive step and industrial applicability), some critical policy space remains in relation to the scope of*

b. Pengecualian terhadap hak paten. Perjanjian TRIPS mengakui bahwa hak-hak dari pemilik paten untuk mencegah pihak ketiga dari memanfaatkan produk dipatenkan tidak mutlak. Pasal 30 menyatakan bahwa anggota WTO dapat memberikan "pengecualian terbatas" untuk hak-hak ini. Artinya, negara-negara mungkin dalam situasi tertentu dapat secara otomatis menggunakan penemuan oleh pihak ketiga tanpa persetujuan dari pemegang paten. Perjanjian TRIPS tidak mendefinisikan keadaan ini, yang akan dikaitkan dengan kebijakan nasional dan tujuan. Sebagai contoh, kegunaan eksperimental, memungkinkan penggunaan penemuan yang telah dipatenkan untuk penelitian atau tujuan eksperimen oleh pihak lain selain pemilik paten. Jenis pengecualian akan relevan dalam konteks perubahan iklim, di mana adaptasi teknologi untuk kebutuhan lokal dan lingkungan akan sangat penting. Ini juga akan memungkinkan perusahaan-perusahaan di negara berkembang untuk menciptakan klaim paten untuk mendapatkan akses ke teknologi ramah lingkungan, yang telah terbukti penting dalam konteks pelaksanaan MEA lainnya.<sup>75</sup>

c. *Compulsory licences*. Ada juga kasus lain di mana Perjanjian TRIPS memungkinkan penggunaan produk yang dipatenkan atau proses tanpa otorisasi dari pemegang hak. Salah satu yang paling penting dan mungkin yang paling kontroversial adalah pemberian *compulsory licences*. Lisensi non-sukarela

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*patentability in each country. The loose definition of these criteria has raised concerns given the resulting all-encompassing patents. For example, patent claims on synthetic biology products and processes among the most promising technologies for cellulosic biofuels are so broad that scientists worry it could bring the discipline to a stand-still (Suppan, 2008). Defining the patentability criteria to adequately limit the scope of patents, on the other hand, would have a positive impact on further innovation by limiting the possibility of conflict with existing patents. In addition, in some contexts, it would also enhance the transfer of technology. Low-income countries in which market-based channels of technology transfer, such as investment and licensing, are not effective could safeguard other pathways to access some climate-related technologies, such as reverse engineering. Ibid, hal. 5-6.*

<sup>75</sup> *Exceptions to patent rights. The TRIPS Agreement recognizes that the rights of a patent owner to prevent third parties from exploiting the patented product are not absolute. Indeed, Article 30 states that WTO Members may provide "limited exceptions" to these rights. That is, countries may under certain circumstances automatically allow the use of the patented invention by a third party without consent of the patent holder. The TRIPS Agreement does not define these circumstances, which will be linked to national policies and objectives. For example, a common exception addresses experimental use, allowing the use of patented inventions for research or experimental purposes by parties other than the patent owner. This type of exception will be relevant in the climate change context, where adaptation of the technology to local needs and environments will be particularly vital. It would also allow companies in developing countries to "invent around" patent claims to gain access to environmentally sound technologies, which has proved important in the context of the implementation of other MEAs. Ibid, hal. 6.*

diberikan oleh otoritas administratif atau yudisial kepada pihak ketiga, yang memungkinkan untuk mengeksploitasi penemuan yang telah dipatenkan tanpa ijin dari pemilik paten. Negara berkembang mempertimbangkan kemungkinan ini penting untuk memastikan bahwa mereka dapat melaksanakan Perjanjian TRIPs dalam cara yang merespon kebijakan-kebijakan publik yang lebih luas.<sup>76</sup>

Dengan adanya pembahasan mengenai ketentuan-ketentuan tersebut, diharapkan perjanjian TRIPs akan dapat mendorong implementasi alih teknologi dalam konteks perubahan iklim. TRIPs diharapkan akan menjadi suatu dorongan untuk memacu inovasi-inovasi baru akan teknologi ramah lingkungan untuk digunakan dalam mengimplementasi UNFCCC dalam upaya penurunan emisi negara berkembang.

### 2.2.3 Alih Teknologi dalam Kerjasama Multilateral dan Bilateral

Alih teknologi dapat dilakukan dalam suatu perjanjian baik bilateral maupun multilateral. Salah satu perjanjian multilateral yang terkait dengan alih teknologi adalah *Multilateral Environmental Agreements* (MEAs). Diantara beberapa MEAs yang memasukkan unsur alih teknologi, salah satunya yang dinilai sukses dalam menerapkan pengalihan teknologi adalah *Montreal Protocol On Substance that Deplete The Ozone Layer*.

Dalam protokol tersebut disebutkan bahwa:

*Each Party shall take every practicable step, consistent with the programmes supported by the financial mechanism, to ensure:*  
*(a) that the best available, environmentally safe substitutes and related technologies are expeditiously transferred to Parties operating under paragraph 1 of Article 5; and*  
*(b) that the transfers referred to in subparagraph (a) occur under fair and most favourable conditions.*<sup>77</sup>

<sup>76</sup> *Compulsory licences. There are also other cases in which the TRIPS Agreement allows the use of a patented product or process without authorization of the rights holder. One of the most important and perhaps most controversial is the granting of compulsory licences. These non-voluntary licences are granted by an administrative or judicial authority to a third party, allowing the exploitation of the patented invention without consent of the patent owner. Developing country Members consider this possibility as essential to ensuring that they can implement the TRIPS Agreement in a way that responds to broader public policies. Ibid, hal. 6.*

<sup>77</sup> *Montreal Protocol on Substance that Deplete the Ozone Layer, Pasal 10 butir a.*

Pasal tersebut memastikan bahwa mekanisme pendanaan yang ada harus memastikan berjalannya alih teknologi, dengan mengharuskan setiap negara peratifikasi mengambil tahapan untuk program tertentu yang didanai, dalam pengoperasian Paragraf 1 di Pasal 5, yaitu penurunan produksi zat-zat yang merusak lapisan ozon.

Tindakan penurunan di bawah Protokol Montreal juga dapat melindungi iklim. Penghapusan *hydrochlorofluorocarbons* (HCFC) dapat dipercepat. Protokol Montreal, sebagai perjanjian lingkungan paling sukses di dunia, yang menghapus secara bertahap sekitar 95 persen dari *Ozone Depleting Substance* (ODSs). Penghapusan produksi bahan kimia yang merusak lapisan ozon, protokol ini telah melindungi bumi dari radiasi ultraviolet yang berbahaya, yang menyebabkan kanker kulit dan katarak, menekan sistem kekebalan tubuh manusia, kerusakan ekosistem alam, dan mengurangi produksi pertanian. Selain menghancurkan lapisan ozon, ODSs juga diidentifikasi sebagai gas rumah kaca, dengan potensi pemanasan global ribuan bahkan puluhan ribu kali lebih besar dari karbon dioksida (CO<sub>2</sub>). Pengurangan emisi gas rumah kaca yang dicapai oleh Protokol Montreal pada tahun 2010 akan setara dengan sekitar 11,7 gigaton karbon dioksida per tahun. Ini adalah sekitar lima sampai enam kali lebih besar daripada emisi pengurangan dibawah Protokol Kyoto. Penelitian juga menunjukkan bahwa penguatan lebih lanjut terhadap Protokol Montreal akan melindungi iklim, juga untuk memajukan pemulihan lapisan ozon untuk negara hingga keadaan sebelum tahun 1980an.<sup>78</sup>

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<sup>78</sup> *The Montreal Protocol is the world's most successful environmental treaty, having phased out about 95 per cent of ODSs. By phasing out the production of chemicals that destroy the ozone layer, it has protected the Earth from harmful ultraviolet radiation, which causes skin cancer and cataracts, suppresses the human immune system, damages natural ecosystems, and decreases agricultural production. In addition to destroying the ozone layer, ODSs are also greenhouse gases, with global warming potential (GWP) thousands and even tens of thousands of times greater than carbon dioxide (CO<sub>2</sub>). For example, CFC-12 has a 100-year GWP of 10,720 relative to CO<sub>2</sub> (GWP=1). According to a new scientific study published in the Proceedings of the National Academy of Sciences,<sup>32</sup> the greenhouse gas emission reductions achieved by the Montreal Protocol by 2010 will be equivalent to about 11.7 gigatonnes of carbon dioxide per year. This is about five to six times greater than the emissions reductions that the Kyoto Protocol, assuming full compliance, will achieve from 2008 to 2012. The study shows that the discovery that ODSs were destroying the ozone layer in 1974 provided an 'early warning' that altered what otherwise would have been a steady annual increase in ODS production and use. This early warning delayed climate change by 35 to 41 years (CFC emissions were growing at 7 per cent annually). Furthermore, the Montreal Protocol provided up to a 12-year delay by eliminating the*



Selain daripada protokol Montreal, terma alih teknologi terdapat dalam UNFCCC dan Protokol Kyoto didalam negosiasi perubahan iklim. Seperti pada Pasal 4 butir 5 UNFCCC:

*The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies.<sup>79</sup>*

Dalam Pasal tersebut mengharuskan negara maju untuk membantu memfasilitasi dan mendanai kegiatan alih teknologi atau akses akan teknologi ramah lingkungan kepada negara berkembang agar dapat mengimplementasi ketentuan-ketentuan dalam konvensi. Negara maju juga diharuskan mendukung perkembangan dan peningkatan kapasitas teknologi negara berkembang.

Alih teknologi telah menjadi suatu kebutuhan dalam dunia internasional. Dilihat dari segi investasi asing langsung, hak kekayaan intelektual dan perjanjian multilateral. Alih teknologi memiliki peranan yang cukup signifikan dalam mendorong adanya investasi asing langsung. Alih teknologi dalam hak kekayaan intelektual dan perjanjian TRIPs mendorong inovasi baru agar dapat digunakan untuk membangun negara terutama negara terbelakang. Perjanjian multilateral terutama dibidang lingkungan membutuhkan peran alih teknologi dalam implementasi beberapa pasal dalam perjanjian tersebut. Kebutuhan akan alih teknologi terutama didasarkan atas kesenjangan teknologi antara negara maju dan

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*uses that persisted after the early warning. Most important, the study also shows that strengthening the Montreal Protocol will further protect climate, in addition to advancing the restoration of the ozone layer to its pre-1980s state. The accelerated phaseout of HCFCs and other measures could avoid emissions of the equivalent of 1.2 gigatonnes of carbon dioxide per year by 2015. The study notes that the greatest climate benefits of strengthening the Montreal Protocol are achieved if low-GWP substitutes delivering the highest life-cycle climate performance (LCCP) are selected, and if energy efficiency standards and refrigerant containment requirements are simultaneously strengthened worldwide. Stephen O. Andersen, K. Madhava Sarma dan Kristen N. Taddonio, *Technology Transfer for the Ozone Layer Lessons for Climate Change*, (London: Earthscan, 2007), hal. 41.*

<sup>79</sup> Kerangka Konvensi Perserikatan Bangsa-Bangsa mengenai Perubahan Iklim, Pasal 4 butir 5.

negara berkembang. Alih teknologi dimaksudkan untuk mengurangi kesenjangan antara negara maju dan berkembang. Dengan pembahasan mengenai pengaruh IAL, HKI dan MEA terhadap alih teknologi di bidang perubahan iklim, jelaslah bahwa alih teknologi dalam perubahan iklim dipengaruhi oleh beberapa faktor salah satunya adalah perdagangan internasional. Disinilah kerjasama internasional oleh negara berkembang dan negara maju diperlukan, untuk bersama meningkatkan tujuan penurunan emisi secara global baik di negara berkembang maupun negara maju.



**BAB III**  
**ALIH TEKNOLOGI DI DALAM MEKANISME KERANGKA**  
**KERJA PERSERIKATAN BANGSA-BANGSA MENGENAI**  
**PERUBAHAN IKLIM**

**3.1 Konvensi Perserikatan Bangsa-Bangsa Mengenai Perubahan Iklim**

**3.1.1 Sejarah**

Konferensi Iklim Dunia Pertama yang mengidentifikasi perubahan iklim sebagai masalah dunia yang mendesak dan mengeluarkan deklarasi meminta pemerintah untuk mengantisipasi dan menjaga akibat perubahan iklim. Sebuah Program Iklim Dunia didirikan dan dikemudikan oleh *World Meteorological Organization (WMO)*, *United Nations Environment Programme (UNEP)* dan *International Council of Scientific Unions (ICSU)*.

Konferensi Toronto ditahun 1988 tentang atmosfer mengubah perdebatan publik, ketika lebih dari 340 peserta dari 46 negara di seluruh dunia direkomendasikan untuk mengembangkan konvensi kerangka kerja yang komprehensif dan bersifat global untuk melindungi atmosfer.<sup>80</sup>

Setelah proposal oleh Malta, Majelis Umum PBB dalam sidang mengenai perubahan iklim untuk pertama kalinya dengan mengadopsi Resolusi 43/53. WMO dan UNEP membentuk *Intergovernmental Panel on Climate Change (IPCC)*, untuk menilai besarnya dan waktu perubahan, perkiraan dampak dan strategi yang menentukan bagaimana cara untuk merespon.

IPCC menerbitkan Laporan Penilaian Pertama pada keadaan iklim global, yang memiliki efek kuat terhadap pembuat kebijakan dan opini publik. Ini menjadi dasar utama untuk negosiasi di bawah Majelis Umum PBB pada konvensi perubahan iklim, dimulai pada akhir tahun 1990. Pada tanggal 21 Desember Majelis Umum PBB mendirikan, oleh Resolusi 45/212, Komite Negosiasi Antar Pemerintah untuk Konvensi Kerangka Kerja tentang Perubahan Iklim (INC) sebagai "sebuah proses negosiasi antar pemerintah tunggal di bawah

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<sup>80</sup> Prof. Koesnadi Hardjosoemantri, *Hukum Tata Lingkungan*, (Yogyakarta: Universitas Gadjah Mada Press, 2007), hal. 25.

naungan Majelis Umum." INC bertemu selama lima sesi antara Februari 1991 dan Mei 1992.<sup>81</sup>

INC menyelesaikan teks konvensi hanya dalam 15 bulan, diadopsi di New York pada tanggal 9 Mei dan diluncurkan penuh pada bulan Juni di Rio de Janeiro dalam KTT Bumi, di mana 154 negara menandatangani. Pada tahun 1994 konvensi mulai berlaku pada 21 Maret, 90 hari setelah kelima puluh instrumen ratifikasi negara telah diserahkan.<sup>82</sup>

INC menyelesaikan tugasnya untuk mempersiapkan pelaksanaan konvensi. Konferensi Para Pihak Konvensi (COP) yang menjadi Otoritas tertinggi konvensi, memegang sesi pertama (COP 1) di Berlin awal tahun. Para Pihak pada konvensi sepakat bahwa komitmen yang terkandung dalam konvensi untuk negara-negara industri tidak memadai dan meluncurkan "*Berlin Mandate*". COP 1 mendirikan *Ad Hoc Working Group* dengan Mandat Berlin untuk melakukan negosiasi. COP 1 juga memutuskan bahwa Badan Tambahan untuk Implementasi (SBI, yang ditetapkan berdasarkan Pasal 10 dari konvensi) dan Badan Tambahan untuk Ilmiah dan Penasihat Teknologi (SBSTA, yang ditetapkan berdasarkan Pasal 9 konvensi) harus dibentuk.<sup>83</sup>

COP 3 mengadopsi Protokol Kyoto pada bulan Desember. Protokol Kyoto mengikat secara hukum akan target-target penurunan emisi untuk negara-negara industri dan siap untuk mengambil langkah positif untuk mengekang emisi karbon dioksida dan gas rumah kaca. Pada COP 4, yang diselenggarakan di Buenos Aires pada bulan November, rencana dua-tahun untuk menyelesaikan seperangkat aturan praktis disepakati, yang disebut Rencana Aksi Buenos Aires (BAPA). Oleh karena tidak semua isu yang berkaitan dengan aturan-aturan operasional Protokol dapat diselesaikan di COP 6 di bulan November di Den Haag, pertemuan ditangguhkan. Teks hukum rinci berdasarkan keputusan-keputusan pada COP 6 lanjutan di Bonn berada di meja perundingan COP 7,

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<sup>81</sup> UNFCCC, *Handbook of the UNFCCC*, (Bonn: UNFCCC Secretariat, 2005), hal. 18.

<sup>82</sup> *Ibid*, hal. 18.

<sup>83</sup> *Ibid*, hal. 18.

diselenggarakan di Marrakesh pada akhir 2001. COP 7 mengadopsi masing-masing keputusan, yang disebut Persetujuan Marrakesh.<sup>84</sup>

COP 8, diselenggarakan di New Delhi pada November, merupakan sesi pertama setelah negosiasi di bawah BAPA yang dinyatakan telah selesai. Ini menandai fase baru negosiasi sebagai fokus bergeser ke pelaksanaan Persetujuan Marrakesh dan untuk isu-isu Konvensi. COP 8 mengadopsi Deklarasi Delhi tentang Perubahan Iklim dan Pembangunan Berkelanjutan serta karya *New Delhi Programme* pada pendidikan, pelatihan dan kesadaran publik yang dituangkan dalam Pasal 6 Konvensi.<sup>85</sup>

COP 9, yang diadakan di Milan pada bulan Desember, mengadopsi keputusan aforestasi dan reforestasi di bawah kegiatan CDM. Pada COP 10, yang diselenggarakan di Buenos Aires pada Desember, yang menjadi isu dominan adalah beradaptasi terhadap perubahan iklim dan menghasilkan program kerja Buenos Aires pada adaptasi dan tindakan penanggulangan.<sup>86</sup>

Protokol Kyoto mulai berlaku pada tanggal 16 Februari 2005. Tahun 2005 menjadi tahun pertama diadakannya Konferensi Para Pihak yang berfungsi sebagai sidang para Pihak Kyoto Protokol (COP / MOP 1), diselenggarakan bersamaan dengan COP 11 di Montreal pada bulan November dan Desember. Konferensi tersebut adalah salah satu yang paling sukses hingga saat ini, dengan terobosan politik yang menjadi keputusan oleh Pihak untuk memulai dialog tentang strategi jangka panjang tindakan kerjasama.<sup>87</sup>

Di tahun 2006 Konferensi Para Pihak dilaksanakan di Nairobi, Kenya dan menghasilkan *Nairobi Work Programme* yang banyak difokuskan kepada kegiatan adaptasi perubahan iklim.<sup>88</sup> Indonesia menjadi tuan rumah pada COP 13

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<sup>84</sup> *Ibid*, hal. 18-19.

<sup>85</sup> *Ibid*, hal. 19.

<sup>86</sup> *Ibid*, hal. 18.

<sup>87</sup> *Ibid*, hal. 18.

<sup>88</sup> United Nations Framework Convention on Climate Change, 2006, *Nairobi work programme on impacts, vulnerability and adaptation to climate change (NWP) - Understanding vulnerability, fostering adaptation*, Disadur dari [http://unfccc.int/adaptation/nairobi\\_work\\_programme/items/3633.php](http://unfccc.int/adaptation/nairobi_work_programme/items/3633.php), Diakses pada tanggal 27 November 2011 pukul 10.00 WIB.

ditahun 2007, yang diselenggarakan di Bali dan menghasilkan suatu keputusan yang diakui keberadaannya dan menjadi acuan hukum internasional mengenai perubahan iklim yang disebut Rencana Aksi Bali atau *Bali Action Plan*.<sup>89</sup>

COP 14 dilaksanakan di Poznan Polandia dan COP 15 yang dilaksanakan di Kopenhagen Denmark dinilai gagal dalam memuaskan negara berkembang. COP 16 yang diselenggarakan di Cancun Meksiko menghasilkan *Cancun Agreement* yang banyak digunakan dalam implementasi Konvensi Perubahan Iklim. Hingga tahun 2011, Konferensi Para Pihak telah melaksanakan 17 pertemuan di mana pertemuan terakhir dilaksanakan di Durban dan menghasilkan *Durban Outcome* dan *Durban Platform* yang melahirkan, secara resmi mempublikasikan program *Green Climate Fund*.<sup>90</sup>

### **3.1.2 Status Ratifikasi**

#### **3.1.2.1 Status Ratifikasi Konvensi**

Konvensi diadopsi di Markas Besar PBB, New York pada 9 Mei 1992. Sesuai dengan Pasal 20, Konvensi terbuka untuk ditandatangani di Rio de Janeiro 4-14 Juni 1992, dan setelah itu di Markas Besar PBB, New York, dari 20 Juni 1992-19 Juni 1993. Pada tanggal tersebut, konvensi telah menerima 166 tanda tangan.

Berdasarkan Pasal 22, konvensi ini tunduk pada ratifikasi, penerimaan, persetujuan atau aksesi oleh negara dan oleh organisasi integrasi ekonomi regional. Negara dan organisasi integrasi ekonomi regional yang belum menandatangani konvensi dapat menyetujui setiap saat.

Konvensi mulai berlaku pada tanggal 21 Maret 1994, sesuai dengan Pasal 23, yaitu pada hari kesembilan puluh setelah tanggal penyimpanan instrumen ratifikasi kelima puluh, penerimaan, persetujuan atau aksesi. Saat ini, ada 195

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<sup>89</sup> United Nations Framework Convention on Climate Change, 2007, *Bali Road Map*, Disadur dari [http://unfccc.int/key\\_documents/bali\\_road\\_map/items/6447.php](http://unfccc.int/key_documents/bali_road_map/items/6447.php), Diakses pada tanggal 27 November 2011 pukul 10.15 WIB.

<sup>90</sup> United Nations Framework Convention on Climate Change, 2011, *Durban Climate Change Conference - November/December 2011*, Disadur dari [http://unfccc.int/meetings/durban\\_nov\\_2011/meeting/6245.php](http://unfccc.int/meetings/durban_nov_2011/meeting/6245.php), Diakses pada tanggal 12 Desember 2011 pukul 9.14 WIB.

Pihak (194 negara dan 1 organisasi integrasi ekonomi regional) untuk Konvensi Kerangka Kerja PBB tentang Perubahan Iklim.<sup>91</sup>

### 3.1.2.2 Status Ratifikasi Protokol Kyoto

Protokol untuk Konvensi Kerangka Kerja PBB tentang Perubahan Iklim (UNFCCC) diadopsi pada sesi ketiga Konferensi Para Pihak (COP 3) di Kyoto, Jepang, pada 11 Desember 1997. Sesuai dengan Pasal 24, Protokol tersebut terbuka untuk penandatanganan dari 16 Maret 1998 hingga 15 Maret 1999 di Markas Besar PBB, New York. Berdasarkan Pasal 22, Protokol tunduk pada ratifikasi, penerimaan, persetujuan atau aksesinya oleh Pihak UNFCCC. Pihak UNFCCC yang belum menandatangani Protokol dapat ikut serta setiap saat.

Protokol ini mulai berlaku pada 16 Februari 2005 sesuai dengan Pasal 23, yaitu hari kesembilan puluh setelah tanggal di mana tidak kurang dari 55 Pihak UNFCCC, Pihak menggabungkan total emisi Negara yang termasuk dalam *Annex I* dengan total minimal 55% dari Total emisi dioksida karbon tahun 1990 dari Para Pihak yang termasuk dalam *Annex I*, yang telah mendepositkan instrumen ratifikasi, penerimaan, persetujuan atau aksesinya.<sup>92</sup>

Saat ini, ada 193 Pihak (192 negara dan 1 organisasi integrasi ekonomi regional) tunduk dalam Protokol Kyoto untuk UNFCCC. Persentase total emisi *Annex I* adalah 63,7%.<sup>93</sup>

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<sup>91</sup> United Nations Framework Convention on Climate Change, 2011, *Status Ratification of the Convention*, Disadur dari [http://www.unfccc.int/essential\\_background/convention/status\\_of\\_ratification/items/2631.php](http://www.unfccc.int/essential_background/convention/status_of_ratification/items/2631.php), Diakses pada tanggal 27 November 2011 pukul 10.44 WIB.

<sup>92</sup> UNFCCC, *Status of Ratification of Kyoto Protocol*, disadur dari [http://www.unfccc.int/kyoto\\_protocol/status\\_of\\_ratification/items/2613.php](http://www.unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php), Diakses pada tanggal 27 November 2011 pada pukul 11.00 WIB

<sup>93</sup> UNFCCC, *Status of Ratification of Kyoto Protocol*, disadur dari [http://www.unfccc.int/kyoto\\_protocol/status\\_of\\_ratification/items/2613.php](http://www.unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php), Diakses pada tanggal 27 November 2011 pada pukul 11.05 WIB.

### 3.1.3 Kelembagaan

Beberapa institusi dan badan bekerja dalam kerangka Konvensi. Institusi tersebut memiliki peran dan fungsi masing-masing dalam konvensi ini. Badan dan insitusi ini saling bekerjasama dalam menyukseskan konvensi perubahan iklim.

#### 3.1.3.1 Konferensi Para Pihak (COP)

Pasal 7 ayat 2 mendefinisikan COP sebagai badan tertinggi konvensi, yang menjadi otoritas tertinggi pada pengambilan keputusan. Konferensi ini diadakan setiap satu tahun sekali dan ditambah dengan pertemuan tambahan yang umumnya dilakukan di awal tahun, pertengahan tahun dan akhir tahun sebelum Konferensi Para Pihak. Pertemuan tambahan ini dilakukan untuk menentukan agenda dan tidak melahirkan keputusan.

*The Conference of the Parties, as the supreme body of this Convention, shall keep under regular review the implementation of the Convention and any related legal instruments that the Conference of the Parties may adopt, and shall make, within its mandate, the decisions necessary to promote the effective implementation of the Convention.*<sup>94</sup>

#### 3.1.3.2 COP Presiden dan Biro

##### 3.1.3.2.1 Presiden

Kantor Presiden COP berputar antara lima regional Serikat bangsa. Presiden terpilih umumnya adalah menteri lingkungan negara tempat diadakan COP dan terpilih secara aklamasi setelah pembukaan sesi COP.

Peran mereka adalah untuk memfasilitasi pekerjaan dan mempromosikan kesepakatan antara Pihak dalam COP. Dengan demikian, aturan prosedur menetapkan bahwa Presiden masih di bawah otoritas COP dan dia harus tetap imparisial dan tidak melaksanakan hak dari perwakilan Partai.<sup>95</sup>

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<sup>94</sup> Konvensi Kerangka Kerja Perserikatan Bangsa-Bangsa mengenai Perubahan Iklim, Pasal 7 butir 2.

<sup>95</sup> UNFCCC, *Handbook of the UNFCCC*, (Bonn: UNFCCC Secretariat, 2005), hal. 31.



### 3.1.3.2.2 Biro

Pekerjaan COP dan setiap badan pendukung dipandu oleh Biro terpilih. Untuk memastikan kesinambungan, ia berfungsi tidak hanya selama sesi tetapi juga antara sesi. Biro COP terdiri dari 11 petugas: Presiden COP, tujuh Wakil Presiden.<sup>96</sup>

### 3.1.3.3 Badan Tambahan (SBS)

Konvensi ini menetapkan dua badan tambahan (SBS), yaitu *Subsidiary Body for Scientific and Technological Advice* (SBSTA), oleh Pasal 9, dan *Subsidiary Body for Implementation* (SBI), dalam Pasal 10. Para SBSTA dan SBI, yang masing-masing bidang kerja dibahas dalam sub-bagian, adalah badan kerja utama konvensi. Mereka bertemu dua kali setahun selama satu sampai dua minggu, pertemuan pertama kali biasanya pada pertengahan tahun dan yang kedua dalam hubungannya dengan COP. Sesi dari SBS menghasilkan kejadian penting dalam proses perubahan iklim tetapi hanya COP yang dapat membuat keputusan. Produk utama dari SBSTA dan SBI adalah rekomendasi untuk rancangan keputusan, yang kemudian diteruskan ke COP untuk dipertimbangkan dan diadopsi. Pasal 9 ayat 1 mengenai SBSTA:

A subsidiary body for scientific and technological advice is hereby established to provide the Conference of the Parties and, as appropriate, its other subsidiary bodies with timely information and advice on scientific and technological matters relating to the Convention. This body shall be open to participation by all Parties and shall be multidisciplinary. It shall comprise government representatives competent in the relevant field of expertise. It shall report regularly to the Conference of the Parties on all aspects of its work.<sup>97</sup>

Pasal 10 mengenai SBI:

A subsidiary body for implementation is hereby established to assist the Conference of the Parties in the assessment and review of the effective implementation of the Convention. This body shall be open to participation

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<sup>96</sup> *Ibid*, hal. 31.

<sup>97</sup> Konvensi Kerangka Kerja Perserikatan Bangsa-Bangsa mengenai Perubahan Iklim, Pasal 9 ayat 1.

by all Parties and comprise government representatives who are experts on matters related to climate change. It shall report regularly to the Conference of the Parties on all aspects of its work.<sup>98</sup>

#### 3.1.3.4 Sekretariat

Sekretariat, juga dikenal sebagai Sekretariat Perubahan Iklim, yang memberikan layanan pada COP, SBS, Biro dan badan-badan lain yang dibentuk oleh COP. Mandat sekretariat ditetapkan dalam Pasal 8 dari Konvensi:

- a. untuk membuat aturan praktis untuk sesi dari badan Konvensi, yaitu COP dan SBS nya;
- b. untuk membantu Pihak, di negara-negara berkembang, dalam melaksanakan komitmen mereka;
- c. untuk memberikan dukungan kepada negosiasi, dan
- d. untuk berkoordinasi dengan sekretariat badan internasional lain yang relevan, *Global Environmental Facility* (GEF) dan menerapkannya dalam lembaga seperti *United Nations Development Programme* (UNDP), *United Nations Environment Program* (UNEP) dan Bank Dunia, IPCC dan konvensi terkait lainnya.<sup>99</sup>

Tugas khusus dari sekretariat termasuk mempersiapkan dokumen resmi COP dan SBS. Sekretariat secara institusional terkait dengan PBB dan diberikan di bawah PBB. Dikepalai oleh seorang Sekretaris Eksekutif, yang diangkat oleh Sekretaris-Jenderal Perserikatan Bangsa-Bangsa dalam konsultasi dengan COP melalui Biro, dan saat ini memegang pangkat Asisten-Sekretaris-Jenderal. Sekretaris Eksekutif member laporan untuk Sekretaris Jenderal melalui Wakil Sekretaris Jenderal mengenai hal-hal administratif dan keuangan. Sekretariat bertanggung jawab, melalui Sekretaris Eksekutif, untuk COP.<sup>100</sup>

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<sup>98</sup> *Ibid*, Pasal 10 ayat 1.

<sup>99</sup> *Ibid*, hal. 36.

<sup>100</sup> *Ibid*, hal. 36.

### 3.1.4 Prinsip Konvensi

Kerangka Konvensi Perubahan Iklim PBB memiliki prinsip yang dikenal luas. Prinsipnya adalah *Common but Differentiated Responsibilities*, yaitu setiap Negara peratifikasi UNFCCC memiliki kewajiban bersama untuk menurunkan emisi, namun dengan tanggung jawab yang berbeda-beda.<sup>101</sup>

## 3.2 Mekanisme Penurunan Karbon Menurut UNFCCC

Protokol Kyoto menyatakan bahwa negara Annex I pada UNFCCC harus mengurangi emisi melalui kebijakan dan langkah-langkah di dalam negeri, antara lain meningkatkan efisiensi penggunaan energi, perlindungan perosot (peresap) GRK, teknologi yang ramah iklim dan sebagainya. Selain itu, untuk memudahkan negara maju memenuhi sasaran penurunan emisi, Protokol Kyoto juga mengatur mekanisme fleksibel, yang terdiri atas Implementasi Bersama, Perdagangan Emisi, dan Mekanisme Pembangunan Bersih.

### 3.2.1 Implementasi Bersama (*Joint Implementation*);

Yaitu mekanisme penurunan emisi di mana negara-negara *Annex I* dapat mengalihkan pengurangan emisi melalui proyek bersama dengan tujuan mengurangi emisi akibat kegiatan manusia atau yang meningkatkan peresapan GRK dalam Pasal 6 Protokol Kyoto, meski protokol ini tidak menyebut secara langsung mekanisme dengan nama *Joint Implementation*.<sup>102</sup> Hal ini dapat

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<sup>101</sup> Pasal 3 butir 1 UNFCCC menyebutkan, *The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.*

<sup>102</sup> Pasal 6 Protokol Kyoto menyebutkan:

1. *For the purpose of meeting its commitments under Article 3, any Party included in Annex I may transfer to, or acquire from, any other such Party emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:*
  - (a) *Any such project has the approval of the Parties involved;*
  - (b) *Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;*
  - (c) *It does not acquire any emission reduction units if it is not in compliance with its obligations under Articles 5 and 7; and*
  - (d) *The acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting commitments under Article 3.*

dilaksanakan dengan beberapa persyaratan, yang terpenting adalah bahwa kegiatan tersebut hanya bersifat tambahan dari langkah-langkah yang diambil di tingkat nasional untuk memenuhi target pengurangan emisi. Dalam Implementasi Bersama, komoditas yang diperdagangkan berupa unit pengurangan emisi (*Emission Reduction Unit, ERU*).<sup>103</sup>

### 3.2.2 Perdagangan Emisi (*Emission Trading*);

Ini adalah mekanisme perdagangan emisi yang hanya dapat dilakukan antar negara industri untuk memudahkan mencapai target. Negara industri yang emisi GRK-nya di bawah batas yang diizinkan dapat menjual kelebihan jatah emisinya ke negara industri lain yang tidak dapat memenuhi kewajibannya. Namun, jumlah emisi GRK yang diperdagangkan dibatasi agar negara pembeli emisi tetap memenuhi kewajibannya. Dalam perdagangan emisi, komoditas yang diperdagangkan berupa Unit Jatah Emisi (*Assigned Amount Unit, AAU*).<sup>104</sup>

Pasal-pasal dalam Protokol Kyoto yang terkait dengan Perdagangan Emisi adalah:

1. Pasal 3 ayat 10, menetapkan bahwa ERU yang didapat dari JI atau sebagian jatah emisi dapat ditambahkan pada Pihak lain yang merupakan negara *Annex I*, yang didapat dari negara *Annex I* sesuai dengan pasal 6 dan 17.

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2. *The Conference of the Parties serving as the meeting of the Parties to this Protocol may, at its first session or as soon as practicable thereafter, further elaborate guidelines for the implementation of this Article, including for verification and reporting.*

3. *A Party included in Annex I may authorize legal entities to participate, under its responsibility, in actions leading to the generation, transfer or acquisition under this Article of emission reduction units.*

4. *If a question of implementation by a Party included in Annex I of the requirements referred to in this Article is identified in accordance with the relevant provisions of Article 8, transfers and acquisitions of emission reduction units may continue to be made after the question has been identified, provided that any such units may not be used by a Party to meet its commitments under Article 3 until any issue of compliance is resolved.*

<sup>103</sup> Daniel Moerdijarso, *Protokol Kyoto: Implikasinya Bagi Negara Berkembang*, (Jakarta : Kompas, 2007), hal.48.

<sup>104</sup> *Ibid*, hal. 58.

2. Pasal 3 ayat 11, menetapkan bahwa ERU yang didapat dari JI atau sebagian jatah emisi dapat dikurangkan pada Pihak lain yang merupakan negara *Annex I*, yang dialihkan dari negara *Annex I* sesuai dengan pasal 6 dan 17.

3. Pasal 17, menetapkan bahwa negara yang dapat melakukan perdagangan emisi hanya negara yang merupakan *Annex B* yang terdiri dari negara yang tergabung dalam *Organization of Economic Co-operation and Development (OECD)*, negara-negara Eropa Tengah dan Timur, dan bekas Uni Soviet.<sup>105</sup>

### 3.2.3 Mekanisme Pembangunan Bersih (*Clean Development Mechanism*)

Pasal 12 Protokol Kyoto menguraikan prosedur penurunan emisi GRK dalam rangka kerja sama negara industri dengan negara berkembang.<sup>106</sup>

<sup>105</sup> *Ibid*, hal. 58.

<sup>106</sup> Pasal 12 Protokol Kyoto menyebutkan:

1. *A clean development mechanism is hereby defined.*
2. *The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.*
3. *Under the clean development mechanism:*
  - (a) *Parties not included in Annex I will benefit from project activities resulting in certified emission reductions; and*
  - (b) *Parties included in Annex I may use the certified emission reductions accruing from such project activities to contribute to compliance with part of their quantified emission limitation and reduction commitments under Article 3, as determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol.*
4. *The clean development mechanism shall be subject to the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Protocol and be supervised by an executive board of the clean development mechanism.*
5. *Emission reductions resulting from each project activity shall be certified by operational entities to be designated by the Conference of the Parties serving as the meeting of the Parties to this Protocol, on the basis of:*
  - (a) *Voluntary participation approved by each Party involved;*
  - (b) *Real, measurable, and long-term benefits related to the mitigation of climate change; and*
  - (c) *Reductions in emissions that are additional to any that would occur in the absence of the certified project activity.*
6. *The clean development mechanism shall assist in arranging funding of certified project activities as necessary.*
7. *The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, elaborate modalities and procedures with the objective of ensuring transparency, efficiency and accountability through independent auditing and verification of project activities.*
8. *The Conference of the Parties serving as the meeting of the Parties to this Protocol shall ensure that a share of the proceeds from certified project activities is used to cover administrative*

Mekanisme ini diharapkan membantu negara *Annex I* mencapai target pengurangan emisi dan negara *Non-Annex I* dapat melaksanakan program pembangunan berkelanjutan. Caranya adalah negara *Annex I* melakukan investasi dalam program pengurangan emisi atau program yang berpotensi mengurangi emisi dan/atau menyerap GRK di negara berkembang. Hasilnya akan dihitung sebagai pengurangan emisi di negara *Annex I* yang melakukan investasi tersebut. Mekanisme ini melibatkan berbagai persyaratan dan diawasi oleh sebuah badan operasional (*Executive Board*) yang ditunjuk COP. Dalam pelaksanaannya CDM adalah murni bisnis jual beli emisi.<sup>107</sup> Mekanisme ini menghasilkan Pengurangan Emisi Yang Disertifikasi (*Certified Emission Reduction, CER*).

### 3.2.4 Penurunan Emisi dari Deforestasi dan Degradasi Hutan (*Reducing Emissions from Deforestation and Forest Degradation*)

Pada pertemuan UNFCCC di Bali (COP-13), kesepakatan dicapai pada "kebutuhan mendesak untuk mengambil tindakan lebih lanjut yang berarti untuk mengurangi emisi dari deforestasi dan degradasi hutan" telah disetujui. Penurunan emisi ini dilakukan di negara berkembang yang tidak memiliki kewajiban untuk menurunkan emisi sehingga dilakukan secara sukarela dengan dukungan berupa peningkatan kapasitas, bantuan teknis dan alih teknologi dari negara maju.<sup>108</sup> Kesepakatan ini dituangkan dalam keputusan SBSTA akan kegiatan Penurunan Emisi dari Deforestasi dan Degradasi Hutan dalam *Bali Action Plan*.<sup>109</sup> REDD

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*expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.*

9. *Participation under the clean development mechanism, including in activities mentioned in paragraph 3(a) above and in the acquisition of certified emission reductions, may involve private and/or public entities, and is to be subject to whatever guidance may be provided by the executive board of the clean development mechanism.*

10. *Certified emission reductions obtained during the period from the year 2000 up to the beginning of the first commitment period can be used to assist in achieving compliance in the first commitment period.*

<sup>107</sup> Daniel Moerdijarso, *CDM: Mekanisme Pembangunan Bersih*, (Jakarta: Kompas, 2007) hal 3.

<sup>108</sup> Michael Richards, *REDD, The Last Chance For Tropical Forests* (London:FRR, 2008).

<sup>109</sup>Bali Action Plan mengenai REDD di negara berkembang Pasal 1-3.

1. *Invites Parties to further strengthen and support ongoing efforts to reduce emissions from deforestation and forest degradation on a voluntary basis;*

digambarkan sebagai salah satu cara untuk mereduksi emisi di yang diberi kompensasi.

*“The basic idea behind Reducing Emissions from Deforestation and Degradation (REDD) is simple: Countries that are willing and able to reduce emissions from deforestation should be financially compensated for doing so.”*<sup>110</sup>

Dalam konvensi perubahan iklim terakhir di Cancun tahun 2010, dunia telah sepakat untuk memasukkan REDD+ dalam mekanisme yang akan berlaku setelah Protokol Kyoto berakhir di tahun 2012.<sup>111</sup>

### 3.3 Pengertian Alih Teknologi Menurut UNFCCC

UNFCCC memiliki beberapa ketentuan jelas dan paling kuat diartikulasikan pada peran alih teknologi di MEAs. Ketentuan ini mendefinisikan, antara lain, apa kewajiban negara-negara industri yang berkenaan dengan pihak-pihak negara berkembang. Alih teknologi dibahas dalam Pasal 4 dari UNFCCC. Ketentuan ini mencakup berbagai isu, termasuk pembiayaan, alih teknologi dan komitmen. Pasal 4 ayat 1 menuliskan tentang difusi teknologi antara semua Pihak dan Pasal 4 ayat 3 menuliskan tentang pembiayaan teknologi. Pasal 4 ayat 7 menghubungkan pemenuhan komitmen negara berkembang negara untuk pelaksanaan yang efektif dari komitmen negara maju, khususnya penyediaan dukungan keuangan dan alih teknologi. Ketentuan kunci untuk alih teknologi dari

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2. *Encourages all Parties, in a position to do so, to support capacity-building, provide technical assistance, facilitate the transfer of technology to improve, inter alia, data collection, estimation of emissions from deforestation and forest degradation, monitoring and reporting, and address the institutional needs of developing countries to estimate and reduce emissions from deforestation and forest degradation;*

3. *Further encourages Parties to explore a range of actions, identify options and undertake efforts, including demonstration activities, to address the drivers of deforestation relevant to their national circumstances, with a view to reducing emissions from deforestation and forest degradation and thus enhancing forest carbon stocks due to sustainable management of forests.*

<sup>110</sup> Imme Scholz dan Lars Schmidt, *Reducing Emissions from Deforestation and Forest Degradation in Developing Countries: Meeting the main challenges ahead*, (Bonn: German Development Institute, 2008), hal 1.

<sup>111</sup> Kementerian Kehutanan, *REDD dalam Perspektif Global*. Disadur dari <http://www.redd-indonesia.org>, diakses pada tanggal 25 November 2011 pukul 18.20 WIB

Lampiran II<sup>112</sup> untuk negara-negara berkembang adalah Pasal 4 ayat 5. Pasal 4 ayat 5 mengharuskan negara maju untuk memfasilitasi dan mendanai pengalihan teknologi ramah lingkungan dan *know-how* agar dapat mengimplementasi ketentuan konvensi.<sup>113</sup>

Pasal 4 ayat 1 (c) juga berkomitmen semua pihak untuk:

*Promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors.*<sup>114</sup>

Protokol Kyoto untuk UNFCCC secara langsung membahas alih teknologi dalam Pasal 10 (c). Protokol Kyoto juga membentuk CDM sebagai salah satu mekanisme pasar untuk membantu Pihak *Annex I* untuk mengurangi emisi mereka dalam Pasal 12. CDM, seolah-olah, memberikan insentif untuk alih teknologi ke negara berkembang dengan mendorong proyek-proyek investasi yang mengurangi jejak gas rumah kaca yang diharapkan dari ekonomi lokal.

Dalam Laporan Khusus yang disiapkan dalam menanggapi permintaan oleh SBSTA untuk UNFCCC, IPCC mendefinisikan alih teknologi sebagai berikut:

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<sup>112</sup> Lampiran II Pihak terdiri dari anggota OECD Annex I, namun tidak dalam transisi ekonomi (EIT) Pihak. Mereka diminta untuk menyediakan sumber daya keuangan untuk memungkinkan negara-negara berkembang untuk melakukan kegiatan pengurangan emisi di bawah Konvensi dan untuk membantu mereka beradaptasi dengan dampak perubahan iklim. Selain itu, mereka harus "mengambil semua langkah praktis" untuk mempromosikan pengembangan dan alih teknologi ramah lingkungan untuk EIT Pihak dan negara-negara berkembang. Pendanaan diberikan oleh Pihak Annex II adalah sebagian besar disalurkan melalui mekanisme keuangan Konvensi.

<sup>113</sup> Pasal 4 ayat 5 UNFCCC menyebutkan:  
*The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies.*

<sup>114</sup> Kerangka Kerja Perserikatan Bangsa-Bangsa mengenai Perubahan Iklim, Pasal 4 ayat 1(c).



*The broad set of processes covering the flows of knowledge, experience and equipment amongst different stakeholders such as governments, private sector entities, financial institutions, NGOs and research/educational institutions.*

*The broad and inclusive term “transfer” encompasses diffusion of technologies and technology co-operation across and within countries. It comprises the process of learning to understand, utilise and replicate the technology, including the capacity to choose it and adapt it to local conditions.*<sup>115</sup>

Dari definisi tersebut dapat disimpulkan bahwa alih teknologi menurut IPCC adalah suatu proses pengalihan ilmu, pengalaman dan peralatan dari pihak yang berbeda-beda. Alih teknologi dapat berupa difusi teknologi dan kerjasama teknologi antar negara atau dalam suatu negara yang dapat diadaptasi secara lokal.

### **3.4 Subjek Alih teknologi dalam UNFCCC**

Subjek alih teknologi dalam UNFCCC adalah negara maju yang memiliki komitmen untuk menurunkan emisi yang tergabung dalam *Annex I* dan negara berkembang yang tidak memiliki kewajiban menurunkan emisi yang tergabung dalam *Non-Annex I*. Ketentuan pembagian negara ini dituliskan dalam Protokol Kyoto. Pembagian negara ini ditentukan oleh besaran emisi negara-negara tersebut sehingga negara-negara tersebut harus berkomitmen untuk menurunkan emisi dengan menjadikan tahun 1990 sebagai *baseline*. dalam menentukan emisi negara *Annex I* harus melakukan berbagai ketentuan dari protokol dalam menjalankan upaya penurunan emisi. Komitmen tersebut dituliskan di Pasal 2 dan 3 Protokol Kyoto termasuk bekerjasama dengan negara lain untuk menurunkan emisi.

UNFCCC membagi negara-negara peratifikasi konvensi menjadi 2 kelompok yaitu:

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<sup>115</sup> Alih teknologi adalah suatu proses pengalihan ilmu, pengalaman dan peralatan oleh berbagai pemangku kepentingan yang dapat diadaptasi secara lokal. Intergovernmental Panel on Climate Change (2000). “*Methodological and Technological Issues in Technology Transfer.*” Cambridge University Press, UK.

a. *Annex I Countries*

Negara yang tergabung dalam kelompok ini adalah negara industri dan negara dalam keadaan ekonomi transisi. Dalam kelompok ini terjadi pembagian lebih lanjut menjadi negara *Annex I* dan *Annex II*.

1. *Annex I*

Negara *Annex I* adalah negara yang memiliki kewajiban untuk mengurangi emisi seperti emisi ditahun 1990. Yang termasuk kedalam kelompok ini adalah:

Australia, Austria, Belarusia, Belgia, Bulgaria, Kanada, Kroasia, Republik Ceko, Denmark, Estonia, Finlandia, Perancis, German, Yunani, Hungaria, Islandia, Irlandia, Italia, Jepang, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monako, Belanda, Selandia Baru, Norwegia, Polandia, Portugal, Romania, Federasi Rusia, Slovakia, Slovenia, Spanyol, Swedia, Swiss, Turki, Ukraina, Inggris Raya, Amerika Serikat.

2. *Annex II*

Negara *Annex II* adalah negara yang termasuk dalam negara maju dan tergabung dalam *Organization of Economic Cooperation and Development*, namun tidak termasuk ke dalam negara ekonomi transisi. Negara dalam kelompok ini adalah:

Australia, Austria, Belgia, Kanada, Denmark, Finlandia, Perancis, German, Yunani, Islandia, Irlandia, Italia, Jepang, Korea Selatan, Luksemburg, Belanda, Selandia Baru, Norwegia, Portugal, Spanyol, Swedia, Swiss, Inggris Raya, Amerika Serikat.

b. *Non-Annex Countries*

Negara *Non-Annex* adalah umumnya negara berkembang yang tidak termasuk kedalam pengelompokan *Annex I* dan *II*. Negara ini tidak memiliki kewajiban untuk menurunkan emisi, namun tetap dapat ikut serta dalam mekanisme UNFCCC.

### 3.5 Tujuan Alih Teknologi dalam UNFCCC

Tujuan Alih teknologi dalam UNFCCC tercantum dalam Pasal 4 ayat 5 yang berbunyi:

*The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies.*<sup>116</sup>

Dengan Pasal tersebut, alih teknologi diyakini harus dilakukan untuk membantu negara berkembang dalam melakukan implementasi kegiatan penurunan emisi yang tertuang dalam Konvensi dan perjanjian internasional dibawahnya.

### 3.6 Landasan Hukum dalam UNFCCC Mengenai Alih teknologi

Landasan hukum mengenai alih teknologi tertuang dalam Konvensi Perubahan Iklim, Protokol Kyoto, dan rencana Aksi Bali.

Pasal 4 ayat 5 Kerangka Konvensi Perubahan Iklim PBB:

*The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies.*<sup>117</sup>

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<sup>116</sup> Perserikatan Bangsa-Bangsa, *Konvensi Perserikatan Bangsa-Bangsa Mengenai Kerangka Kerja Perubahan Iklim*. Pasal 4 butir 5.

<sup>117</sup> *Ibid*, Pasal 4 ayat 5.

Pasal 10 butir c Protokol Kyoto:

*Cooperate in the promotion of effective modalities for the development, application and diffusion of, and take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies, know-how, practices and processes pertinent to climate change, in particular to developing countries, including the formulation of policies and programmes for the effective transfer of environmentally sound technologies that are publicly owned or in the public domain and the creation of an enabling environment for the private sector, to promote and enhance the transfer of, and access to, environmentally sound technologies.*<sup>118</sup>

*Bali Action Plan*

*The Bali Action Plan launched a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term co-operative action', by addressing, inter alia:*

*(d) Enhanced action on technology development and transfer to support action on mitigation and adaptation, including, inter alia, consideration of:*

*(i) Effective mechanisms and enhanced means for the removal of obstacles to, and provision of financial and other incentives for, scaling up of the development and transfer of technology to developing country Parties in order to promote access to affordable environmentally sound technologies;*

*(ii) Ways to accelerate deployment, diffusion and transfer of affordable environmentally sound technologies;*

*(iii) Co-operation on research and development of current, new and innovative technology, including winwin solutions;*

*(iv) The effectiveness of mechanisms and tools for technology co-operation in specific sectors.*<sup>119</sup>

Selain itu, dalam perkembangannya, alih teknologi menjadi isu penting dalam beberapa perjanjian yang dibuat dalam COP setelah *Bali Action Plan*, seperti dalam COP 15 yang *Copenhagen Accord*, dan COP 16 yang menghasilkan *Cancun Agreement*.

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<sup>118</sup> Konvensi Perserikatan Bangsa-Bangsa Mengenai Kerangka Kerja Perubahan Iklim. *Protokol Kyoto*, pasal 10 butir c.

<sup>119</sup> International Center for Trade and Sustainable Development, *Technologies for Climate Change and Intellectual Property: Issues for Small Developing Countries*, (Jenewa: ICTSD, 2009), hal. 2.

### 3.7 Alih Teknologi dalam Konferensi Para Pihak

Alih teknologi menjadi sudah menjadi suatu isu yang sangat penting dalam negosiasi perubahan iklim. Sebagaimana yang diamanatkan dalam Pasal 4 UNFCCC, alih teknologi menjadi suatu instrumen yang mendukung keberhasilan konvensi. Dalam pasal tersebut, dihubungkan bagaimana implementasi konvensi yang efektif dapat dilakukan oleh negara berkembang ditentukan oleh komitmen negara maju dalam mekanisme pendanaan dan alih teknologi.

Membangun kerangka hukum UNFCCC, Protokol Kyoto menegaskan kembali perlunya bagi negara-negara untuk bekerja sama dalam rangka meningkatkan pengembangan dan difusi ESTs dengan penekanan khusus pada alih teknologi ke negara berkembang. Sebagai tambahan, Protokol Kyoto menyebutkan dalam pasal 10 butir c:

*“explicitly calls on the member states to enlist the help of the private sector to promote technology transfer by creating an enabling environment.”*<sup>120</sup>

Konferensi Para Pihak, badan UNFCCC, yang mendefinisikan komponen lingkungan yang memungkinkan untuk memasukkan menghapus *“technical, legal and administrative barriers to technology transfer”* dan menyiapkan *“regulatory frameworks and transparency,”* sebagai tindakan-tindakan pemerintah yang menciptakan lingkungan yang sesuai untuk alih teknologi antara sektor swasta dan publik.<sup>121</sup> Perlindungan hak kekayaan intelektual secara khusus diidentifikasi sebagai salah satu sarana untuk menciptakan lingkungan yang kondusif seperti serta menyediakan akses ke teknologi didanai publik. Pasal 10(c) juga memasukan pengalihan ESTs yang dimiliki publik atau dalam ranah publik.<sup>122</sup>

Keputusan pada Konferensi Para Pihak di Buenos Aires menuangkan akan harapan terhadap perkembangan alih teknologi dalam perubahan iklim. Negara maju diharapkan dapat mendukung negara berkembang untuk meningkatkan

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<sup>120</sup> UNFCCC, Protokol Kyoto, Pasal 10.

<sup>121</sup> UNFCCC, *Report of the Conference of the Parties on its Seventh Session, held at Marrakesh from 29 October to 10 November 2001*, diunduh dari <http://unfccc.int/resource/docs/cop7/13.pdf>, Diakses pada tanggal 29 Desember pukul 17.15 WIB.

<sup>122</sup> UNFCCC, Protokol Kyoto, Pasal 10.

kemampuan dalam negeri untuk menurunkan emisi.<sup>123</sup> Buenos Aires pun menuliskan langkah-langkah untuk mendukung kegiatan alih teknologi.

Dalam Rencana Aksi Bali tahun 2007 yang disepakati dalam Konferensi Para Pihak ke-13, dituangkan kebutuhan mengenai alih teknologi sebagai prioritas utama untuk mencapai keberhasilan implementasi. Dalam *Bali Action Plan*, dikemukakan:

*Urges Parties included in Annex II to the Convention, relevant intergovernmental organizations, international financial institutions, and other partnerships and initiatives, including the Climate Technology Initiative, in a position to do so, to provide technical and financial support to Parties not included in Annex I to the Convention and countries with economies in transition to help them conduct, identify and implement prioritized technology needs.*<sup>124</sup>

Dalam *Copenhagen Accord* di tahun 2009 yang disepakati dalam COP 15 di Denmark, Pihak Konvensi menyetujui diadakannya mekanisme alih teknologi dilakukan untuk meningkatkan dan mendukung aksi mitigasi dan adaptasi negara. Dalam perjanjian tersebut dispesifikasi juga mengenai mekanisme alih teknologi yang didasarkan atas situasi nasional dan prioritas nasional. Dalam perkembangannya, mekanisme teknologi dalam perubahan iklim telah dituliskan secara tegas dalam negosiasi mengenai mandat, struktur dan fungsi entitas alih teknologi walau beberapa isu besar masih belum dapat diselesaikan dan masih harus dibahas dalam pertemuan di Durban.<sup>125</sup>

Salah satu perjanjian dalam negosiasi mengenai perubahan iklim yang cukup banyak mengakomodasi mengenai alih teknologi adalah perjanjian Cancun (*Cancun Agreement*). *Cancun Agreement* menciptakan suatu mekanisme baru dalam alih teknologi untuk perubahan iklim yang disebut mekanisme teknologi (*Technology Mechanism*). Dengan demikian, keputusan untuk menciptakan

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<sup>123</sup> *Buenos Aires Plan of Action* mengenai alih teknologi menyatakan: *Annex I Parties, in their technology transfer activities, to take into account support for the development and enhancement of the endogenous capacities and technologies of developing country Parties.*

<sup>124</sup> UNFCCC, *Bali Action Plan*, Keputusan 3 mengenai Alih Teknologi, Pasal 8.

<sup>125</sup> ICTSD, *The Climate Technology Mechanism: Issues and Challenges*, (Jenewa: ICTSD, 2011), hal. 2.

Mekanisme Teknologi di Konferensi Cancun merupakan puncak dari proses tiga tahun negosiasi sejak COP 13 di Bali. Pada akhirnya, pembentukan Mekanisme Teknologi merupakan perkembangan yang berpotensi positif, terutama mengingat tuntutan lama oleh negara-negara berkembang untuk memperkuat kelembagaan 'pilar' alih teknologi di bawah UNFCCC. Lebih luas lagi, ia memiliki potensi untuk menjadi titik pertemuan penting bagi negara maju dan berkembang untuk bekerja sama dalam semangat yang positif untuk mempercepat penyebaran dan alih teknologi untuk mitigasi dan adaptasi perubahan iklim.<sup>126</sup>

Keputusan yang terkait dengan pembentukan *Technology Mechanism* terdapat dalam bagian IV B dari keputusan 1/CP.16 dari COP 16 dalam *the Outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action* (AWG LCA). Menurut paragraf 117, COP memutuskan untuk membentuk *Technology Mechanism* untuk memfasilitasi implementasi dari kegiatan alih teknologi. Paragraf 117 berbunyi:

*Facilitate the implementation of actions for achieving the objective referred to in paragraphs 113-115. Objective of enhanced action on technology development and transfer, is to support action on mitigation and adaptation in order to achieve the full implementation of the Convention.*<sup>127</sup>

COP juga memutuskan untuk mempercepat aksi yang konsisten dengan kewajiban internasional dalam tahapan yang berbeda dalam siklus teknologi termasuk kegiatan riset dan pembangunan, demonstrasi, pengeluaran, difusi dan pengalihan teknologi untuk mendukung aksi mitigasi dan adaptasi, seperti tertuang sebagai berikut:

*To accelerate action consistent with international obligations, at different stages of the technology cycle, including research and development, demonstration, deployment, diffusion and transfer of technology in support of action on mitigation and adaptation.*<sup>128</sup>

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<sup>126</sup> *Ibid*, hal. 2.

<sup>127</sup> UNFCCC, *Cancun Agreements*, Butir 117.

<sup>128</sup> UNFCCC, *Cancun Agreements*, Butir 115.

Dalam COP pula diputuskan area yang menjadi prioritas mekanisme teknologi yaitu:

- (a) *Development and enhancement of endogenous capacities and technologies of developing country Parties, including cooperative research, development and demonstration programmes;*
- (b) *Deployment and diffusion of environmentally sound technologies and know-how in developing country Parties;*
- (c) *Increased public and private investment in technology development, deployment, diffusion and transfer;*
- (d) *Deployment of soft and hard technologies for the implementation of adaptation and mitigation actions;*
- (e) *Improved climate change observation systems and related information management;*
- (f) *Strengthening of national systems of innovation and technology innovation centres;*
- (g) *Development and implementation of national technology plans for mitigation and adaptation;*<sup>129</sup>

Mekanisme Teknologi terdiri dari dua komponen: *Technology Executive Committee* (TEC) dan *Climate Technology Center and Network* (CTCN). Keduanya harus "memfasilitasi pelaksanaan yang efektif dari Mekanisme Teknologi, di bawah bimbingan dari Konferensi Para Pihak".<sup>130</sup>

Mandat dan komposisi dari TEC tertulis dalam Annex IV dari keputusan Cancun dalam AWG LCA). Menurut keputusan tersebut, TEC harus terdiri dari 20 ahli yang di[pilih oleh COP dan bertindak sesuai kapasitas personal dan dinominasikan oleh COP. Dalam memenuhi asas adil dan seimbang, TEC harus terdiri dari 9 perwakilan negara Annex I, 3 dari 3 wilayah yang tidak termasuk dalam negara Annex I (Afrika; Asia Pasifik; dan Amerika Latin dan Karibia), 1 perwakilan dari *Small Island Developing State* dan 1 perwakilan dari *Least Developed Countries*.<sup>131</sup>

Fungsi-fungsi dari TEC dijelaskan sebagai berikut:

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<sup>129</sup> *Ibid*, Paragraf 120.

<sup>130</sup> ICTSD, *The Climate Technology Mechanism: Issues and Challenges*, (Jenewa: ICTSD, 2011), hal. 5.

<sup>131</sup> *Ibid*, hal. 6.



- (a) *Provide an overview of technological needs and analysis of policy and technical issues related to the development and transfer of technology for mitigation and adaptation;*
- (b) *Consider and recommend actions to promote technology development and transfer in order to accelerate action on mitigation and adaptation;*
- (c) *Recommend guidance on policies and programme priorities related to technology development and transfer with special consideration given to the least developed country Parties;*
- (d) *Promote and facilitate collaboration on the development and transfer of technology for mitigation and adaptation between governments, the private sector, non-profit organizations and academic and research communities;*
- (e) *Recommend actions to address the barriers to technology development and transfer in order to enable enhanced action on mitigation and adaptation;*
- (f) *Seek cooperation with relevant international technology initiatives, stakeholders and organizations, promote coherence and cooperation across technology activities, including activities under and outside of the Convention;*
- (g) *Catalyse the development and use of technology road maps or action plans at international, regional and national levels through cooperation between relevant stakeholders, particularly governments and relevant organizations or bodies, including the development of best practice guidelines as facilitative tools for action on mitigation and adaptation.*<sup>132</sup>

Selain dibentuk TEC, mekanisme teknologi juga membentuk *Climate Technology Center and Network (CTCN)*. Fungsi utama CTCN adalah:

*facilitate a Network of national, regional, sectoral and international technology networks, organizations and initiatives with a view to engaging the participants of the Network in a number of functions”.*

- (a) *At the request of a developing country Party:*
  - (i) *Provide advice and support related to the identification of technology needs and the implementation of environmentally sound technologies, practices and processes;*
  - (ii) *Facilitate the provision of information, training and support for programmes to build or strengthen developing country capacity to identify technology options, make technology choices and operate, maintain and adapt technology;*
  - (iii) *Facilitate prompt action on the deployment of existing technology in developing country Parties based on identified needs;*
- (b) *Stimulate and encourage, through collaboration with the private sector, public institutions, academia and research institutions, the development and transfer of existing and emerging environmentally sound technologies, as well as opportunities for North/South, South/South and triangular technology cooperation;*
- (c) *Facilitate a Network of national, regional, sectoral and international technology centres, networks, organizations and initiatives with a view to:*

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<sup>132</sup> *Ibid*, Paragraf 121.

- (i) *Enhancing cooperation with national, regional and international technology centres and relevant national institutions;*
  - (ii) *Facilitating international partnerships among public and private stakeholders to accelerate the innovation and diffusion of environmentally sound technologies to developing country Parties;*
  - (iii) *Providing, on request by a developing country Party, in-country technical assistance and training to support identified technology actions in developing country Parties;*
  - (iv) *Stimulating the establishment of twinning centre arrangements to promote North/South, South/South and triangular partnerships with a view to encouraging cooperative research and development;*
  - (v) *Identify, disseminate and assist with developing analytical tools, policies and best practices for country-driven planning to support the dissemination of environmentally sound technologies;*
- (d) *Performing other such activities as may be necessary to carry out its functions.*<sup>133</sup>

Teks negosiasi untuk pertemuan Tianjin UNFCCC, pada bulan Oktober 2010, tepat sebelum Cancun, menyatakan bahwa CTCN akan membangun dan memfasilitasi TEC.<sup>134</sup> Penghapusan istilah membangun dari Cancun di akhir perjanjian adalah signifikan. Penciptaan atau pembentukan jaringan pusat inovasi regional dengan tujuan mempercepat difusi teknologi ramah lingkungan selama pra-perundingan Cancun dianggap sebagai salah satu langkah konkret Mekanisme Teknologi yang baru. Sebenarnya, banyak nilai yang bertambah dalam Mekanisme Teknologi terletak dalam penciptaan jaringan pusat inovasi regional.

Di samping itu, juga harus dicatat, bahwa tidak ada akhirnya referensi eksplisit dalam keputusan akhir Cancun untuk mendukung strategi inovasi energi bersih dan upaya atau dengan negara-negara berkembang, di antara fungsi TEC atau CTCN tersebut. Hal ini disebutkan bahwa TEC adalah untuk memfasilitasi kemitraan internasional antara pemangku kepentingan publik dan swasta untuk mempercepat inovasi dan difusi teknologi lingkungan untuk Pihak negara berkembang. Namun, membina kemitraan untuk mempercepat inovasi dan difusi EST ke negara berkembang tidak selalu berhasil untuk mendukung inovasi energi

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<sup>133</sup> *Ibid*, Paragraf 123.

<sup>134</sup> *Ibid*, Paragraf 123.

bersih di atau oleh negara-negara, khususnya karena tidak adanya referensi untuk penciptaan pusat inovasi teknologi nasional atau regional.<sup>135</sup>

Dengan demikian fakta bahwa CTCN sekarang terbatas hanya memfasilitasi jaringan nasional, regional, sektoral dan pusat teknologi internasional menandai penurunan ambisi dibandingkan dengan keinginan sebenarnya. Perubahan ini mungkin berasal dari kekhawatiran tentang implikasi biaya yang terkait dengan penciptaan entitas baru dan keinginan untuk mengambil keuntungan lebih besar dari lembaga-lembaga yang ada dan pusat.<sup>136</sup> Secara keseluruhan, fokus utama CTCN adalah untuk memberikan layanan kepada negara-negara berkembang. Namun, ada juga beberapa kemungkinan tumpang tindih antara beberapa fungsi TEC dan dari CTCN dalam kaitannya dengan mempromosikan kolaborasi teknologi dengan berbagai pemangku kepentingan. Misalnya, TEC dapat mempromosikan dan memfasilitasi kolaborasi pada pengembangan dan alih teknologi untuk mitigasi dan adaptasi antara pemerintah, sektor swasta, organisasi *non-profit* dan akademis, dan komunitas peneliti (fungsi (d)) dan juga CTCN dapat mempromosikan dan memfasilitasi kolaborasi pada pengembangan dan alih teknologi untuk mitigasi dan adaptasi antara pemerintah, sektor swasta, organisasi *non-profit* dan akademis, dan komunitas peneliti (fungsi (b)). Untuk alasan ini, referensi untuk kebutuhan koherensi dan sinergi antara kedua badan ini penting.

Dalam Konferensi Para Pihak di Durban, tercipta suatu komitmen baru bagi negara *Annex* di mana komitmen dalam Protokol Kyoto akan berlanjut menjadi Komitmen Periode II yang dimulai pada tahun 2013.<sup>137</sup> Ini berarti mekanisme perdagangan karbon dalam Protokol Kyoto akan terus berlanjut hingga 2017 atau 2020. Selain itu Durban memperkenalkan beberapa hal dalam

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<sup>135</sup> ICTSD, *The Climate Technology Mechanism: Issues and Challenges*, (Jenewa: ICTSD, 2011), hal. 8.

<sup>136</sup> *Ibid*, hal. 8.

<sup>137</sup> Keputusan AWG-KP di COP 17 berbunyi: *Decides that the second commitment period under the Kyoto Protocol shall begin on 1 January 2013 and end either on 31 December 2017 or 31 December 2020, to be decided by the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its seventeenth session.*

alih teknologi menyangkut TEC diantaranya pemilihan ketua wakil ketua TEC yaitu Gabriel Blanco dari Argentina dan Antonio Pflueger dari Jerman.<sup>138</sup> Keputusan Durban pun meluncurkan suatu mekanisme pendanaan baru secara resmi yang bernama *Green Climate Fund*, yang juga akan mendanai alih teknologi di dalam UNFCCC.<sup>139</sup>

### 3.8 Mekanisme Pendanaan Alih Teknologi dalam Upaya Penurunan Emisi di UNFCCC

Dalam melakukan alih teknologi, negara berkembang mengandalkan beberapa mekanisme pendanaan baik multilateral dan bilateral. Mekanisme pendanaan ini masing-masing memiliki anggaran dalam pelaksanaan alih teknologi di negara berkembang. Mekanisme pendanaan yang tersedia untuk alih teknologi diantaranya adalah *Overseas Development Assistance*, *Global Environment Facility*, inisiatif pendanaan dari negara maju, Bank Pembangunan Multilateral, dan *Public-Private Partnership*.

#### 3.8.1 *Overseas Development Assistance (ODA)*

Bantuan Pembangunan Luar Negeri (ODA) masih signifikan bagi negara-negara berkembang dan pengalihan yang sukses dari EST. ODA juga dapat membantu peningkatan kerangka kebijakan dan mengambil peningkatan kapasitas jangka panjang. ODA masih diperlukan untuk bagian dunia dan sektor di mana investasi sektor swasta relatif rendah, seperti pertanian, kehutanan, kesehatan manusia dan pengelolaan zona pesisir. Ada peningkatan pengakuan bahwa ODA dapat difokuskan terbaik pada mobilisasi dan melipatgandakan tambahan sumber

<sup>138</sup> Pembukaan keputusan Durban dalam TEC menyatakan: *Welcomes the elected members of the Technology Executive Committee and the election of Mr. Gabriel Blanco (Argentina) as Chair and Mr. Antonio Pflüger (Germany) as Vice-Chair of the Technology Executive Committee for 2012 and acknowledges that Mr. Blanco and Mr. Pflüger acted as Co-Chairs of the first meeting of the Technology Executive Committee in 2011.*

<sup>139</sup> Butir ke 23 dari keputusan Durban mengenai *Green Climate Fund* yaitu: *All developing country Parties to the Convention are eligible to receive resources from the Fund. The Fund will finance agreed full and agreed incremental costs for activities to enable and support enhanced action on adaptation, mitigation (including REDD-plus),<sup>1</sup> technology development and transfer (including carbon capture and storage), capacity-building and the preparation of national reports by developing countries.*

daya keuangan. Selain itu dapat mendukung terciptanya kondisi yang memungkinkan, yang dapat memanfaatkan lebih besar aliran keuangan swasta ke EST dalam konteks keseluruhan tujuan pembangunan berkelanjutan di negara penerima. Rencana dan strategi pembangunan nasional harus mampu menghubungkan prioritas alih teknologi masing-masing sektor untuk sistem ODA untuk meningkatkan pembangunan, pengalihan dan penyebaran teknologi untuk mengurangi perubahan iklim. Lembaga kerjasama pembangunan seperti GTZ, USAID, JICA, NEDO, DFID dan instansi pengembangan lain dapat memainkan peran positif dalam memberikan bantuan teknis dan keuangan untuk proyek pengalihan teknologi. Pemerintah Indonesia perlu mengusulkan inisiatif pembentukan kerjasama pengembangan dengan fokus pada alih teknologi mitigasi GRK, serta pengembangan kapasitas dan institusional untuk menjadi tuan rumah kegiatan alih teknologi.<sup>140</sup>

### **3.8.2 Global Environment Facility (GEF)**

*Global Environment Facility* (GEF), sebuah entitas yang beroperasi pada mekanisme keuangan UNFCCC, adalah lembaga multilateral yang menjadi kunci untuk pengalihan EST. GEF juga mendukung proyek-proyek peningkatan kapasitas untuk adaptasi yang konsisten dengan keterbatasan yang saat ini diberlakukan oleh panduan Konvensi. GEF memanfaatkan pembiayaan melalui pinjaman dan sumber daya lain dari pemerintah, lembaga donor lainnya, sektor swasta sektor, dan tiga instansi pelaksana proyek GEF (Program Pembangunan PBB, Program Lingkungan PBB dan Kelompok Bank Dunia). Pada bulan November 2008 Program strategis GEF yang ditetapkan adalah program untuk menciptakan pendanaan untuk mendukung aktivitas alih teknologi.<sup>141</sup>

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<sup>140</sup> Indonesia, *Synthesis Report Indonesia's Technology Needs Assessment On Green House Gases Mitigation*, (Jakarta: Republik Indonesia, 2007), hal. 73.

<sup>141</sup> *In November 2008, the GEF Council and the LDCF/SCCF Council approved the new Strategic Program on Technology Transfer. This Program was developed in response to the 13th Conference of the Parties (COP13) to the UNFCCC (Decision 4/CP.13), which requested the GEF to elaborate a strategic program for scaling up investment in technology transfer to help developing countries address their needs for ESTs.* Global Environment Facility, *Implementation of the Poznan Strategic Program on Technology Transfer*, (Washington DC: GEF, 2010) hal. 5.

Di bawah UNFCCC dan Protokol Kyoto, dana tersedia di bawah *Global Environment Facility* (GEF) yang disajikan sebagai badan mekanisme keuangan untuk Konvensi. UNFCCC pada tahun 2001 memutuskan untuk mendirikan *Special Climate Change Fund* (SCCF) dan *Least Developed Country Fund* (LDCF) untuk membiayai proyek-proyek yang berkaitan dengan adaptasi perubahan iklim, alih teknologi dan peningkatan kapasitas di berbagai sektor, termasuk energi, transportasi, industri, pertanian, kehutanan dan pengelolaan limbah, dan untuk program diversifikasi ekonomi.<sup>142</sup>

GEF diarahkan untuk menjadi manajer untuk LDCF dan SCCF, yang mulai beroperasi pada tahun 2002. Pendanaan untuk SCCF itu dibentuk oleh sumbangan-sumbangan sukarela di luar pengisian GEF reguler dari kontribusi 13 peserta (Kanada, Denmark, Finlandia, Jerman, Irlandia, Italia, Belanda, Norwegia, Portugal, Spanyol, Swedia, Swiss dan Inggris). Rencana awal periode SCCF lima tahun ini didukung oleh Dewan GEF pada bulan November 2004. Pertemuan dewan GEF pada bulan November 2008 memutuskan untuk menyisihkan 50 juta dollar dari SCCF, dan Dana Iklim Global untuk mendukung program alih teknologi. Program yang diusulkan akan terdiri dari tiga pendanaan untuk mendukung kegiatan alih teknologi: (1) TNA (2) proyek-proyek teknologi percontohan yang prioritas terkait dengan TNAs, dan (3) penyebarluasan pengalaman GEF dan EST yang berhasil didemonstrasikan.<sup>143</sup> Mekanisme keuangan lain adalah investasi untuk proyek-proyek CDM yang banyak dilakukan oleh sektor swasta.

### **3.8.3 Inisiatif Pendanaan dari Negara Maju**

Selain mekanisme keuangan di bawah UNFCCC, inisiatif pendanaan bilateral dan multilateral juga tersedia dalam mekanisme dan inisiatif pendanaan yang berbeda. Beberapa negara maju seperti Inggris, AS, Jerman, Australia dan Jepang mengembangkan mekanisme bilateral untuk mendukung proyek

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<sup>142</sup> Global Environment Facility, *Implementation of the Poznan Strategic Program on Technology Transfer*, (Washington DC: GEF, 2010) hal. 5.

<sup>143</sup> *Ibid*, hal.5.

perubahan iklim. Jepang muncul dengan *Cool Earth Partnership* dengan pendanaan sebesar 10 miliar dollar Amerika untuk mendukung program perubahan iklim sejak 2008-2012, di mana US mengalokasikan 8 miliar dollar (1 triliun yen) untuk proyek mitigasi perubahan iklim dalam negara berkembang. Sekitar 4 miliar dialokasikan melalui pinjaman ODA Jepang dan 4 miliar lain melalui modal kontribusi dan jaminan oleh JBIC, asuransi oleh NEXI dan proyek dukungan pemerintah melalui NEDO.<sup>144</sup>

*International Climate Initiative* (ICI) adalah dana dari Pemerintah Jerman. ICI Jerman akan memberikan dukungan keuangan untuk proyek-proyek internasional yang mendukung proyek mitigasi perubahan iklim, adaptasi dan keanekaragaman hayati dengan relevansi pada iklim. Ini bertujuan untuk memastikan bahwa investasi tersebut akan memicu investasi swasta yang lebih besar. Hal ini juga bertujuan untuk memastikan bahwa proyek strategis yang dibiayai akan mendukung negosiasi perubahan iklim pasca-2012. Untuk tujuan ini, ICI akan mendukung kegiatan multilateral dan pendanaan berfokus pada adaptasi dan pengelolaan hutan.<sup>145</sup>

ICI akan memobilisasi sumber daya dari perusahaan swasta (*compliance buyers*) di bawah kerangka Skema Perdagangan Emisi Uni Eropa (EU ETS). Pada tahun 2008, pemerintah Jerman melelang 8,8% emisinya dari yang diijinkan izin untuk bisnis. Sekitar 30% dari pendapatan yang diperoleh dari penjualan ini dimaksudkan untuk membiayai proyek yang terkait perubahan iklim. Ini diharapkan mencapai 400 juta euro per tahun untuk digunakan dalam domestik dan internasional. Sebesar 120 juta euro per tahun diperuntukkan bagi negara-negara berkembang dan negara dalam transisi. Dari jumlah ini, setengah dimaksudkan untuk proyek-proyek energi berkelanjutan dan setengah lainnya untuk proyek adaptasi terhadap dampak perubahan iklim dan keanekaragaman hayati. Pada tahun 2008, ICI mendukung sekitar 100 proyek dalam

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<sup>144</sup> Indonesia, *Synthesis Report Indonesia's Technology Needs Assessment On Green House Gases Mitigation*, (Jakarta: Republik Indonesia, 2007), hal. 78.

<sup>145</sup> Jerman, *International Climate Initiative*.

pengembangan, industri baru dan negara-negara transisi dengan total sekitar 110 juta euro.<sup>146</sup>

### 3.8.4 Bank Pembangunan Multilateral (MDB)

*World Bank's Climate Investment Fund* adalah instrumen investasi sebesar 6,3 triliun dollar Amerika bagi perubahan iklim. Dana tersebut terbagi atas *Clean Technology Fund* (CTF), di mana Bank Dunia akan menyediakan sumber daya keuangan baru dalam skala besar untuk berinvestasi dalam proyek dan program di negara berkembang. Proyek ini harus memberikan kontribusi demonstrasi, penyebaran, dan alih teknologi rendah karbon. Proyek-proyek atau program harus memiliki potensi signifikan dalam penyusutan jangka panjang dari emisi gas rumah kaca. Dana kedua, *Strategic Climate Fund*, akan lebih luas dan lebih fleksibel dalam lingkungannya dan akan berfungsi sebagai dana untuk berbagai program yang menyeluruh untuk menguji pendekatan-pendekatan inovatif untuk perubahan iklim. Program ditujukan untuk meningkatkan ketahanan iklim dalam negara-negara berkembang.<sup>147</sup>

ADB mendirikan dua instrumen pembiayaan, yaitu *Climate Change Fund* (CCF) pada Mei 2008 dan *Clean Energy Financing Partnership Facility* (CEFPF) pada tahun 2007. CCF didirikan dengan alokasi sebesar 40 juta dollar dari modal sumber daya biasa ADB, dengan 25 juta dollar yang tersedia untuk pengembangan energi bersih, 5 juta dollar tersedia untuk penggunaan lahan dan Pengurangan Emisi dari Deforestasi dan Degradasi (REDD) dan meningkatkan manajemen penggunaan lahan, dan 10 juta dollar untuk adaptasi.<sup>148</sup> *Clean Energy Financing Partnership Facility* (CEFPF) didirikan pada 2007 untuk membantu meningkatkan keamanan energi di negara-negara berkembang yang menjadi anggota dan mengurangi laju perubahan iklim. CEFPF akan melakukan pembiayaan penyebaran baru, persediaan yang lebih efisien dan mengurangi polusi, dan *end-use technologies*. ADB telah menetapkan target awal sebesar 250

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<sup>146</sup> Jerman, *International Climate Initiative*.

<sup>147</sup> World Bank, *World Bank's Climate Investment Fund*.

<sup>148</sup> Asia Development Bank (ADB), *Climate Change Fund*, dapat diakses di [www.adb.org/Clean-Energy/ccf.asp](http://www.adb.org/Clean-Energy/ccf.asp), diakses pada tanggal 5 Januari 2012 pukul 15.30 WIB.



juta dollar di 2008. Sumber daya CEFPF juga dimaksudkan untuk membiayai kebijakan, reformasi regulasi, dan kelembagaan yang mendorong pengembangan energi bersih.

### **3.8.5 Public Private Partnerships (PPP) untuk Teknologi Rendah Karbon**

Sebuah instrumen yang menjanjikan untuk pengalihan dan penerapan teknologi ramah iklim adalah PPP, yang penting dalam hal volume investasi dapat dipahami dengan melihat saham investasi asing langsung dalam kaitannya dengan bantuan pembangunan resmi (ODA), yang dua kali lebih tinggi (sekitar 50 milyar dollar amerika ODA per tahun dan 170 milyar dollar amerika per tahun untuk FDI pada tahun 2004). Umumnya publik akan memberikan bantuan teknis seperti analisis masalah, keahlian, pengembangan modul pelatihan, pemantauan dan evaluasi, serta dalam keuangan & *in kind contributions*. Mitra sektor swasta sebaliknya akan memberikan kontribusi dengan pengetahuan dan teknologi, akses ke pasar & jaringan dan keuangan (biasanya 50% dari seluruh biaya, setengah lainnya ditanggung oleh mitra masyarakat). PPP dapat mencakup: perbaikan efisiensi energi dalam industri, bantuan tertentu untuk Mekanisme Pembangunan Bersih (CDM), sistem *mini-hydro-power* atau dukungan untuk manajemen mitigasi GRK dalam perusahaan.<sup>149</sup> PPP tertuang dalam *Report of the Global Environment Facility on the progress made in carrying out the Poznan strategic programme on technology transfer* di Konferensi Para Pihak di Durban, yang mengajak sektor swasta untuk bergabung dalam pendanaan alih teknologi. Pengalihan teknologi oleh sektor swasta diharapkan dapat mempermudah penciptaan teknologi ramah lingkungan yang dapat membantu negara berkembang dalam memenuhi penurunan emisi.<sup>150</sup>

<sup>149</sup> Indonesia, *Synthesis Report Indonesia's Technology Needs Assessment On Green House Gases Mitigation*, (Jakarta: Republik Indonesia, 2007).

<sup>150</sup> At the November 2010 GEF Council meeting, the GEF Secretariat presented options for private sector engagement. The Council directed the Secretariat to develop a new private sector strategy that contained elements of the Earth Fund while extending its reach and effectiveness. The GEF Secretariat presented a private sector strategy at the May 2011 GEF Council Meeting. In response to Council comments, a revised private sector strategy has been developed and submitted for Council review. In the document posted for Council review (C.41.09) the following objectives for GEF-5 private sector engagement are identified:

a) Supporting greater access to financing for private sector companies pursuing innovative technologies and business models that yield benefits consistent with GEF focal area objectives;

### 3.8.6. Green Climate Fund

Konferensi Para Pihak di Durban melahirkan suatu mekanisme pendanaan baru yang tersedia bagi negara berkembang. Pendanaan ini dimaksudkan untuk mencapai tujuan Konvensi, membantu negara berkembang dalam menerapkan industry rendah emisi dan mencapai pembangunan yang berkelanjutan.<sup>151</sup> Mekanisme pendanaan ini akan memiliki suatu badan yang mengatur tentang pemberian pendanaan.<sup>152</sup> Mekanisme pendanaan ini akan membantu negara berkembang dalam mengakses dana yang dibutuhkan untuk kegiatan REDD, alih teknologi dan adaptasi. Dengan adanya pendanaan ini, diharapkan negara berkembang akan dapat mengurangi emisi mereka dan dapat beradaptasi dengan efek perubahan iklim yang terjadi di negara masing-masing.<sup>153</sup>

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b) Stimulating the development, dissemination and implementation of new technologies.

<sup>151</sup> Keputusan Durban mengenai Green Climate Fund menyatakan: *The Fund will contribute to the achievement of the ultimate objective of the United Nations Framework Convention on Climate Change (UNFCCC). In the context of sustainable development, the Fund will promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change, taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change.*

<sup>152</sup> Keputusan Durban mengenai Green Climate Fund menyatakan: *The Fund will be governed and supervised by a Board that will have full responsibility for funding decisions.*

<sup>153</sup> Keputusan Durban mengenai Green Climate Fund menyatakan: *All developing country Parties to the Convention are eligible to receive resources from the Fund. The Fund will finance agreed full and agreed incremental costs for activities to enable and support enhanced action on adaptation, mitigation (including REDD-plus),<sup>1</sup> technology development and transfer (including carbon capture and storage), capacity-building and the preparation of national reports by developing countries.*

*The Fund will support developing countries in pursuing project-based and programmatic approaches in accordance with climate change strategies and plans, such as low-emission development strategies or plans, nationally appropriate mitigation actions (NAMAs), national adaptation plans of action (NAPAs), national adaptation plans (NAPs) and other related activities.*

## BAB IV

### ANALISIS KEPENTINGAN INDONESIA TERHADAP ALIH TEKNOLOGI DI DALAM KONTEKS PERUBAHAN IKLIM

#### 4.1 Kepentingan Indonesia akan Alih Teknologi di Dalam Perjanjian Upaya Penurunan Emisi di dalam UNFCCC

Indonesia menjadi salah satu negara yang memiliki peranan penting dalam negosiasi perubahan iklim. Indonesia pernah menjadi tuan rumah perundingan perubahan iklim di tahun 2007, yang menghasilkan *Bali Action Plan*, suatu instrumen yang diperhitungkan dalam perjanjian internasional di dalam isu perubahan iklim.<sup>154</sup> Indonesia memiliki komitmen yang kuat dalam berkontribusi dalam upaya global di dalam perubahan iklim sebagai negara peratifikasi Konvensi dan Protokol Kyoto. Indonesia memiliki hak dan kewajiban, meski Indonesia adalah bagian dari negara *Non-Annex*, yang tidak memiliki kewajiban untuk menurunkan emisi, namun Indonesia dapat ikut menurunkan emisi secara sukarela dengan tanpa ikatan dari Protokol Kyoto.<sup>155</sup>

Dalam negosiasi perubahan iklim, Indonesia banyak bergabung dalam beberapa kelompok negosiasi seperti negara G20, G77+Cina, ASEAN dan *Alliance of Rainforest Nations*.<sup>156</sup> Ini menjelaskan bahwa Indonesia memiliki kepentingan sebagai negara berkembang yang rentan terhadap perubahan iklim.

Setiap negara peratifikasi Konvensi, terutama negara berkembang perlu untuk memiliki Rencana Aksi Nasional, yang menjadi tolok ukur negara tersebut dalam kegiatan penurunan emisi. Singkatnya, Rencana Aksi Nasional tersebut

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<sup>154</sup> Indonesia, *Synthesis Report Indonesia's Technology Needs Assessment On Green House Gases Mitigation*, (Jakarta: Republik Indonesia, 2007), hal. 2.

<sup>155</sup> Indonesia meratifikasi UNFCCC dengan Undang-Undang No. 6 tahun 1994 mengenai pengesahan Konvensi Kerangka Kerja Perserikatan Bangsa-Bangsa mengenai Perubahan Iklim dan meratifikasi Protokol Kyoto dengan Undang-Undang No. 17 Tahun 2004 tentang Ratifikasi Protokol Kyoto.

<sup>156</sup> Daniel Moerdijarto, *Protokol Kyoto: Implikasinya Bagi Negara Berkembang*, (Jakarta: Kompas, 2007), hal. 8.

berisikan kepentingan negara tersebut dalam upaya penurunan emisi. Rencana Nasional Indonesia berfokus pada apa yang menjadi prioritas domestik yaitu<sup>157</sup>:

- a. Adaptasi,
- b. Penelitian dan pembangunan,
- c. Mitigasi,
- d. Pengembangan institusional dan jaringan, dan
- e. *Community outreach*.

Dalam kegiatan adaptasi, Indonesia menitikberatkan pada formulasi Mekanisme Pembangunan Bersih meliputi kebijakan asuransi dalam langkah adaptasi dan menghubungkan mekanisme asuransi dengan tingkat upaya mitigasi global. Kebijakan asuransi global yang didanai dan diadministrasi lewat Mekanisme Pembangunan Bersih dapat dikembangkan lebih lanjut lewat Mekanisme Pembangunan Bersih.<sup>158</sup> Dalam penelitian dan pembangunan, langkah kebijakan diharapkan akan meliputi keberlangsungan kerjasama dalam penelitian dan pembangunan di perubahan iklim, ekonomi dan kebijakan dengan negara lain, inisiasi penelitian dan pembangunan dalam energi terbarukan dan inisiasi kerjasama selatan-selatan untuk penelitian dan pembangunan.<sup>159</sup> Dalam isu mitigasi, kebijakan Indonesia meliputi<sup>160</sup>:

1. Mengikuti prinsip kehati-hatian dalam mitigasi perubahan iklim,
2. Evaluasi standar teknologi yang sudah ada,
3. Meningkatkan kerjasama teknologi, dan
4. Identifikasi langkah sukarela yang dapat dikukuhkan dalam tingkat global.

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<sup>157</sup> Indonesia, *Indonesia: The First National Communication on Climate Change Convention*, (Jakarta:Kementrian Lingkungan Hidup, 1999), hal. 4-24

<sup>158</sup> *Ibid*, hal. 4-25.

<sup>159</sup> *Ibid*, hal 4-28.

<sup>160</sup> *Ibid*, hal 4-29.

Dalam pembangunan institusional dan jaringan, langkah kebijakan meliputi aspek<sup>161</sup>:

1. Pembangunan dan penguatan komite nasional dalam perubahan iklim untuk berperan sebagai kontak kerjasama domestik dan internasional,
2. Penguatan pemerintah dan lembaga swadaya masyarakat yang memberikan peran strategis dalam adaptasi dan mitigasi perubahan iklim,
3. Mengembangkan *clearinghouse mechanism* yang menggunakan sistem informasi teknologi yang tepat, dan
4. Meningkatkan kerjasama dengan pemerintah dan LSM global, regional dan nasional dalam perubahan iklim.

Dalam *community outreach*, kebijakan yang harus diimplementasi antara lain<sup>162</sup>:

1. Meluncurkan program kampanye, dan
2. Mengembangkan presentasi multimedia.

Rencana Indonesia dalam upaya penurunan emisi dapat dilakukan dengan mekanisme penurunan emisi menurut UNFCCC. Dalam mekanisme penurunan emisi di dalam UNFCCC, Indonesia dimungkinkan untuk melakukan skema CDM dan REDD. Dalam mekanisme ini, Indonesia sebagai negara berkembang memiliki potensi yang besar untuk menerima teknologi dari negara maju dalam setiap kerjasama internasional dalam upaya penurunan emisi. Negara maju yang memiliki komitmen untuk menurunkan emisi diharapkan dapat membantu Indonesia sebagai negara berkembang untuk mengimplementasi ketentuan UNFCCC.

Kegiatan alih teknologi di Indonesia memiliki aspek-aspek seperti kerjasama yang dilakukan, pendanaan dan implementasi perjanjian. Selain itu dalam negosiasi perubahan iklim, Indonesia memiliki kepentingan seperti kepengurusan lembaga alih teknologi di UNFCCC dan kepentingan untuk

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<sup>161</sup> *Ibid*, hal 4-29.

<sup>162</sup> *Ibid*, hal. 4-29.

diikutsertakan dalam mekanisme pendanaan yang mungkin dilakukan dalam UNFCCC.

## 4.2 Kepentingan Indonesia dalam Bantuan Luar Negeri

Indonesia sebagai negara berkembang yang memiliki keterbatasan dana, membutuhkan bantuan negara maju dan institusi internasional dalam menurunkan emisi. Hal ini diperkuat dengan komitmen Indonesia sebesar 26% penurunan emisi mandiri, dan 26-41% dengan bantuan asing. Melalui Peraturan Presiden nomor 61 tahun 2011 mengenai Rencana Aksi Nasional Gas Rumah Kaca (RAN GRK), kementerian di Indonesia diharapkan dapat mencanangkan upaya penurunan emisi di masing-masing sektor.<sup>163</sup>

### 4.2.1 Dana Bantuan *Global Environment Facility* dalam *Technology Needs Assessment* Indonesia

*Global Environment Facility*, sebagai salah satu kemungkinan pendanaan yang tersedia bagi kegiatan alih teknologi dalam perubahan iklim, telah memberikan dana bagi Indonesia.<sup>164</sup> Bantuan ini diberikan dalam mengidentifikasi kebutuhan akan alih teknologi Indonesia yaitu dalam pembuatan

<sup>163</sup> Peraturan Presiden No.61 tahun 2011 dalam pembukaannya menyatakan: bahwa dalam rangka menindaklanjuti kesepakatan *Bali Action Plan* pada *The Conferences of Parties (COP)* ke-13 *United Nations Frameworks Convention on Climate Change (UNFCCC)* dan hasil COP-15 di Copenhagen dan COP-16 di Cancun serta memenuhi komitmen Pemerintah Indonesia dalam pertemuan G-20 di Pittsburg untuk menurunkan emisi gas rumah kaca sebesar 26% dengan usaha sendiri dan mencapai 41% jika mendapat bantuan internasional pada tahun 2020 dari kondisi tanpa adanya rencana aksi (*business as usual/BAU*), maka perlu disusun langkah-langkah untuk menurunkan emisi Gas Rumah Kaca.

<sup>164</sup> *Thirty-six countries are participating in the TNA project. They include:*

1. *Africa: Cote d'Ivoire, Ethiopia, Kenya, Ghana, Mali, Morocco, Mauritius, Rwanda, Senegal, Sudan, Zambia;*
2. *Asia and Europe: Azerbaijan, Bangladesh, Bhutan, Cambodia, Georgia, Indonesia, Kazakhstan, Laos, Lebanon, Moldova, Mongolia, Nepal, Sri Lanka, Thailand, Vietnam; and*
3. *Latin America and the Caribbean: Argentina, Bolivia, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Peru.*

*Global Environment Facility, Implementation Of The Poznan Strategic Program On Technology Transfer: Report Of The Global Environment Facility To The Seventeenth Session Of The Conference Of The Parties To The United Nations Framework Convention On Climate Change. 2011.*

suatu penilaian kebutuhan teknologi (*Technology Needs Assessment, TNA*).<sup>165</sup> Menurut kerangka alih teknologi, tujuan dari TNAs adalah untuk membantu dalam mengidentifikasi dan menganalisis kebutuhan teknologi, dan karena itu TNA adalah pusat kerja alih teknologi. Ini mengikuti pendekatan yang didorong oleh negara, membawa bersama-sama pemangku kepentingan untuk mengidentifikasi kebutuhan dan mengembangkan rencana untuk memenuhi kebutuhan negara. Selain itu laporan tersebut akan membahas evaluasi dan seleksi gas rumah kaca yang menjadi prioritas langkah-langkah mitigasi Indonesia di dalam UNFCCC dan mengidentifikasi apa yang menjadi hambatan utama dalam proses alih teknologi.<sup>166</sup> Visi TNA<sup>167</sup>:

- a. Berkontribusi terhadap upaya global menuju pembangunan berkelanjutan dan khususnya perlindungan sistem iklim;
- b. Mengkomunikasikan kepada UNFCCC dan komunitas global dalam perubahan iklim mengenai persyaratan teknologi di Indonesia;
- c. Menjadi dokumen sumber daya untuk mengidentifikasi dan menentukan prioritas adaptasi perubahan iklim dan/atau mitigasi teknologi yang dibutuhkan oleh Indonesia, yang memerlukan dukungan dan kerjasama dari negara-negara maju;
- d. Membentuk dasar dari sumber data untuk teknologi dalam perubahan iklim bagi Indonesia.

<sup>165</sup> *The project has the following three components:*

1. *Support the development of TNAs in 35 to 45 developing countries or, where these have already been prepared, make the TNAs more strategic and useful in an operational sense;*
2. *Develop appropriate decision-support tools and provide the technology information needed for preparation of TNAs and TAPs; and*
3. *Establish a mechanism that facilitates cooperative sharing of TNA and TAP experiences, thereby fostering implementation of identified measures.*

Global Environment Facility, *Implementation of the Poznan Strategic Program on Technology Transfer*, (Washington DC: GEF, 2010) hal. 6.

<sup>166</sup> Indonesia, *Synthesis Report Indonesia's Technology Needs Assessment On Green House Gases Mitigation*, (Jakarta: Republik Indonesia, 2007), hal. 3.

<sup>167</sup> *Ibid*, hal. 3.

Dengan adanya visi tersebut, misi dari TNA adalah<sup>168</sup>:

- a. Mengidentifikasi, menganalisis dan memprioritaskan teknologi yang dapat membentuk dasar untuk portofolio Program Alih Teknologi untuk mitigasi GRK dan / atau adaptasi perubahan iklim.
- b. Mengidentifikasi kebutuhan kapasitas manusia dan kelembagaan yang menjamin perkembangan, pengalihan dan akuisisi teknologi.
- c. Memilih kepentingan dan komitmen dari pemangku kepentingan dan menjalin kemitraan untuk mendukung investasi atau tindakan penghapusan hambatan untuk meningkatkan komersialisasi dan difusi dari teknologi yang diprioritaskan.

Selain memiliki TNA, dalam menerapkan alih teknologi Indonesia memiliki rencana jangka panjang seperti yang selama ini dinegosiasikan dalam sesi AWG-LCA dalam perundingan UNFCCC. Rencana jangka panjang Indonesia dalam menerapkan alih teknologi membutuhkan langkah sebagai berikut<sup>169</sup>:

1. Mengembangkan Rencana Aksi Nasional (RAN) Alih Teknologi,
2. Mengembangkan basis data dari sumber energi terbarukan,
3. Program peningkatan kapasitas, dan
4. Dukungan finansial.

Dalam mengembangkan RAN Alih Teknologi yang berfungsi sebagai dokumen kebijakan utama untuk melangkah keluar dari fase TNAs menuju implementasi konkret dari kegiatan dalam kerangka alih teknologi. RAN Alih Teknologi harus diintegrasikan dengan dokumen perencanaan yang utama dari masing-masing sektor di Indonesia, seperti: Cetak Biru Pasokan Energi Nasional (PEN), Rencana Listrik Nasional, Rencana Industri Nasional, dan Rencana

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<sup>168</sup> *Ibid*, hal. 3.

<sup>169</sup> *Ibid*, hal.3.



Pembangunan Jangka Panjang dan Menengah Nasional (RPJPM) dan peta jalan lainnya di masing-masing sektor.<sup>170</sup>

Dari perspektif negosiasi UNFCCC, alih teknologi dari mitigasi GRK akan memainkan peran penting untuk mengembangkan kontribusi negara untuk memenuhi tujuan Konvensi. Dalam hal itu dirasa perlu RAN Alih Teknologi yang dapat mendefinisikan semua elemen yang penting untuk proses ini dalam hal tujuan, tindakan, tanggung jawab, indikator keberhasilan dan hasil yang diharapkan. Dirasa penting pula untuk secara efektif mengintegrasikan pelaksanaan kegiatan alih teknologi dengan program perubahan iklim yang relevan dan kegiatan pemangku kepentingan. Ketentuan panduan RAN Alih Teknologi dapat mencakup<sup>171</sup>:

- a. Tujuan dan target, terkait dengan pelaksanaan prioritas langkah mitigasi masing-masing dalam bentuk spesifik, terukur, dapat dicapai dan tujuan realistis;
- b. Lingkup tindakan, yang akan dilakukan untuk mencapai tujuan; penting untuk menunjukkan ketergantungan dari tindakan ini dalam rangka untuk meminimalkan kelebihan;
- c. Tanggung jawab partisipan, yang harus jelas mendefinisikan peran dan tanggung jawab masing-masing institusi yang akan terlibat dalam alih teknologi dengan mempertimbangkan sumber daya mereka yang tersedia;
- d. Penilaian kelayakan teknologi yang menjadi prioritas, penilaian tekno-ekonomi lanjut dan analisis teknologi prioritas yang teridentifikasi dalam TNA. Hasil dari penilaian ini adalah studi kelayakan dokumen akan teknologi;
- e. Hambatan, yang diidentifikasi dalam laporan TNA harus dianalisa lebih lanjut dan solusi untuk mengatasinya harus telah diusulkan;
- f. Durasi dari kegiatan, harus mendefinisikan batasan waktu yang realistis dari kegiatan, tanggal penyelesaian serta tonggak dalam pelaksanaannya;

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<sup>170</sup> *Ibid*, hal. 70.

<sup>171</sup> *Ibid*, hal. 70.

- g. Biaya tindakan, perkiraan biaya untuk pelaksanaan kegiatan harus ditampilkan;
- h. Indikator kemajuan, adalah perangkat pemantauan yang akan memberikan bukti bahwa tujuan dan target tercapai dan/atau terlaksana;
- i. Ditunggu hasil, output kuantitatif atau penyampaian kegiatan yang diharapkan setelah kegiatan selesai; dan
- j. Opsi untuk proyek percontohan, untuk memiliki implementasi konkret dari rencana aksi.

Dalam pengembangan basis data untuk sumber energi terbarukan, basis data sumber daya terbarukan sangat penting dalam mengembangkan program kebijakan energi dan pengembangan energi. Pelajaran dari penggunaan TNA menyarankan bahwa informasi yang kredibel dan rinci dan data pada sumber daya energi terbarukan sangat penting untuk pemilihan teknologi. Tim TNA telah mempelajari bahwa banyak data pada sumber daya terbarukan kurang, usang, terlalu umum, dan tidak spesifik. Sebuah pembaharuan, data yang spesifik dan dapat diandalkan pada sumber daya energi terbarukan yang diperlukan untuk membuka kesempatan untuk alih teknologi dan investasi pada proyek terbarukan.<sup>172</sup>

Pengembangan basis data yang kredibel dan telah diperbarui dan terbarukan membutuhkan kerja kolaboratif dari departemen yang berbeda dan badan seperti Departemen Energi dan Sumber Daya Mineral (ESDM), Departemen Pertanian, Departemen Kehutanan, Badan Pengkajian dan Penerapan Teknologi (BPPT), Akademi Sains dan Universitas di Indonesia.<sup>173</sup>

Program Peningkatan kapasitas sumber daya manusia harus menargetkan unit perencanaan pemerintah nasional dan lokal, departemen perencanaan dan penelitian, pusat-pusat penelitian dan pembangunan, unit perencanaan kebutuhan dan pusat penelitian universitas dan LSM. Program peningkatan kapasitas harus

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<sup>172</sup> *Ibid*, hal.70.

<sup>173</sup> *Ibid*, hal. 71.

berfokus pada peningkatan keterampilan ilmiah dan teknis, kemampuan, dan lembaga-lembaga di Indonesia sebagai prasyarat untuk menilai, beradaptasi, mengelola, dan mengembangkan teknologi. Selain itu ada kebutuhan untuk meningkatkan keterampilan dan kemampuan berkenaan dengan pembiayaan, pemasaran, pemeliharaan, layanan, penyebaran informasi, regulasi kebutuhan, pengembangan kebijakan, alih teknologi, intermediasi pasar, pajak kebijakan, kebijakan makroekonomi, dan hak properti.<sup>174</sup>

Peningkatan kapasitas organisasi akan berfokus pada perusahaan-perusahaan berkembang untuk penerbitan dan penyediaan komunikasi, akses dan pengalihan informasi, dorongan dari asosiasi industri, asosiasi profesional dan organisasi konsumen/pengguna; pendekatan partisipatif untuk memungkinkan aktor-aktor swasta, lembaga publik dan LSM untuk terlibat di semua tingkat formulasi pembuatan kebijakan dan proyek lingkungan; desentralisasi pengambilan keputusan pemerintah dan otoritas. Kapasitas informasi akan fokus pada pengembangan indikator yang ditingkatkan dan mengumpulkan data tentang ketersediaan, kualitas dan arus ESTs; mengembangkan tolok ukur kinerja teknologi untuk EST; meningkatkan informasi sistem dan menghubungkan mereka dengan jaringan internasional atau regional.<sup>175</sup>

Untuk memastikan kelanjutan dari kegiatan yang berkaitan dengan persiapan dan pengembangan RAN Alih Teknologi, peningkatan kapasitas dan kegiatan alih teknologi lainnya, perlu untuk mengamankan dukungan teknis dan keuangan baik dari organisasi donor asing dan institusi domestik. Dari perspektif jangka panjang, kelembagaan yang sudah dibuat seperti Sistem Inovasi Nasional (NSI) dan Sistem Teknologi Informasi Nasional (NTIS) diperlukan untuk mendukung pengalihan jangka panjang dan teknologi berguna. Modalitas atau sarana untuk memperoleh dan menerapkan teknologi baru berkaitan erat dengan aliran kegiatan investasi yang melibatkan sektor swasta dan publik. Alih teknologi dapat berlangsung dalam masing-masing negara atau antara negara, ini terkait erat dengan mekanisme kelembagaan dan keuangan. Modalitas untuk meningkatkan

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<sup>174</sup> *Ibid*, hal. 71.

<sup>175</sup> *Ibid*, hal. 71.

alih teknologi mitigasi perubahan iklim diperlukan untuk menghubungkan pengembangan kapasitas kelembagaan di tingkat nasional dan modalitas pembiayaan.<sup>176</sup>

a. Pembangunan Sistem Inovasi Nasional (NSI)

Sistem Inovasi Nasional (NSI) yang mengintegrasikan elemen-elemen peningkatan kapasitas, akses informasi dan lingkungan yang memungkinkan terjadinya pendekatan yang komprehensif untuk mentransfer ESTs dan mendukung penciptaan budaya inovasi. Sub-sistem dan kualitas interkoneksi dalam diri mereka berhasil dapat mempengaruhi alih teknologi. Konsep NSIs dapat ditingkatkan melalui kemitraan dengan konsorsium internasional. Kemitraan akan berorientasi pada sistem, mencakup semua tahap proses pengalihan, dan memastikan partisipasi pemangku kepentingan swasta dan publik, termasuk bisnis, penyedia jasa hukum, keuangan dan lainnya dari negara maju dan negara-negara berkembang.<sup>177</sup>

Kegiatan NSI termasuk<sup>178</sup> :

- a. Target pengembangan kapasitas, akses informasi, dan pelatihan bagi para pemangku kepentingan publik dan swasta dan dukungan untuk persiapan proyek;
- b. Memperkuat lembaga pendidikan ilmiah dan teknis dalam konteks kebutuhan teknologi;
- c. Pengumpulan dan penilaian yang spesifik terhadap informasi teknis, komersial, keuangan dan hukum;
- d. Identifikasi dan pengembangan solusi untuk hambatan teknis, keuangan, kebijakan hukum, dan hambatan lain untuk penyebarluasan EST;

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<sup>176</sup> *Ibid*, hal. 71

<sup>177</sup> *Ibid*, hal. 72.

<sup>178</sup> *Ibid*, hal. 72.

- e. Penilaian teknologi, promosi *prototypes*, proyek percontohan dan penyuluhan melalui hubungan antara manufaktur, prosedur dan pengguna akhir;
- f. Mekanisme keuangan yang inovatif seperti kemitraan sektor publik / swasta dan fasilitas kredit khusus;
- g. Kemitraan lokal dan regional antara pemangku kepentingan yang berbeda untuk evaluasi, pengalihan dan penyesuaian kondisi lokal EST; dan
- h. Mengembangkan organisasi perantara pasar seperti Perusahaan Jasa Energi (ESCO).

Dalam konteks Indonesia, kebijakan tertentu dan peraturan untuk mendukung NSI berada di tempat seperti<sup>179</sup>:

1. Undang-undang Nomor 18 tahun 2002 tentang Sistem Nasional Ilmu Pengetahuan dan Teknologi.
2. Peraturan Pemerintah Nomor 20 tahun 2005 tentang Alih Teknologi Kekayaan Intelektual Serta Hasil Penelitian Dan Pengembangan Oleh Perguruan Tinggi Dan Lembaga Penelitian Dan Pengembangan.

Undang-Undang Nomor 18 tahun 2002 menyatakan pentingnya inovasi untuk dikelola oleh lembaga-lembaga pemerintah agar meningkatkan pertumbuhan akan teknologi baru.<sup>180</sup> Peraturan Pemerintah No. 20 tahun 2005 menitikberatkan kepada inovasi yang dapat mendorong keberadaan alih teknologi.<sup>181</sup>

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<sup>179</sup> *Ibid*, hal. 72.

<sup>180</sup> Pasal 6 UU No.18 tahun 2002 menyebutkan: Kelembagaan ilmu pengetahuan dan teknologi terdiri atas unsur perguruan tinggi, lembaga litbang, badan usaha, dan lembaga penunjang.

Kelembagaan sebagaimana dimaksud dalam ayat (1) berfungsi :

- a. mengorganisasikan pembentukan sumber daya manusia, penelitian, pengembangan, perekayasaan, inovasi, dan difusi teknologi;
- b. membentuk iklim dan memberikan dukungan yang diperlukan bagi penyelenggaraan penguasaan, pemanfaatan, dan pemajuan ilmu pengetahuan dan teknologi.

<sup>181</sup> Penjelasan PP No. 20 tahun 2005 menyebutkan: Alih teknologi kekayaan intelektual dan hasil kegiatan penelitian dan pengembangan merupakan suatu kegiatan yang bertujuan mentransfer kemampuan untuk memanfaatkan dan menguasai ilmu pengetahuan dan teknologi dari satu pihak (pemberi) ke pihak lain (penerima) yang dapat berupa kekayaan intelektual dan hasil kegiatan penelitian dan pengembangan yang bersifat *codified* atau *tacit*. Alih teknologi kekayaan intelektual dan hasil kegiatan penelitian dan pengembangan bersifat *codified* apabila

Meski terdapat peraturan mengenai alih teknologi, tantangannya adalah dalam pelaksanaan NSI di nasional dan tingkat lokal. Kebutuhan dan kesempatan untuk program alih teknologi dalam konteks perubahan iklim harus menciptakan kebutuhan yang lebih besar untuk membangun NSI di tingkat nasional.<sup>182</sup>

b. Sistem Nasional Teknologi Informasi

Proses alih teknologi membutuhkan sebuah informasi komprehensif dan konsisten untuk berbagai teknologi. Oleh karena itu sistem teknologi informasi yang termasuk *hardware*, perangkat lunak dan jaringan, untuk memfasilitasi aliran informasi antara para pemangku kepentingan yang berbeda, dibutuhkan untuk meningkatkan pengembangan dan alih teknologi ramah lingkungan. Dalam tingkat nasional, sistem informasi pada basis data teknologi, studi kasus atas aplikasi teknologi dapat digunakan oleh pihak yang berbeda untuk mendapatkan informasi tentang status penelitian dan pengembangan teknologi dan skala aplikasi. Sistem ini memberikan informasi tentang parameter teknis, ekonomi dan lingkungan terhadap aspek teknologi ramah lingkungan dan kesempatan untuk alih teknologi. Sistem ini dapat diselenggarakan oleh kementerian teknologi dan

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tertuang dalam bentuk informasi yang tertata dengan baik sehingga dapat diakses, dipelajari, dan dipahami oleh pihak lain. Sedangkan alih teknologi kekayaan intelektual dan hasil kegiatan penelitian dan pengembangan dikatakan bersifat *tacit* apabila tidak tertuang dalam bentuk informasi yang tertata dengan baik, masih dalam bentuk pengetahuan dan pengalaman dari pelaku iptek atau dalam bentuk informasi yang hanya difahami oleh pelaku yang terlibat. Dengan pengertian di atas, maka obyek pengaturan alih teknologi yang relevan adalah kepemilikan atas kekayaan intelektual dan hasil kegiatan penelitian dan pengembangan yang dihasilkan oleh perguruan tinggi dan lembaga penelitian dan pengembangan untuk mendorong inovasi-inovasi yang bermutu dan pemberian penghargaan bagi pelaku penelitian dan pengembangan. *Mekanisme* atau cara alih teknologi kekayaan intelektual dan hasil kegiatan penelitian dan pengembangan baik yang bersifat *codified knowledge* maupun *tacit knowledge transfer*. Alih teknologi kekayaan intelektual dan hasil kegiatan penelitian dan pengembangan tidak dapat berjalan dengan baik dan sesuai tujuan apabila badan usaha atau penerima tidak siap dan tidak mampu untuk memenuhi persyaratan mutu, kinerja dan sumber daya lainnya. Oleh karena itu perlu diatur kewajiban pemerintah untuk menciptakan kondisi yang memungkinkan terlaksananya alih teknologi kekayaan intelektual serta hasil kegiatan penelitian dan pengembangan. Selain itu, untuk mendorong inovasi-inovasi yang bermutu oleh perguruan tinggi dan lembaga penelitian dan pengembangan perlu pengaturan mengenai kepemilikan terhadap kekayaan intelektual dan hasil kegiatan penelitian dan pengembangan yang dihasilkan. Perguruan tinggi dan lembaga penelitian dan pengembangan perlu diberi keleluasaan untuk menggunakan pendapatan yang diperolehnya dari hasil alih teknologi kekayaan intelektual dan hasil kegiatan penelitian dan pengembangan untuk pengembangan diri.

<sup>182</sup> *Ibid*, hal. 72.

basis data yang terkait dengan berbagai pusat penelitian pemerintah, pusat penelitian universitas dan industri.<sup>183</sup>

Dukungan dana diperlukan untuk penelitian, pengembangan dan penyebaran teknologi diprioritaskan untuk GRK mitigasi, dan program peningkatan kapasitas untuk meningkatkan keterampilan dan kemampuan, pengembangan pasar, pembiayaan, pemasaran, peraturan kebutuhan, dan proses untuk melakukan alih teknologi. Pembiayaan juga diperlukan untuk mengembangkan studi komprehensif untuk setiap sektor dalam rangka mengembangkan peta jalan teknologi. Selain itu, pembiayaan diperlukan untuk setiap tahap pengembangan teknologi<sup>184</sup>:

1. Penelitian dan Pengembangan
2. Proyek demonstrasi
3. Penyebaran
4. Difusi
5. Komersialisasi teknologi

Tahapan dari pengembangan teknologi dimulai dengan kegiatan penelitian dan pembangunan. Selanjutnya dilakukan proyek demonstrasi dan melakukan penyebaran. Setelah tahapan tersebut, dilakukan difusi teknologi dan pada akhirnya dilakukan komersialisasi teknologi.

Dalam tahapan tersebut sangat dibutuhkan dana sebagai pembiayaan pengembangan teknologi. Pembiayaan langsung diperlukan untuk penyebaran teknologi untuk proyek CDM yang potensial untuk proses industri, pasokan energi dan sistem transportasi. Kegiatan dalam CDM bisa dihubungkan dengan aktivitas alih teknologi. Departemen Energi dan Sumber Daya Mineral (2007) memperkirakan bahwa pembangunan terlatih dan berpengalaman dari semua sumber daya panas bumi untuk memproduksi 27 GW pembangkit listrik tenaga panas bumi pada 2025 akan membutuhkan 161 milyar dollar amerika sementara pembangunan teknologi CCS membutuhkan 158 milyar dollar amerika. Pembiayaan lebih lanjut diperlukan untuk membangun sistem energi desentralisasi dalam daerah terpencil di Indonesia. Menurut Rencana

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<sup>183</sup> *Ibid*, hal. 72.

<sup>184</sup> *Ibid*, hal. 75.

Pembangunan Penyediaan Tenaga Listrik (RUPTL) dari perusahaan listrik milik negara, PLN, untuk membangun pembangkit listrik 57 GW baru, termasuk 5 GW pembangkit listrik tenaga panas bumi dan tenaga air 4,74 GW dan 0.192 Mini hidro, dan 35.811 km<sup>2</sup> transmisi, dan lebih dari 175 juta jaringan distribusi tegangan menengah km<sup>2</sup> dan lebih dari 222 juta km<sup>2</sup> jaringan distribusi tegangan rendah untuk periode 2009 - 2018 total investasi dibutuhkan untuk membangun sistem listrik diperkirakan mencapai 83,7 milyar dollar amerika atau lebih dari 8 miliar dollar amerika per tahun.<sup>185</sup>

Dari 57 GW tambahan pembangkit listrik baru yang direncanakan untuk dibangun, PLN berencana untuk membangun lebih dari 35,3 GW, sementara sektor swasta melalui skema IPP diharapkan untuk membangun 22 GW selama 10 tahun ke depan. Pengembangan pembangkit listrik hanya mencakup pembangunan pembangkit listrik yang akan dihubungkan ke dalam sistem interkoneksi/*grid* (disebut unit pembangkit listrik yang besar). Oleh karena itu kebutuhan pembiayaan untuk membangun sistem energi yang terdesentralisasi yang berbasis pada sumber daya terbarukan belum terintegrasi dalam rencana.<sup>186</sup>

#### **4.2.2 Indonesia Climate Change Trust Fund**

Pemerintah Indonesia saat ini sedang mempersiapkan mekanisme pembiayaan sebagai sumber pendanaan untuk mitigasi dan adaptasi proyek, termasuk alih teknologi ramah lingkungan untuk mencapai pembangunan rendah karbon. Badan Perencanaan Pembangunan Nasional (BAPPENAS) sedang mempersiapkan *Indonesia Climate Change Trust Fund* (ICCTF) yang akan berfungsi sebagai kegiatan pendanaan untuk aktivitas mitigasi dan adaptasi. Dana tersebut bertujuan untuk mempromosikan tindakan terkoordinasi untuk menanggapi perubahan iklim. Sumber pendanaan ICCTF berasal dari anggaran nasional dan hibah dari donor per ODA. Tahap pertama dari ICCTF diharapkan

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<sup>185</sup> *Ibid*, hal. 75.

<sup>186</sup> *Ibid*, hal 75.



mulai tahun 2009.<sup>187</sup> Pendanaan ICCTF dilandasi oleh Peraturan Presiden No. 61 tahun 2011 mengenai RAN GRK.

### 4.3 Kepentingan Indonesia akan Alih Teknologi di dalam Proyek CDM

Protokol Kyoto tahun 1997 menciptakan sebuah mekanisme keuangan baru untuk investasi negara maju dan berkembang yang bisa digunakan untuk mitigasi perubahan iklim disebut mekanisme pembangunan bersih (CDM). CDM adalah salah satu dari tiga mekanisme fleksibel dalam Protokol Kyoto yang dirancang untuk membantu negara industri/*Annex B* untuk memenuhi komitmennya mengurangi emisi GRK dan membantu negara berkembang dalam mencapai pembangunan berkelanjutan. CDM adalah satu-satunya mekanisme fleksibel yang melibatkan negara berkembang. Berdasarkan Protokol Kyoto, negara berkembang tidak memiliki kewajiban membatasi emisi GRKnya, akan tetapi dapat secara sukarela berkontribusi dalam pengurangan emisi global dengan menjadi tempat pelaksanaan proyek CDM.<sup>188</sup>

Tujuan dari CDM adalah untuk membantu Pihak yang tidak termasuk dalam *Annex I* dalam mencapai pembangunan berkelanjutan dan dalam memberikan kontribusi terhadap tujuan akhir Konvensi, dan untuk membantu Pihak yang termasuk dalam *Annex I* dalam mencapai kepatuhan dengan pembatasan emisi terukur mereka dan komitmen pengurangan dalam Pasal 3 dari Protokol Kyoto. Meskipun CDM secara luas mirip dengan JI karena merupakan investasi internasional yang digunakan untuk mengimbangi pengurangan karbon nasional, CDM berbeda dari JI dalam hal untuk proyek pembangunan berkelanjutan pada umumnya. Selanjutnya, di bawah Protokol Kyoto, JI terbatas pada negara-negara dalam *Annex I*. CDM harus tunduk kepada otoritas dan pedoman Konferensi Para Pihak (COP) sebagai sidang para Pihak pada Protokol ini dan diawasi oleh sebuah dewan eksekutif CDM. CDM harus membantu dalam mengatur pendanaan kegiatan proyek bersertifikat diperlukan. COP sebagai sidang para Pihak pada Protokol ini wajib, pada sidang pertama, mengelaborasi

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<sup>187</sup> BAPPENAS, *Indonesia Climate Change Trust Fund*, 2008.

<sup>188</sup> *Ibid*, hal. 74.

modalitas dan prosedur yang rumit dengan tujuan untuk memastikan transparansi, efisiensi dan akuntabilitas melalui audit independen dan verifikasi kegiatan proyek. Partisipasi di bawah CDM dan dalam akuisisi pengurangan emisi bersertifikat mungkin melibatkan perusahaan swasta dan/atau publik, dan harus tunduk pada apa pun panduan yang mungkin disediakan oleh dewan eksekutif CDM. CDM harus memfasilitasi alih teknologi dari negara *Annex I* untuk *non-Annex*.<sup>189</sup>

Alih teknologi ramah lingkungan dan *know-how* adalah salah satu tujuan inti dari CDM, seperti yang dinyatakan oleh Konferensi Para Pihak. Peserta proyek diminta untuk menjelaskan dalam dokumen desain proyek (PDD) bagaimana teknologi akan dialihkan. Meskipun banyak kritik untuk CDM karena dampak yang lebih rendah dalam mempromosikan pembangunan berkelanjutan dan alih teknologi yang dibutuhkan oleh negara-negara berkembang untuk berkontribusi pada tujuan konvensi iklim, dampak ekonomi untuk negara tuan rumah dan kompleksitas dan biaya tinggi terkait pengaturan dan pemantauan proyek CDM itu, mekanisme ini dapat digunakan untuk mempromosikan alih teknologi untuk proyek sektor swasta jika terdapat dukungan kelembagaan untuk memperkuat manfaat pembangunan berkelanjutan Proyek CDM.<sup>190</sup>

Indonesia telah membentuk Komite Nasional untuk Mekanisme Pembangunan Bersih (KOMNAS MPB) yang bertugas mengkoordinir penerapan proyek CDM di Indonesia. Komisi ini merupakan organisasi pemerintah yang dibentuk melalui Keputusan Menteri Lingkungan Hidup No. 206 tahun 2005 (21 Juli 2005), yang berfungsi sebagai otoritas nasional Indonesia untuk CDM. KOMNAS MPB didukung oleh sekretariat dan tim teknis, yang akan melakukan kegiatan harian KOMNAS MPB.<sup>191</sup>

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<sup>189</sup> *Ibid*, hal. 72.

<sup>190</sup> *Ibid*, hal. 72.

<sup>191</sup> IGES, *Panduan Kegiatan MPB di Indonesia*, (Jakarta:Avisindo Pratama, 2007), hal. 76.

### 4.3.1 Siklus Proyek CDM

Menggambarkan siklus proyek CDM di Indonesia, termasuk modal, prosedur, dan kelayakan. Terdapat modal dan prosedur operasional tertentu yang ditetapkan oleh keputusan COP (pertemuan para pihak UNFCCC) serta kriteria-kriteria yang digunakan untuk menjamin pengurangan emisi secara nyata, terukur dan jangka panjang, termasuk metodologi penetapan *baseline*, *additionality* dan *monitoring*. Kriteria-kriteria ini berbeda dari satu proyek ke proyek atau dari satu sektor ke sektor lain, dan dipengaruhi oleh situasi sosial-ekonomi, politik, dan peraturan-perundangan negara di mana CDM diimplementasikan. Dalam hal *additionality*, CDM dapat dipandang sebagai perangkat untuk mengurangi emisi GRK tetapi juga untuk meningkatkan pelaksanaan pembangunan berkelanjutan dan kemandirian dalam ketahanan di bidang energi. Pendapatan dari kredit pengurangan emisi (dalam hal ini CERs) suatu proyek CDM akan membantu mengatasi beberapa kendala yang dihadapi selama ini, misalnya, peningkatan kehidupan ekonomi, alih teknologi dan ilmu pengetahuan, akses terhadap dana, dan menghilangkan hambatan pasar bagi proyek-proyek efisiensi energi pengguna akhir. Seperti halnya di sektor energi, *additionality* di sektor kehutanan berkaitan dengan upaya pengurangan emisi atau penyerapan carbon melalui proyek CDM yang tidak akan terjadi bila tanpa ada proyek CDM. *Additionality* tidak hanya menyangkut penyerapan carbon tetapi juga termasuk *additionality* dalam aspek lingkungan, sosial, keuangan, dan investasi.<sup>192</sup>

### 4.3.2 Kategori Proyek CDM di Berbagai Sektor Ekonomi

Indonesia telah melakukan berbagai studi untuk mengidentifikasi kegiatan pengurangan emisi GRK termasuk tantangan dan kendala dalam implementasinya (KLH, 2000, 2001, 2002). Sebagian besar kegiatan mitigasi yang teridentifikasi memiliki potensi untuk dikembangkan menjadi proyek CDM. Berikut adalah tipe-tipe proyek yang mungkin layak untuk menjadi proyek CDM:

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<sup>192</sup> IGES, *Panduan Kegiatan MPB di Indonesia*, (Jakarta: Avisindo Pratama, 2007), hal.

- a. Proyek energi terbarukan: Proyek dalam kategori ini adalah tenaga matahari, angin, biogas, biomass, air, panas bumi, sistim hybrid, dan waste.<sup>193</sup>
- b. Proyek peningkatan efisiensi energi: Proyek dalam kategori ini adalah *supply-side projects; end-use projects* di semua sektor; *end-use residential, service, industry-cross-cutting technologies; end-use industry-sectors* dan *end-use transport*.<sup>194</sup>
- c. Kegiatan proyek lain yang mengurangi emisi GRK: Proyek dalam kategori ini termasuk pertanian dan lain-lain.<sup>195</sup>
- d. Aforestasi dan reforestasi: Kegiatan aforestasi dan reforestasi skala kecil di dalam proyek CDM akan menghasilkan penyerapan GRK oleh sink kurang dari 8 kilo ton setara CO<sub>2</sub> per tahun. Jika rata-rata penyerapan GRK oleh sink yang diproyeksikan untuk setiap verifikasi tidak lebih dari 8 kiloton setara CO<sub>2</sub> per tahun.<sup>196</sup>

Dalam menentukan kelayakan proyek CDM, KOMNAS MPB memiliki suatu kriteria dan indikator pembangunan berkelanjutan dari proyek tersebut. Berikut adalah kriteria dan indikator pembangunan berkelanjutan yang digunakan oleh KOMNAS MPB dalam proses penilaian usulan proyek<sup>197</sup>:

1. Kelestarian lingkungan dengan menerapkan konservasi dan diversifikasi pemanfaatan sumberdaya alam:
  - a. Terjaganya kelestarian fungsi ekologis.

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<sup>193</sup> UNFCCC, *Clean Development Mechanism Project*, dapat diakses di [www.unfccc.int/cdm/ebmeeting/eb0003/eb03annan2.pdf](http://www.unfccc.int/cdm/ebmeeting/eb0003/eb03annan2.pdf), diakses pada tanggal 5 januari 2012 pukul 22.45.

<sup>194</sup> *Ibid.*

<sup>195</sup> *Ibid.*

<sup>196</sup> UNFCCC, *Buenos Aires Plan of Action*.

<sup>197</sup> IGES, *Panduan Kegiatan MPB di Indonesia*, (Jakarta:Avisindo Pratama, 2007), hal. 76.

- b. Tidak melampaui ambang batas baku mutu lingkungan yang ditetapkan di tingkat nasional dan lokal (tidak mengizinkan adanya polusi tanah, air dan udara).
  - c. Terjaganya keaneka-ragaman hayati (genetik, spesies, ekosistem) dan mencegah terjadinya penurunan plasma nuftah.
  - d. Dipatuhinya peraturan tata guna lahan dan tata ruang.
2. Keselamatan dan kesehatan masyarakat lokal
    - a. Tidak menyebabkan timbulnya gangguan kesehatan.
    - b. Dipatuhinya peraturan keselamatan kerja.
    - c. Adanya dokumentasi prosedur yang menjelaskan usaha-usaha yang memadai untuk mencegah kecelakaan dan cara mengatasinya bila terjadi kecelakaan.
3. Kesejahteraan masyarakat lokal
    - a. Tidak menurunkan pendapatan masyarakat lokal.
    - b. Adanya upaya untuk mengatasi kemungkinan dampak penurunan pendapatan bagi sekelompok masyarakat.
    - c. Adanya kesepakatan dari pihak terkait untuk menyelesaikan masalah PHK sesuai dengan peraturan perundangan yang berlaku.
    - d. Tidak menurunkan kualitas pelayanan umum.
4. Partisipasi masyarakat
    - a. Adanya proses konsultasi dengan masyarakat.
    - b. Adanya tanggapan dan tindak lanjut terhadap komentar, keluhan masyarakat lokal.
5. Tidak merusak integritas sosial masyarakat
    - a. Tidak ada konflik di tengah masyarakat lokal.
6. Terjadi alih teknologi
    - a. Tidak menimbulkan ketergantungan pada pihak asing dalam hal pengetahuan dan pengoperasian alat (*know-how*).
    - b. Tidak menggunakan teknologi yang masih dalam percobaan dan teknologi usang.
    - c. Adanya upaya peningkatan kemampuan dan pemanfaatan teknologi lokal.

Disamping kriteria dan indikator pembangunan berkelanjutan, Departemen Energi dan Sumberdaya Mineral (ESDM) melalui Pusat Litbang Teknologi Energi dan Kelistrikan) telah menetapkan kriteria pembangunan berkelanjutan khusus untuk proyek CDM (Keputusan Menteri ESDM No.953.K/50/2003). Keputusan ini berdasarkan kebijakan dan peraturan yang telah ada. Melalui program pembangunan energi berkelanjutan telah ditetapkan 7 kriteria yang harus dipatuhi dalam proyek CDM energi<sup>198</sup>:

- a. Mendukung implementasi program diversifikasi dan konservasi energi: meningkatkan penggunaan sumberdaya non minyak dan mengurangi penggunaan energi per unit produksi.
- b. Mendukung pembangunan alternatif dan teknologi energi bersih: konsentrasi NOx dan SOx dan emisi GRK yang lebih rendah.
- c. Mendukung konservasi lingkungan: kepatuhan terhadap peraturan-perundangan lingkungan
- d. Mendukung pertumbuhan ekonomi lokal: meningkatkan pendapatan masyarakat lokal/ kegiatan ekonomi lokal terdekat dengan lokasi proyek.
- e. Menjaga tingkat penyerapan tenaga kerja tanpa pemberhentian: tidak ada PHK karena adanya proyek.
- f. Mendukung alih teknologi: meningkatkan penggunaan SDM lokal dalam kuantitas dan kualitas, memberikan peran baru bagi tenaga kerja lokal, rencana pengembangan karir bagi tenaga kerja.
- g. Membuat program pembangunan masyarakat: proyek harus memiliki program pembangunan masyarakat yang pasti dan jelas.

Alih teknologi yang terkait dengan perubahan iklim terjadi melalui proyek-proyek penerapan CDM. Saat ini, KOMNAS MPB, telah menyetujui sekitar 104 proyek CDM. Dari jumlah ini, sekitar 24 proyek telah terdaftar di Badan Eksekutif. Sebagian besar pendukung proyek CDM adalah perusahaan swasta. Namun, LSM memainkan peran penting dalam pelaksanaan adaptasi dan mitigasi kegiatan dengan masyarakat lokal. Berdasarkan data dari Program

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<sup>198</sup> Indonesia, Keputusan Menteri ESDM No.953.K/50/2003.

SGP-GEF UNDP, ada sekitar 18 LSM yang bekerja pada proyek-proyek mitigasi perubahan iklim.<sup>199</sup>

Salah satu dari sekian proyek CDM yang berlangsung di Indonesia adalah proyek penyerapan gas dari tempat pembuangan sampah akhir yang berada di Piyungan, Jogjakarta. Proyek ini adalah proyek antara Indonesia yang diwakili oleh Pemerintah Provinsi Jogjakarta dengan Jepang yang diwakili oleh PT. Shimizu. Proyek ini bertujuan menyerap gas methana, yang merupakan gas rumah kaca, yang terdapat dalam tempat pembuangan sampah akhir. Gas methana diproduksi oleh sampah yang bertumpuk dan didiamkan dalam waktu lama. Proyek ini bermaksud untuk menyerap gas methana tersebut dan merubah gas tersebut menjadi tenaga listrik. Alih teknologi yang ditawarkan dalam proyek ini adalah teknologi penangkapan gas methana untuk dirubah menjadi tenaga listrik. Sebagai perbandingan dikemukakan pula mengenai CDM antara Denmark dan Mesir yang berjudul *Zafarana Wind Farm*, yang dinilai sebagai salah satu proyek yang berhasil dalam menerapkan teknologi baru di negara berkembang.

#### **4.3.3 Kerjasama Indonesia dan Jepang dalam Proyek CDM di Provinsi DI Yogyakarta**

Kerjasama Indonesia dan Jepang dalam proyek CDM yang berlokasi di Piyungan, Daerah Istimewa Yogyakarta, merupakan salah satu perjanjian kerjasama dalam upaya alih teknologi yang berunsurkan alih teknologi. Dalam perjanjian ini, Jepang sebagai negara *Annex I*, bekerjasama dengan Indonesia sebagai negara *Non-Annex* untuk secara bersama melakukan penurunan emisi.

##### **4.3.3.1 Subjek dan Objek Perjanjian CDM**

Perjanjian CDM ini dilakukan oleh PT.Shimizu yang mewakili Jepang dan Pemerintah Provinsi DI Yogyakarta yang mewakili Indonesia. Jepang sebagai negara yang termasuk ke dalam pengelompokkan negara *Annex I*, memiliki kewajiban untuk menurunkan emisinya kegiatan penurunan emisi Jepang dapat dilakukan secara lokal maupun internasional. Dalam hal ini, Jepang melakukan

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<sup>199</sup> Indonesia, *Second National Communications*, (Jakarta: Kementerian Lingkungan Hidup, 2010) hal. VI-1. Lihat juga [www.dna-cdm.menlh.go.id/id/database](http://www.dna-cdm.menlh.go.id/id/database).

kegiatan penurunan emisi di luar wilayah negaranya yaitu di Indonesia. Dengan adanya kondisi ini, dapat dinyatakan bahwa Jepang melakukan penurunan emisi melalui kegiatan CDM, di mana negara maju dapat menurunkan emisinya dengan bekerjasama dengan negara berkembang yang tidak memiliki kewajiban untuk menurunkan emisi dalam Protokol Kyoto. Seperti yang diamanatkan dalam Pasal 12 Protokol Kyoto di mana negara maju dalam melakukan penurunan emisi melalui CDM diharapkan dapat membantu negara berkembang dalam mencapai pembangunan yang berkelanjutan.<sup>200</sup>

Dalam Perjanjian ini, Jepang dan Indonesia yang masing-masing diwakili oleh PT.Shimizu dan Sekber Kartamantul (Sekretaris Bersama Yogyakarta, Sleman, Bantul) akan menurunkan emisi yang terdapat dalam tempat pembuangan sampah akhir di Piyungan, DI Yogyakarta. Tempat pembuangan sampah ini berpotensi untuk menimbun gas methana yang terbentuk akibat dari penumpukan sampah dalam jangka waktu lama.<sup>201</sup>

#### 4.3.3.2 Alih Teknologi dalam Perjanjian CDM Jepang-Indonesia

Dalam perjanjian ini, Jepang akan melakukan alih teknologi seperti yang tertuang dalam Konvensi.<sup>202</sup> Dalam hal ini, Jepang sebagai negara yang

<sup>200</sup> *The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.* Pasal 12 Protokol Kyoto.

<sup>201</sup> *The landfill site, which is a controlled type landfill, is owned by the Yogyakarta Special Province and is jointly managed by the Municipality of Yogyakarta City, Sleman Regency and Bantul Regency. A joint secretariat named KARTAMANTUL has been organized and conducts planning and coordination in order to smoothly advance the joint operation. In topographical terms, the site comprises a valley that is being filled in and it covers an area of approximately 7.4 ha. The site was commissioned in 1995 and it is scheduled to receive waste from the three municipalities until August of 2010. The site facilitates a management office building, warehouse, pavement roads outside of dumping area and drainage canal system, dam and slope protection with stone wall, leachate treatment ponds and aeration facilities, dumping truck scale with a recorder, buffer stops of dumping trucks, and other facilities. Leveling and compaction works by heavy equipments on the dumping area and periodicall soil-cover is practiced. Project Design Document Piyungan Landfill Gas Capture Project in Yogyakarta.*

<sup>202</sup> *The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of*



dikelompokkan sebagai negara maju, yang memiliki kewajiban untuk membantu negara berkembang dalam melaksanakan ketentuan-ketentuan dalam Konvensi, memiliki kewajiban untuk mengalihkan teknologi yang ramah lingkungan kepada Indonesia sebagai negara berkembang. Ketentuan mengenai alih teknologi pun dituangkan dalam Pasal 10 butir c Protokol Kyoto<sup>203</sup>. Jepang sebagai negara peratifikasi Protokol Kyoto, sekaligus tuan rumah terbentuknya Protokol tersebut, memiliki kewajiban untuk tunduk pada Protokol tersebut setelah Protokol tersebut dinyatakan berkekuatan hukum dan mengikat secara hukum.<sup>204</sup> Selanjutnya dalam Protokol Kyoto, negara maju diwajibkan, dalam melakukan kegiatan CDM, untuk membantu negara berkembang dalam mencapai pembangunan yang berkelanjutan.<sup>205</sup> Dalam perjanjian ini, Jepang mengalihkan teknologi dalam CDM melalui *LFG collection system technology* dan *flaring technology*. Gas methana dengan teknologi yang ada akan diubah menjadi listrik.

#### 4.3.4 Perjanjian Denmark-Mesir dalam CDM *Zafarana Wind Farm Project*

Pada tahun 2005 Denmark melakukan kerjasama dengan Mesir dalam proyek CDM di dalam pemanfaatan tenaga angin. Denmark, sebuah negara dengan penggunaan energi terbarukan terbesar menginvestasikan proyek energi

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*endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies.* Pasal 4 ayat 5 UNFCCC.

<sup>203</sup> *Cooperate in the promotion of effective modalities for the development, application and diffusion of, and take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies, know-how, practices and processes pertinent to climate change, in particular to developing countries, including the formulation of policies and programmes for the effective transfer of environmentally sound technologies that are publicly owned or in the public domain and the creation of an enabling environment for the private sector, to promote and enhance the transfer of, and access to, environmentally sound technologies.* Pasal 10 butir c Protokol Kyoto.

<sup>204</sup> Protokol ini mulai berlaku pada 16 Februari 2005 sesuai dengan Pasal 23, yaitu hari kesembilan puluh setelah tanggal di mana tidak kurang dari 55 Pihak UNFCCC, Pihak menggabungkan total emisi Negara yang termasuk dalam *Annex I* dengan total minimal 55% dari Total emisi dioksida karbon tahun 1990 dari Para Pihak yang termasuk dalam *Annex I*, yang telah mendepositkan instrumen ratifikasi, penerimaan, persetujuan atau aksesi.

<sup>205</sup> *The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.* Pasal 12 ayat 2 Protokol Kyoto.

terbaruannya di Mesir dengan tujuan mengurangi emisi lewat proyek CDM seperti yang tertuang dalam Konvensi.

#### 4.3.4.1 Subjek dan Objek kerjasama

Dalam perjanjian ini yang menjadi subjeknya ialah negara maju dan berkembang, seperti perjanjian CDM pada umumnya. Denmark, sebagai negara Annex I yang memiliki kewajiban di dalam Konvensi dan Protokol Kyoto untuk menurunkan emisinya. Mesir sebagai negara non-annex memiliki kemampuan untuk turut serta dalam melakukan penurunan emisi di dalam proyek CDM. Dengan kerjasama ini diharapkan Mesir akan mencapai pembangunan berkelanjutan seperti yang diamanatkan dalam Pasal 12 Protokol Kyoto.<sup>206</sup> Dalam kerjasama ini, yang menjadi objek perjanjian adalah pemanfaatan energi yang dihasilkan dari tenaga angin sebagai salah satu bentuk dari pemanfaatan energi terbarukan.<sup>207</sup>

#### 4.3.4.2 Alih Teknologi dalam Kerjasama Denmark dan Mesir

Dalam kerjasama ini, Denmark sebagai negara *Annex I* memiliki beberapa objek alih teknologi kepada Mesir sebagai negara penerima. Dalam hal ini, tenaga angin yang menghasilkan listrik diproduksi dengan turbin yang merupakan teknologi dari Denmark. Denmark akan mengalihkan teknologi berupa turbin

<sup>206</sup> *The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3. UNFCCC, Protokol Kyoto, Pasal 12.*

<sup>207</sup> *The project is the grant contribution to a mixed credit loan for the extension of the Zafarana Wind Farm at the Gulf of Suez. The project owner is the New and Renewable Energy Agency (NREA) in Egypt. The extension of 120 MW is the third part of Danish support to Zafarana Wind Farm. The first component of 30 MW was financed by grant funds, the second phase of additional 30 MW was partly grant partly mixed credit. The 120 MW will together with support from other bilateral donors bring the total capacity of the farm up to 545 MW. The development of Zafarana Wind Farm is a result of efforts initiated in 1997 with development of a wind map for Egypt and with detailed wind mapping of the Zafarana site, as well as institutional support to NREA. The electricity produced is fed into the national electricity grid and off set use of natural gas for electricity production. The total cost of the project is approximately 956 Mill. DKK. Project Design Document Zafarana Wind Farm.*

angin, pengoperasian dan perawatan turbin tersebut.<sup>208</sup> Alih teknologi ini terkait dengan Pasal 11 ayat 2 Protokol Kyoto<sup>209</sup> di mana Denmark menyediakan sumber dana dalam kegiatan alih teknologi untuk mengimplementasi Pasal 4 Ayat 1 butir c<sup>210</sup> dan Pasal 4 Ayat 3 Konvensi<sup>211</sup>.

#### 4.3.5 Analisa Alih Teknologi dalam Proyek CDM antara Indonesia-Jepang dan Mesir-Denmark

Alih teknologi dalam perjanjian CDM Indonesia-Jepang dan Mesir Denmark dilandaskan oleh perjanjian-perjanjian yang dihasilkan dalam Konferensi Para Pihak UNFCCC. CDM sebagai instrumen penurunan emisi

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<sup>208</sup> *The Zafarana 8 project, along with the wind farms already in operation at Zafarana, will contribute to technology transfer in terms of plant operation. In addition to this, the fact that Zafarana 8 is larger in size than the previously installed projects provides a step towards large-scale wind power plants in Egypt.*

<sup>209</sup> *In the context of the implementation of Article 4, paragraph 1, of the Convention, in accordance with the provisions of Article 4, paragraph 3, and Article 11 of the Convention, and through the entity or entities entrusted with the operation of the financial mechanism of the Convention, the developed country Parties and other developed Parties included in Annex II to the Convention shall:*

*(a) Provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in advancing the implementation of existing commitments under Article 4, paragraph 1 (a), of the Convention that are covered in Article 10, subparagraph (a); and*

*(b) Also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of advancing the implementation of existing commitments under Article 4, paragraph 1, of the Convention that are covered by Article 10 and that are agreed between a developing country Party and the international entity or entities referred to in Article 11 of the Convention, in accordance with that Article.* UNFCCC, Protokol Kyoto, Pasal 11 ayat 2.

<sup>210</sup> *(c) Promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors.* PBB, UNFCCC, Pasal 4 ayat 1 butir c.

<sup>211</sup> *The developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1. They shall also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing measures that are covered by paragraph 1 of this Article and that are agreed between a developing country Party and the international entity or entities referred to in Article 11, in accordance with that Article. The implementation of these commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among the developed country Parties.* PBB, UNFCCC, Pasal 4 ayat 3.

menurut Protokol Kyoto diwajibkan untuk membantu negara berkembang.<sup>212</sup> Dalam pelaksanaan alih teknologi di dalam proyek CDM, Indonesia memiliki sejumlah kekurangan. Dari wawancara yang dilakukan dengan Ketua Sekber Kartamantul, kekurangan yang terdapat dalam proyek ini adalah masih terdapat kesulitan dalam menentukan peraturan yang digunakan oleh Pihak dalam perjanjian CDM. Sekber Kartamantul dalam hal ini menggunakan Undang-Undang mengenai Hibah Luar Negeri sebagai instrumen hukum yang mendukung proyek CDM Piyungan. Jepang sebagai Pihak dalam perjanjian menuntut Indonesia untuk mengundang BPPT sebagai pihak yang juga terlibat terutama dalam pelaksanaan alih teknologi. *Zafarana Wind Farm*, sebagai salah satu proyek CDM yang dikenal memberikan banyak perkembangan, menjadi salah satu proyek yang strategis dalam mengembangkan energi terbarukan bagi pembangunan berkelanjutan. *Zafarana Wind Farm* dapat menjadi teladan bagi Indonesia, dan menjadi suatu studi yang dapat meningkatkan kerjasama CDM yang bermanfaat bagi pelaksanaan alih teknologi di Indonesia.

#### **4.4 Kepentingan Indonesia akan Alih Teknologi di dalam Penurunan Emisi dari Deforestasi dan Degradasi Hutan**

Pengurangan Emisi dari deforestasi dan degradasi hutan (REDD) diterima sebagai insentif positif untuk mengurangi deforestasi di negara berkembang, banyak pihak telah mengusulkan baik pasar dan mekanisme berbasis dana untuk mendukung aksi REDD. Beberapa Pihak berpendapat bahwa dana yang didukung oleh keuangan publik akan memainkan peran penting dalam kegiatan seperti peningkatan kapasitas, penguatan kelembagaan, konservasi, pengelolaan hutan yang berkelanjutan dan cara lain untuk meningkatkan stok karbon hutan.

Dalam melaksanakan REDD, Indonesia memiliki kebutuhan akan teknologi maju dalam melakukan kegiatan yang terkait dengan REDD seperti

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<sup>212</sup> Pasal 12 ayat 1 Protokol Kyoto menyebutkan:

*The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.*

pemantauan dan pengukuran. Dalam pemantauan, Indonesia memerlukan teknologi dalam memantau hutan di mana dilaksanakan proyek REDD sedangkan dalam pengukuran Indonesia membutuhkan teknologi untuk dapat mengukur dengan spesifik stok karbon yang terkandung dalam hutan yang dikonservasi.

Indonesia, lewat proyek REDD, telah melakukan kerjasama yang menuangkan alih teknologi sebagai salah satu unsur objek perjanjian. Dalam kerjasama *Indonesia-Australia Forest Carbon Partnership*, Australia menuangkan kegiatan alih teknologi dalam proses *Measurable, Reportable, Verifiable* (MRV). Selain itu, Australia membentuk kegiatan dalam rangka meningkatkan kapasitas Indonesia sehingga dapat melakukan proses MRV atas aktivitas REDD yang sudah dilakukan.<sup>213</sup> Kerjasama serupa dilakukan oleh Finlandia dan Laos, yang akan dibahas sebagai perbandingan.

#### **4.4.1 Alih Teknologi dalam Perjanjian *Indonesia-Australia Forest Carbon Partnership* (IAFCP)**

Perjanjian lain yang mengakomodasi alih teknologi dalam upaya penurunan emisi di dalam UNFCCC yang dilakukan Indonesia salah satunya adalah *Indonesia-Australia Forest Carbon Partnership*. Perjanjian ini berisikan mengenai dukungan Australia dalam upaya Penurunan Emisi dari Deforestasi dan Degradasi Hutan yang dilakukan oleh Indonesia sebagai aktivitas mitigasi Indonesia terhadap perubahan iklim.

##### **4.4.1.1 Subjek Perjanjian *Indonesia-Australia Forest Carbon Partnership***

Dalam perjanjian ini, yang menjadi subjek ialah Australia yang merupakan negara dalam kelompok Annex I, yang memiliki kewajiban untuk menurunkan emisi seperti yang tertuang dalam Pasal 3 Protokol Kyoto. Sedangkan subjek lainnya yaitu Indonesia ialah negara penyelenggara upaya penurunan emisi. Indonesia tergabung dalam kelompok negara berkembang yang tidak memiliki kewajiban untuk menurunkan emisi, namun penurunan emisi dapat dilakukan secara sukarela.

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<sup>213</sup> Indonesia dan Australia, *Letter of Intent on Indonesia-Australia Forest Carbon Partnership*, 2008.

#### 4.4.1.2 Objek Perjanjian *Indonesia-Australia Forest Carbon Partnership*

*Indonesia-Australia Forest Carbon Partnership*, kerjasama yang bergerak dalam REDD, merupakan kerjasama teknis yang menitikberatkan kepada tiga area yaitu:

1. Pengembangan kebijakan dan peningkatan kapasitas
2. Dukungan teknis terhadap pemantauan dan pengukuran karbon dari hutan
3. Pengembangan dari aktivitas percobaan<sup>214</sup>

Dukungan ini mengacu kepada Pasal 1 keputusan *Bali Action Plan* mengenai REDD di negara berkembang. Dalam keputusan tersebut, negara maju harus mendukung negara berkembang dalam kegiatan REDD. Dalam Pasal 2, negara maju diharapkan untuk membantu negara berkembang dalam alih teknologi berupa *data collection, estimation of emissions from deforestation and forest degradation, monitoring and reporting*, dan *address the institutional needs of developing countries to estimate and reduce emissions from deforestation and forest degradation*. Selain itu dalam Pasal 3 negara maju diharapkan dapat membantu negara berkembang dalam melakukan proyek percontohan REDD.<sup>215</sup>

Bantuan yang diberikan oleh Australia mencerminkan apa yang tertulis dalam *Bali Action Plan*. Australia mendukung Indonesia dalam mengembangkan kebijakan nasional dalam REDD<sup>216</sup> dan peningkatan kapasitas dalam REDD.

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<sup>214</sup> *Letter of Intent, Indonesia-Australia Forest Carbon Partnership.*

<sup>215</sup> 1. *Invites Parties to further strengthen and support ongoing efforts to reduce emissions from deforestation and forest degradation on a voluntary basis;*

2. *Encourages all Parties, in a position to do so, to support capacity-building, provide technical assistance, facilitate the transfer of technology to improve, inter alia, data collection, estimation of emissions from deforestation and forest degradation, monitoring and reporting, and address the institutional needs of developing countries to estimate and reduce emissions from deforestation and forest degradation;*

3. *Further encourages Parties to explore a range of actions, identify options and undertake efforts, including demonstration activities, to address the drivers of deforestation relevant to their national circumstances, with a view to reducing emissions from deforestation and forest degradation and thus enhancing forest carbon stocks due to sustainable management of forests.* UNFCCC, *Bali Action Plan*, Pasal 1.

<sup>216</sup> *Indonesia is currently preparing its national policy and legal framework for REDD. This includes new national regulations for REDD implementation released in May 2009. In taking early action in designing the national MRV system, Indonesia is ensuring that these systems are integrated with, and guided by this broader institutional framework.*

Selain itu Australia melakukan dukungan teknis dalam memantau dan mengukur potensi karbon di hutan Indonesia dengan membentuk *Indonesia's National Carbon Accounting System (INCAS)* dan *Forest Resource Information System (FRIS)*. Hal ini dikaitkan dengan sistem penghitungan karbon di Australia yang bernama *National Carbon Accounting System (NCAS)*.<sup>217</sup> Selain itu, Australia akan mendukung proyek percontohan yang akan dilakukan Kalimantan yang diharapkan dapat membantu Indonesia dalam mengembangkan REDD sebagai upaya penurunan emisi Indonesia.<sup>218</sup>

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*Indonesia's REDD architecture is also being designed to fit anticipated international requirements. Indonesia is ensuring its national frameworks for REDD are effectively linked to broader climate change policies and measures by establishing suitable government arrangements at the national level, to be followed by arrangements at the sub-national level. This includes the establishment of a National Council on Climate Change, underpinned by working groups in key ministries. This measure has served to enhance coordination across government on climate change issues including REDD. Letter of Intent IAFCP.*

<sup>217</sup> *It is important to underline the need for genuine cooperation and capacity building between developed and developing countries in an effort to realise the full potential of REDD in the COP 15 outcome. Through our Indonesia – Australia Forest Carbon Partnership we are working collaboratively to take practical action on REDD. This includes support for the development of the necessary national MRV systems for REDD.*

*Strong technical expertise and access to suitable data is a core part of successfully establishing national MRV systems for REDD. Capacity building for MRV can enable Parties to efficiently develop these system requirements. For example, to assist Indonesia and other neighbouring countries establish MRV systems for REDD, Australia is acquiring satellite data from various overseas archives. This includes providing satellite data acquired from international ground stations to Indonesia for the development of their INCAS. To support this work, Australia is enhancing its national capability to directly receive regional satellite data by installing a new ground receiving station (satellite dish) in northern Australia.*

*Australia is supporting the efforts of Indonesia for the development of the FRIS and INCAS by providing scientific, technical and analytical support. This has included a series of policy and technical workshops and exchanges of technical staff between Indonesia and Australia.*

*To improve efficiency we have found that capacity building support needs to be effectively targeted to national circumstances. This ensures early identification of priority technical and systems needs, and avoids duplication of existing skills and expertise. In developing the FRIS and INCAS, it was important to allow sufficient time for this analysis prior to system development. Indonesia already has considerable technical expertise in establishing forest inventories, geographic information systems and remote sensing. With this in mind, the design process involved a determination of system requirements and identification of any remaining technical gaps that needed to be addressed. Letter of Intent IAFCP.*

<sup>218</sup> *The Indonesia-Australia Forests Carbon Partnership will encompass the Kalimantan Forest and Climate Partnership agreed between the Government of Indonesia and Australia in September 2007. Both countries recognise the importance of the Kalimantan Forests and Climate Partnership as the first, large-scale demonstration activity of its kind in the world, and its role in informing international negotiations under the UNFCCC and Kyoto Protocol. Australia has committed A\$30 million to the Kalimantan Forests and Climate Partnership which will trial an innovative market based approach to financing implementing measures to reduce emissions from deforestation and forest degradation in Central Kalimantan. Letter of Intent IAFCP.*

#### 4.4.2 Kerjasama Laos dan Finlandia dalam *Sustainable Forestry for Rural Development Project* (SUFORD)

Aktivitas REDD yang diperkuat dalam *Bali Action Plan* menginginkan negara maju untuk membantu negara berkembang dalam menurunkan emisi melalui sektor kehutanan.<sup>219</sup> Kerjasama dalam REDD, sebagai salah satu aksi mitigasi terutama negara berkembang merupakan wadah bagi alih teknologi. Begitupun dalam kerjasama Finlandia dan Laos dalam SUFORD. Finlandia membantu Laos dalam kegiatan REDD sebagai salah satu upaya penurunan emisi di dalam UNFCCC.

##### 4.4.2.1 Subjek dan Objek Kerjasama

Dalam kerjasama ini, Finlandia yang merupakan negara *Annex I* yang memiliki komitmen untuk menurunkan emisi. Finlandia membantu Laos sebagai negara *Non-Annex*, yang dapat menurunkan emisi secara sukarela.

Perjanjian yang bergerak dalam aktivitas kehutanan ini menitik beratkan kepada pengelolaan hutan lestari bagi pembangunan pedesaan. Tujuan dari kerjasama ini menitikberatkan kepada terciptanya kebijakan dan hukum akan pembangunan pedesaan yang banyak berkaitan dengan kegiatan kehutanan. Selain itu kerjasama ini bertujuan untuk kegiatan pemantauan oleh Laos akan aktivitas REDD.<sup>220</sup>

<sup>219</sup> 1. *Invites Parties to further strengthen and support ongoing efforts to reduce emissions from deforestation and forest degradation on a voluntary basis;*

2. *Encourages all Parties, in a position to do so, to support capacity-building, provide technical assistance, facilitate the transfer of technology to improve, inter alia, data collection, estimation of emissions from deforestation and forest degradation, monitoring and reporting, and address the institutional needs of developing countries to estimate and reduce emissions from deforestation and forest degradation;*

3. *Further encourages Parties to explore a range of actions, identify options and undertake efforts, including demonstration activities, to address the drivers of deforestation and forest degradation and thus enhancing forest carbon stocks due to sustainable management of forests.* UNFCCC, *Bali Action Plan*, Pasal 1.

<sup>220</sup> *Specific objectives are to:*

1. *Improve the policy, legal and incentive framework enabling the expansion of Participatory Sustainable Forest Management (PSFM) in the whole country*
2. *Bring the country's priority natural production forests under the PSFM*
3. *Improve well-being and livelihoods in villages through benefits from sustainable forestry, community development and development of viable livelihood systems*



#### 4.4.2.2 Alih Teknologi dalam Kerjasama SUFORD

Dalam Kerjasama ini, Finlandia sebagai negara maju akan mengalihkan teknologi berupa perangkat untuk penilaian karbon hutan dan penggunaan citra satelit yang digunakan untuk penilaian.<sup>221</sup> Finlandia sebagai negara maju menerapkan Pasal 4 ayat 5 Konvensi yaitu memfasilitasi Laos dengan mengalihkan teknologi agar dapat mengimplementasi Konvensi.<sup>222</sup> Dalam hal ini Finlandia menerapkan Pasal 4 ayat 8 Konvensi di mana negara maju diharapkan dapat mengalihkan teknologi kepada negara yang memiliki area hutan.<sup>223</sup> Selain itu, kebutuhan akan pembangunan pedesaan yang menjadi kebutuhan spesifik

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4. *Support the development of new and innovative methodologies for REDD monitoring. SUFORD Document.*

<sup>221</sup> *Participatory forest management could provide a sound base for further development of the REDD concept. The SUFORD project has supported the Lao PDR government in piloting new and innovative tools for forest carbon assessment. High resolution satellite images and airborne laser scanning (LIDAR) have proved to be cost-effective tools for the assessment. SUFORD Report.*

<sup>222</sup> *The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies. PBB, UNFCCC, Pasal 4 ayat 5.*

<sup>223</sup> *In the implementation of the commitments in this Article, the Parties shall give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures, especially on:*

- (a) Small island countries;*
  - (b) Countries with low-lying coastal areas;*
  - (c) Countries with arid and semi-arid areas, forested areas and areas liable to forest decay;*
  - (d) Countries with areas prone to natural disasters;*
  - (e) Countries with areas liable to drought and desertification;*
  - (f) Countries with areas of high urban atmospheric pollution;*
  - (g) Countries with areas with fragile ecosystems, including mountainous ecosystems;*
  - (h) Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products; and*
  - (i) Landlocked and transit countries.*
- Further, the Conference of the Parties may take actions, as appropriate, with respect to this paragraph. PBB, UNFCCC, Pasal 4 ayat 8.*

Laos terbantu dengan adanya pengalihan teknologi ini seperti ditulis dalam Pasal 4 ayat 9 Konvensi.<sup>224</sup>

#### **4.4.3 Perbandingan Alih Teknologi dalam Kerjasama IAFCP dan SUFORD**

Bentuk alih teknologi yang paling mudah ditemukan dalam proyek REDD adalah mengenai penggunaan citra satelit. Ini berkaitan dengan kebutuhan akan pemantauan proyek REDD, yang merupakan hal esensial yang menunjang keberhasilan REDD.

Proyek REDD yang dilakukan di daerah hutan, merupakan daerah terpencil yang sulit dipantau. Dengan adanya alih teknologi dalam citra satelit proyek REDD diharapkan dapat lebih ditingkatkan pemantauannya. Kerjasama Indonesia dan Australia dalam IAFCP dan kerjasama Laos dan Finlandia dalam SUFORD sama-sama menitikberatkan kepada pengelolaan hutan lestari. Inilah yang menjadi inti dalam pelaksanaan REDD di negara berkembang. Selain itu kegiatan REDD di negara berkembang sangat membutuhkan peningkatan kapasitas terutama kapasitas di daerah. Melalui alih teknologi, peningkatan kapasitas di daerah diharapkan akan mampu menunjang keberhasilan proyek REDD di negara berkembang.

#### **4.5 Analisis Dasar Hukum Penerapan Alih Teknologi dalam UNFCCC**

Dasar hukum mengenai alih teknologi berdasarkan kerjasama-kerjasama diatas menitikberatkan kepada tiga hal meliputi:

1. Alih teknologi dalam Pasal 4 ayat 5 dalam UNFCCC,
2. Alih teknologi dalam CDM, dan
3. Alih teknologi dalam REDD.

Ketiga komponen ini memiliki perkembangan masing-masing dalam kaitan dengan pembahasan dan keputusan-keputusan yang dihasilkan hingga Konferensi Para Pihak ke-17 di Durban, Afrika Selatan.

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<sup>224</sup> *The Parties shall take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology.* PBB, UNFCCC, Pasal 4 ayat 9.

#### 4.5.1 Alih Teknologi dalam Pasal 4 ayat 5 dalam UNFCCC

Alih teknologi adalah suatu bentuk komitmen negara maju dalam menerapkan Pasal 4 ayat 5 Konvensi. Komitmen ini masih terus dibahas hingga COP terakhir di Durban. Pasal 4 ayat 5 sebagai salah satu dasar dari penerapan alih teknologi dalam konteks perubahan iklim berkembang dari setiap COP. Dalam Protokol Kyoto, komitmen negara maju untuk membantu negara berkembang ditunjukkan dalam Pasal 10 butir c yang menekankan kembali pentingnya komitmen negara maju dalam mengalihkan teknologi ke negara berkembang untuk membantu negara berkembang mengimplementasi ketentuan Konvensi.<sup>225</sup> Selanjutnya dalam *Buenos Aires Plan of Action*, pengimplementasian alih teknologi dalam Pasal 4 ayat 5 Konvensi kembali ditingkatkan dengan keputusan mengenai *Development and Transfer of Technology* yang meminta negara Annex II untuk berkomitmen dalam membantu negara berkembang menerapkan teknologi ramah lingkungan melalui alih teknologi. *Buenos Aires Plan of Action* meminta untuk membentuk suatu tim konsultasi yang khusus mengidentifikasi isu-isu yang berkaitan dengan alih teknologi.<sup>226</sup> *Marrakesh Accord* mengidentifikasi 5 kunci dalam meningkatkan penerapan Pasal 4 ayat 5 Konvensi yaitu<sup>227</sup>:

<sup>225</sup> Pasal 10 butir c Protokol Kyoto: *All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, without introducing any new commitments for Parties not included in Annex I, but reaffirming existing commitments under Article 4, paragraph 1, of the Convention, and continuing to advance the implementation of these commitments in order to achieve sustainable development, taking into account Article 4, paragraphs 3, 5 and 7, of the Convention, shall:*

*Cooperate in the promotion of effective modalities for the development, application and diffusion of, and take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies, know-how, practices and processes pertinent to climate change, in particular to developing countries, including the formulation of policies and programmes for the effective transfer of environmentally sound technologies that are publicly owned or in the public domain and the creation of an enabling environment for the private sector, to promote and enhance the transfer of, and access to, environmentally sound technologies.*

<sup>226</sup> Pasal 7 *Buenos Aires Plan of Action* menyebutkan:

*Urges:*

*(a) Annex I Parties, in their technology transfer activities, to take into account support for the development and enhancement of the endogenous capacities and technologies of developing country Parties;*

*(b) Annex II Parties to provide, as appropriate, for reference by developing country Parties, a list of environmentally sound technologies and know-how related to adaptation to and mitigation of*

1. *Technology Needs and Needs Assessment*
2. *Technology Information*
3. *Enabling Environments*
4. *Capacity Building*
5. *Mechanisms for Technology Transfer*

Kelima komponen diatas diharapkan dapat meningkatkan penerapan alih teknologi yang disebutkan dalam Pasal 4 ayat 5 Konvensi. *Bali Action Plan* menambah ketentuan baru bagi berjalannya alih teknologi dalam perubahan iklim. Dengan pembentukan *Expert Group on Technology Transfer*, penerapan alih teknologi sesuai Pasal 4 ayat 5 Konvensi diharapkan akan meningkat.<sup>228</sup> Keputusan dalam *Bali Action Plan* yang membentuk *Expert Group on Technology Transfer*, dirubah dengan adanya keputusan COP 16 di Cancun. *Cancun Agreement* membentuk suatu mekanisme baru yang diharapkan akan meningkatkan alih teknologi dalam perubahan iklim bernama *Technology Mechanism*. Badan yang dibentuk dalam *Mechanism* melalui *Cancun Agreement* adalah *Technology Executive Committee* dan *Climate Technology Centre and*

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*climate change that are publicly owned, and to report in their national communications steps taken to implement Article 4.5 of the Convention;*

Pasal 9 menyebutkan:

*Requests the Chairman of the SBSTA to establish a consultative process to consider the list of issues and questions contained in the annex to this decision, as well as any additional issues and questions subsequently identified by Parties, and to make recommendations on how they should be addressed in order to achieve agreement on a framework for meaningful and effective actions to enhance implementation of Article 4.5 of the Convention. Such a process should also consider issues identified in the secretariat progress report on transfer of technology<sup>1</sup> and in submissions from Parties. The consultative process could include, resources permitting, regional meetings, regional workshops and a SBSTA workshop, arranged with the assistance of the secretariat and drawing upon the roster of experts and, as appropriate, experts engaged in the IPCC process;*

<sup>227</sup> *Marrakesh Accord* menyebutkan: *The successful development and transfer of ESTs and know-how requires a countrydriven, integrated approach, at a national and sectoral level. This should involve cooperation among various stakeholders (the private sector, governments, the donor community, bilateral and multilateral institutions, non-governmental organizations and academic and research institutions), including activities on technology needs assessments, technology information, enabling environments, capacity building and mechanisms for technology transfer.*

<sup>228</sup> *Bali Action Plan* menyebutkan: *The Expert Group on Technology Transfer shall have the objectives of enhancing the implementation of Article 4, paragraph 5, of the Convention and advancing the development and transfer of technology activities under the Convention.*

*Network*. Badan ini memiliki tugas yang berbeda seperti yang tertera dalam *Cancun Agreement*.<sup>229</sup>

#### 4.5.2 Alih Teknologi dalam CDM

Alih teknologi dalam CDM menjadi suatu komitmen negara maju untuk membantu negara berkembang dalam menerapkan teknologi ramah lingkungan untuk pembangunan yang berkelanjutan. Ini dikuatkan dengan adanya Pasal 12 ayat 2 Protokol Kyoto yang meminta negara maju untuk mendukung negara berkembang dalam mencapai tujuan Konvensi melalui kerjasama dalam CDM.<sup>230</sup> Dalam perkembangannya, negara maju harus mencantumkan alih teknologi yang akan diterapkan dalam proyek CDM di *Project Design Document*. Ini ditegaskan dalam *Marrakesh Accord*.<sup>231</sup> Dengan adanya keharusan untuk menuliskan alih teknologi yang digunakan dalam proyek CDM, diharapkan pelaksanaan alih teknologi melalui CDM akan meningkat.

#### 4.5.3 Alih Teknologi dalam REDD

Kegiatan penurunan emisi melalui deforestasi dan degradasi hutan pertama kali dikuatkan dalam *Bali Action Plan*. Selain CDM, mekanisme penurunan emisi melalui REDD menjadi suatu cara yang dapat dilakukan oleh negara berkembang.

<sup>229</sup> Keputusan Cancun mengenai pengembangan teknologi menuliskan:

*Also decides that the Technology Executive Committee and the Climate Technology Centre and Network, consistent with their respective functions, should facilitate the effective implementation of the Technology Mechanism, under the guidance of the Conference of the Parties. Further decides that the Technology Executive Committee shall further implement the framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention adopted by decision 4/CP.7 and enhanced by decision 3/CP.1.*

<sup>230</sup> Pasal 12 ayat 2 Protokol Kyoto menyebutkan:

*The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.*

<sup>231</sup> *Appendix B, Decision 17/CP.7* menyatakan:

*The purpose of this appendix is to outline the information required in the project design document. A project activity shall be described in detail taking into account the provisions of the annex on modalities and procedures for a CDM, in particular, section G on validation and registration and section H on monitoring, in a project design document which shall include the following:*  
*(a) A description of the project comprising the project purpose, a technical description of the project, including how technology will be transferred, if any, and a description and justification of the project boundary.*

REDD, selain dapat menyerap banyak karbon diharapkan dapat meningkatkan alih teknologi dari negara maju ke negara berkembang. Hal ini diutarakan dalam *Bali Action Plan* yang menyebutkan bahwa kegiatan REDD harus mendukung alih teknologi dalam perubahan iklim.<sup>232</sup>

*Cancun Agreement*, instrumen yang lebih baru dari *Bali Action Plan*, menyebutkan hal baru mengenai ketentuan alih teknologi dalam REDD, yaitu dengan meminta negara maju untuk membantu negara berkembang dalam menerapkan unsur *Measurable, Reportable and Verifiable (MRV)*.<sup>233</sup> *Cancun Agreement* menekankan pentingnya bantuan negara maju dalam memberikan bantuan berupa alih teknologi, pengembangan teknologi dan peningkatan kapasitas dalam REDD.<sup>234</sup>

Perkembangan alih teknologi dalam implementasi Pasal 4 ayat 5 Konvensi, proyek CDM dan aktivitas REDD terus berkembang berdasarkan analisis di atas. Konferensi Para Pihak hampir setiap tahun memberikan kemajuan yang signifikan dalam mengidentifikasi alih teknologi untuk perubahan iklim. Berdasarkan analisis di atas, kekurangan penerapan hasil-hasil keputusan mengenai alih teknologi berada pada pelaksanaan alih teknologi di dunia nyata. Alih teknologi dituangkan dengan baik dalam *Project Design Document CDM*

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<sup>232</sup> *Bali Action Plan* dalam keputusan REDD menyatakan:

*Encourages all Parties, in a position to do so, to support capacity-building, provide technical assistance, facilitate the transfer of technology to improve, inter alia, data collection, estimation of emissions from deforestation and forest degradation, monitoring and reporting, and address the institutional needs of developing countries to estimate and reduce emissions from deforestation and forest degradation.*

<sup>233</sup> *Cancun Agreement* menyebutkan:

*Decides that the activities undertaken by Parties referred to in paragraph 70 above should be implemented in phases, beginning with the development of national strategies or action plans, policies and measures, and capacity-building, followed by the implementation of national policies and measures and national strategies or action plans that could involve further capacity building, technology development and transfer and results-based demonstration activities, and evolving into results-based actions that should be fully measured, reported and verified.*

<sup>234</sup> *Cancun Agreement* menyebutkan:

*Urges Parties, in particular developed country Parties, to support, through multilateral and bilateral channels, the development of national strategies or action plans, policies and measures and capacity-building, followed by the implementation of national policies and measures and national strategies or action plans that could involve further capacity-building, technology development and transfer and results-based demonstration activities, including consideration of the safeguards referred to in paragraph 2 of appendix I to this decision, taking into account the relevant provisions on finance including those relating to reporting on support.*

dan perjanjian bilateral maupun multilateral dalam rangka melakukan upaya penurunan emisi, namun pada dasarnya melakukan alih teknologi bukanlah hal yang mudah. Ketentuan mengenai keharusan akan penerapan alih teknologi lah yang kurang ditegaskan dalam UNFCCC dan perjanjian sesudahnya. Alih teknologi hanya menjadi komoditas yang diperdagangkan dalam upaya penurunan emisi di dalam UNFCCC.<sup>235</sup>

Kekurangan kedua yang dapat dianalisis adalah mengenai ketentuan fleksibilitas TRIPs yaitu hak paten dan lisensi. Fleksibilitas TRIPs telah lama dibahas dalam Konferensi Para Pihak, namun sampai kini tidak pernah berhasil dituangkan dalam keputusan. Fleksibilitas TRIPs akan mempermudah negara berkembang dalam menurunkan emisi di dalam mekanisme UNFCCC.<sup>236</sup>

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<sup>235</sup> Teece's empirical works about TTs by multinational companies (1977) showed that the transmission and absorption of the knowhow required to actually put the technology into operation involved substantial costs. These averaged roughly 20 per cent of the total project costs and were supplementary to the cost of transmitting knowledge in the form of capital goods, blueprints, specifications and special materials. Also included in the cost were pre-engineering technological exchanges, engineering costs associated with transferring process or product design, and the associated process or product engineering, as well as R&D necessary for tailoring technology to suit local conditions. They also included pre-start-up training costs and outlays made during the initial 'shakedown' and 'debugging' phases of learning that was required for the plant to achieve its designed performance specifications. Dominique Foray, *Technology Transfer in the TRIPS Age: The Need for New Types of Partnerships between the Least Developed and Most Advanced Economies*, (Jenewa: ICTSD, 2009), hal.13. Pernyataan didapat berdasarkan wawancara dengan Delegasi Republik Indonesia yang memperjuangkan alih teknologi dalam perubahan iklim.

<sup>236</sup> ICTSD, *Climate Change, Technology Transfer and Intellectual Property Right*, (Jenewa: ICTSD, 2008), hal.5.

## **BAB V**

### **PENUTUP**

#### **5.1 KESIMPULAN**

Alih teknologi dalam perubahan iklim telah menjadi isu yang strategis. Kegiatan alih teknologi sangat terkait dengan berbagai sektor yang potensial untuk melakukan penurunan emisi. Alih teknologi menjadi suatu kunci utama keberhasilan pembangunan berkelanjutan dalam upaya mengurangi dampak perubahan iklim. Dengan berbagai penjelasan dalam bab-bab diatas, dapat diambil kesimpulan bahwa:

1. Konsep alih teknologi yang umumnya ditemukan berupa *know-how*, *technical cooperation* dan *capacity building*. Konsep alih teknologi yang dapat digunakan dalam pelaksanaan upaya penurunan emisi terbagi dalam beberapa lingkup seperti Investasi Asing Langsung, Hak Kekayaan Intelektual dan *Multilateral Environmental Agreements*. Alih teknologi dalam lingkup Investasi Asing Langsung sangat berpengaruh pada penurunan emisi, ini terkait dengan peran perusahaan multinasional dan perusahaan transnasional yang sangat berpengaruh dalam mengalihkan atau mendifusikan teknologi. Investasi Asing Langsung membuka peluang bagi negara berkembang untuk merasakan adanya teknologi canggih yang didatangkan oleh negara maju untuk diterapkan di negara berkembang. Investasi Asing Langsung memiliki keterkaitan yang sangat erat dengan alih teknologi dalam perubahan iklim, ini berkaitan erat dengan mekanisme Protokol Kyoto yaitu CDM, yang merupakan wujud dari Investasi Asing Langsung. Dengan adanya CDM, pelaksanaan alih teknologi dalam upaya penurunan emisi akan semakin mudah. Alih teknologi dalam kaitannya dengan Hak Kekayaan Intelektual pun memiliki arti tersendiri bagi upaya penurunan emisi. TRIPs sebagai instrumen HKI menuliskan beberapa ketentuan terkait dengan pelaksanaan alih teknologi. Dalam perkembangan negosiasi perubahan iklim, fleksibilitas TRIPs diharapkan dapat diterapkan dalam upaya alih teknologi yang dilakukan untuk mencegah dan mengurangi dampak perubahan iklim. HKI



diharapkan dapat memacu inovasi-inovasi baru yang dapat diterapkan sebagai teknologi ramah lingkungan. Lingkup yang ketiga yaitu *Multilateral Environmental Agreements* mengenai *substance that deplete the ozone layer*, memiliki keterkaitan yang tidak kalah penting. Protokol Montreal yang dinilai berhasil dalam melakukan alih teknologi dalam mengurangi zat-zat yang merusak ozon mampu mendukung upaya penurunan emisi dalam mekanisme UNFCCC. Dengan adanya pengalihan teknologi melalui Protokol Montreal, pengurangan emisi GRK diharapkan dapat mengurangi dampak perubahan iklim.

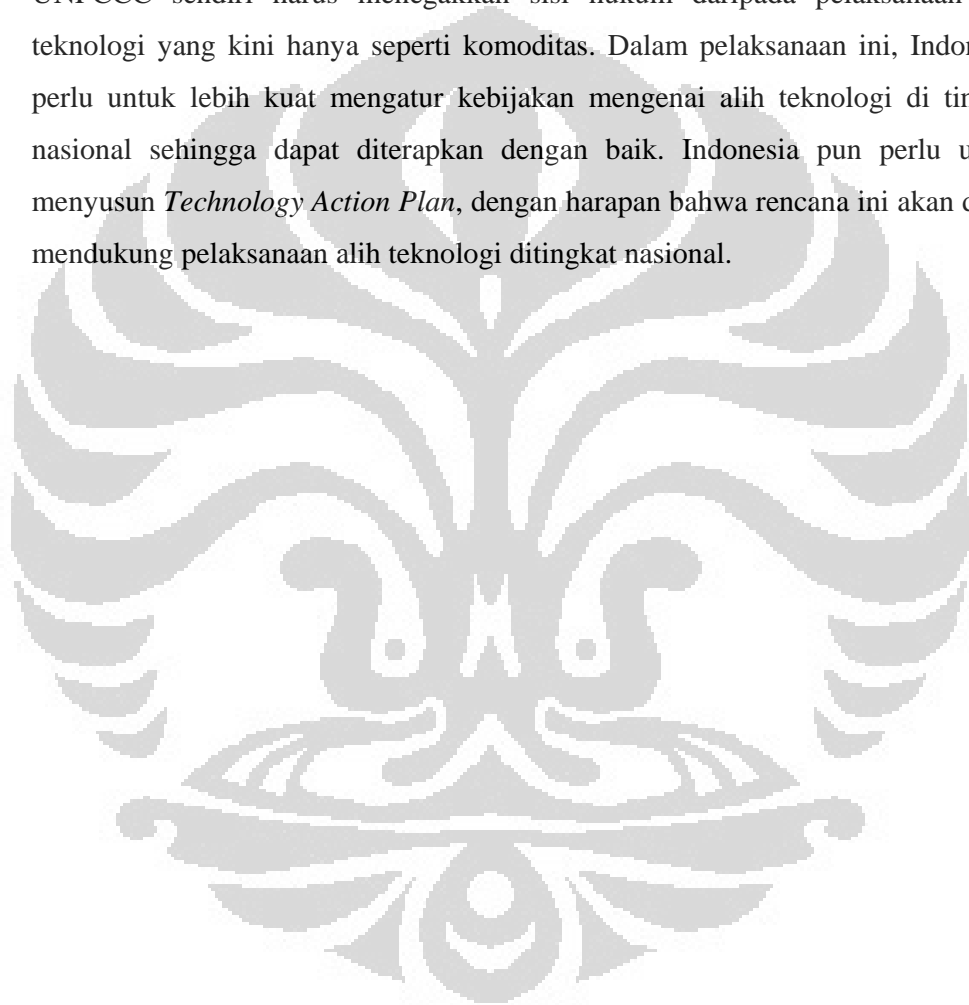
2. Pengaturan mengenai alih teknologi dalam UNFCCC sudah signifikan. UNFCCC menyebutkan bahwa alih teknologi akan mendukung negara berkembang dalam melaksanakan ketentuan yang terdapat dalam Konvensi. Dalam setiap Konferensi Para Pihak, terlahir kesepakatan dalam pelaksanaan upaya penurunan emisi. Kesepakatan ini umumnya mengaitkan alih teknologi untuk diimplementasi dalam membantu negara berkembang untuk mengurangi emisi. Kesepakatan setelah UNFCCC yang menuangkan alih teknologi menjadi isu yang signifikan adalah Protokol Kyoto. Protokol ini mendorong negara maju untuk mengalihkan teknologi kepada negara berkembang. Selain Protokol Kyoto terdapat *Buenos Aires Action Plan* yang mendorong adanya mekanisme bilateral dan multilateral untuk alih teknologi dalam upaya penurunan emisi. *Bali Action Plan* yang dilaksanakan pada tahun 2007 menjadi instrumen yang tidak kalah penting bagi keberadaan alih teknologi dalam UNFCCC. *Bali Action Plan* mengamanatkan untuk memperkuat mekanisme alih teknologi dan memperkuat penelitian dan pembangunan terhadap alih teknologi. Instrumen besar setelah *Bali Action Plan* adalah *Cancun Agreement* yang membentuk mekanisme teknologi dalam UNFCCC, yang terdiri dari *Technology Executive Committee* dan *Climate Technology Center and Network*. Kedua badan ini diharapkan akan dapat mempermudah negara berkembang dalam mengakses teknologi ramah lingkungan yang berguna dalam upaya penurunan emisi. Alih teknologi mendapat perhatian besar dari dunia internasional sehingga diciptakan beberapa mekanisme

pendanaan yang dapat membantu pelaksanaan alih teknologi. Beberapa mekanisme pendanaan dalam UNFCCC adalah *Global Environment Facility* dan *Green Climate Fund*.

3. Indonesia sebagai negara berkembang memiliki kepentingan akan alih teknologi dalam upaya penurunan emisi nasional. Indonesia perlu untuk membuat TNA sebagai salah satu penilaian akan teknologi yang dibutuhkan. Indonesia telah mengintegrasikan beberapa peraturan nasional terkait dengan pelaksanaan alih teknologi. Indonesia sebagai negara berkembang dapat berpartisipasi dalam CDM memiliki kemampuan untuk mengakses teknologi ramah lingkungan melalui proyek CDM. Indonesia yang memiliki angka besar dalam kegiatan industri akan sangat tepat jika berpartisipasi dalam proyek CDM. CDM akan menjadi sarana bagi Indonesia untuk mendapatkan kemudahan akan pengalihan teknologi oleh negara maju sebagai pihak yang berkewajiban untuk menurunkan emisi. Selain daripada proyek CDM, Indonesia sebagai negara yang memiliki hutan tropis yang luas dapat mengakses teknologi ramah lingkungan melalui proyek REDD. Sebagai negara yang berpartisipasi dalam upaya penurunan emisi lewat sektor kehutanan, Indonesia dapat memanfaatkan teknologi yang diterapkan dalam proyek REDD untuk selanjutnya secara berkelanjutan diterapkan di Indonesia. Indonesia tidak hanya memanfaatkan teknologi yang diterapkan saat REDD, tapi juga dapat memanfaatkan kegiatan peningkatan kapasitas yang umumnya dilakukan sebelum proyek REDD yang biasanya bersifat bilateral berlangsung. Dalam bantuan luar negeri, Indonesia dapat mengakses alih teknologi dalam bantuan pendanaan yang diberikan melalui bank-bank pembangunan internasional, negara donor dan *Global Environment Facility*. Dana-dana ini akan sangat membantu Indonesia untuk menerapkan alih teknologi. Dengan adanya dana bantuan internasional Indonesia diharapkan dapat melakukan kegiatan alih teknologi dengan baik dan berkelanjutan sehingga dapat mengurangi emisi secara sukarela dengan baik.

## 5.2 SARAN

Dalam pelaksanaan alih teknologi dalam upaya penurunan emisi, terdapat beberapa kekurangan. Dalam Investasi Asing Langsung, Indonesia seharusnya lebih memperkuat kebutuhan akan alih teknologi. Dalam hal Hak Kekayaan Intelektual, Indonesia sebaiknya mendorong adanya fleksibilitas TRIPs dalam UNFCCC sehingga dapat mempermudah akses akan teknologi ramah lingkungan. UNFCCC sendiri harus menegakkan sisi hukum daripada pelaksanaan alih teknologi yang kini hanya seperti komoditas. Dalam pelaksanaan ini, Indonesia perlu untuk lebih kuat mengatur kebijakan mengenai alih teknologi di tingkat nasional sehingga dapat diterapkan dengan baik. Indonesia pun perlu untuk menyusun *Technology Action Plan*, dengan harapan bahwa rencana ini akan dapat mendukung pelaksanaan alih teknologi ditingkat nasional.



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**UNITED NATIONS FRAMEWORK CONVENTION  
ON CLIMATE CHANGE**



UNITED NATIONS  
1992

FCCC/INFORMAL/84  
GE.05-62220 (E) 200705

## UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

*The Parties to this Convention,*

*Acknowledging* that change in the Earth's climate and its adverse effects are a common concern of humankind,

*Concerned* that human activities have been substantially increasing the atmospheric concentrations of greenhouse gases, that these increases enhance the natural greenhouse effect, and that this will result on average in an additional warming of the Earth's surface and atmosphere and may adversely affect natural ecosystems and humankind,

*Noting* that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs,

*Aware* of the role and importance in terrestrial and marine ecosystems of sinks and reservoirs of greenhouse gases,

*Noting* that there are many uncertainties in predictions of climate change, particularly with regard to the timing, magnitude and regional patterns thereof,

*Acknowledging* that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions,

*Recalling* the pertinent provisions of the Declaration of the United Nations Conference on the Human Environment, adopted at Stockholm on 16 June 1972,

*Recalling also* that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction,

*Reaffirming* the principle of sovereignty of States in international cooperation to address climate change,

*Recognizing* that States should enact effective environmental legislation, that environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply, and that standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries,

*Recalling* the provisions of General Assembly resolution 44/228 of 22 December 1989 on the United Nations Conference on Environment and Development, and resolutions 43/53 of 6 December 1988, 44/207 of 22 December 1989, 45/212 of 21 December 1990 and 46/169 of 19 December 1991 on protection of global climate for present and future generations of mankind,

*Recalling also* the provisions of General Assembly resolution 44/206 of 22 December 1989 on the possible adverse effects of sea-level rise on islands and coastal areas, particularly low-lying coastal areas and the pertinent provisions of General Assembly resolution 44/172 of 19 December 1989 on the implementation of the Plan of Action to Combat Desertification,

*Recalling further* the Vienna Convention for the Protection of the Ozone Layer, 1985, and the Montreal Protocol on Substances that Deplete the Ozone Layer, 1987, as adjusted and amended on 29 June 1990,

*Noting* the Ministerial Declaration of the Second World Climate Conference adopted on 7 November 1990,

*Conscious* of the valuable analytical work being conducted by many States on climate change and of the important contributions of the World Meteorological Organization, the United Nations Environment Programme and other organs, organizations and bodies of the United Nations system, as well as other international and intergovernmental bodies, to the exchange of results of scientific research and the coordination of research,

*Recognizing* that steps required to understand and address climate change will be environmentally, socially and economically most effective if they are based on relevant scientific, technical and economic considerations and continually re-evaluated in the light of new findings in these areas,

*Recognizing* that various actions to address climate change can be justified economically in their own right and can also help in solving other environmental problems,

*Recognizing also* the need for developed countries to take immediate action in a flexible manner on the basis of clear priorities, as a first step towards comprehensive response strategies at the global, national and, where agreed, regional levels that take into account all greenhouse gases, with due consideration of their relative contributions to the enhancement of the greenhouse effect,

*Recognizing further* that low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change,

*Recognizing* the special difficulties of those countries, especially developing countries, whose economies are particularly dependent on fossil fuel production, use and exportation, as a consequence of action taken on limiting greenhouse gas emissions,

*Affirming* that responses to climate change should be coordinated with social and economic development in an integrated manner with a view to avoiding adverse impacts on the latter, taking into full account the legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty,

*Recognizing* that all countries, especially developing countries, need access to resources required to achieve sustainable social and economic development and that, in order for developing countries to progress towards that goal, their energy consumption will need to grow taking into account the possibilities for achieving greater energy efficiency and for controlling greenhouse gas emissions in general, including through the application of new technologies on terms which make such an application economically and socially beneficial,

*Determined* to protect the climate system for present and future generations,

*Have agreed* as follows:

## **Article 1**

### **DEFINITIONS\***

For the purposes of this Convention:

1. “Adverse effects of climate change” means changes in the physical environment or biota resulting from climate change which have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on the operation of socio-economic systems or on human health and welfare.
2. “Climate change” means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.
3. “Climate system” means the totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions.
4. “Emissions” means the release of greenhouse gases and/or their precursors into the atmosphere over a specified area and period of time.
5. “Greenhouse gases” means those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation.
6. “Regional economic integration organization” means an organization constituted by sovereign States of a given region which has competence in respect of matters governed by this Convention or its protocols and has been duly authorized, in accordance with its internal procedures, to sign, ratify, accept, approve or accede to the instruments concerned.

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\* Titles of articles are included solely to assist the reader.

7. “Reservoir” means a component or components of the climate system where a greenhouse gas or a precursor of a greenhouse gas is stored.
8. “Sink” means any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere.
9. “Source” means any process or activity which releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas into the atmosphere.

## **Article 2**

### **OBJECTIVE**

The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

## **Article 3**

### **PRINCIPLES**

In their actions to achieve the objective of the Convention and to implement its provisions, the Parties shall be guided, inter alia, by the following:

1. The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.
2. The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration.
3. The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. To achieve this, such policies and measures should take into account different socio-economic contexts, be comprehensive, cover all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise all economic sectors. Efforts to address climate change may be carried out cooperatively by interested Parties.

4. The Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change.

5. The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change. Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.

#### **Article 4**

#### **COMMITMENTS**

1. All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall:

(a) Develop, periodically update, publish and make available to the Conference of the Parties, in accordance with Article 12, national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies to be agreed upon by the Conference of the Parties;

(b) Formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, and measures to facilitate adequate adaptation to climate change;

(c) Promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors;

(d) Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems;

(e) Cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods;

(f) Take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions, and employ appropriate methods, for example impact assessments, formulated and determined nationally, with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change;

(g) Promote and cooperate in scientific, technological, technical, socio-economic and other research, systematic observation and development of data archives related to the climate system and intended to further the understanding and to reduce or eliminate the remaining uncertainties regarding the causes, effects, magnitude and timing of climate change and the economic and social consequences of various response strategies;

(h) Promote and cooperate in the full, open and prompt exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change, and to the economic and social consequences of various response strategies;

(i) Promote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process, including that of non-governmental organizations; and

(j) Communicate to the Conference of the Parties information related to implementation, in accordance with Article 12.

2. The developed country Parties and other Parties included in Annex I commit themselves specifically as provided for in the following:

(a) Each of these Parties shall adopt national<sup>1</sup> policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs. These policies and measures will demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention, recognizing that the return by the end of the present decade to earlier levels of anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol would contribute to such modification, and taking into account the differences in these Parties' starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each of these Parties to the global effort regarding that objective. These Parties may implement such policies and measures jointly with other Parties and may assist other Parties in contributing to the achievement of the objective of the Convention and, in particular, that of this subparagraph;

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<sup>1</sup> This includes policies and measures adopted by regional economic integration organizations.

(b) In order to promote progress to this end, each of these Parties shall communicate, within six months of the entry into force of the Convention for it and periodically thereafter, and in accordance with Article 12, detailed information on its policies and measures referred to in subparagraph (a) above, as well as on its resulting projected anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the period referred to in subparagraph (a), with the aim of returning individually or jointly to their 1990 levels these anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol. This information will be reviewed by the Conference of the Parties, at its first session and periodically thereafter, in accordance with Article 7;

(c) Calculations of emissions by sources and removals by sinks of greenhouse gases for the purposes of subparagraph (b) above should take into account the best available scientific knowledge, including of the effective capacity of sinks and the respective contributions of such gases to climate change. The Conference of the Parties shall consider and agree on methodologies for these calculations at its first session and review them regularly thereafter;

(d) The Conference of the Parties shall, at its first session, review the adequacy of subparagraphs (a) and (b) above. Such review shall be carried out in the light of the best available scientific information and assessment on climate change and its impacts, as well as relevant technical, social and economic information. Based on this review, the Conference of the Parties shall take appropriate action, which may include the adoption of amendments to the commitments in subparagraphs (a) and (b) above. The Conference of the Parties, at its first session, shall also take decisions regarding criteria for joint implementation as indicated in subparagraph (a) above. A second review of subparagraphs (a) and (b) shall take place not later than 31 December 1998, and thereafter at regular intervals determined by the Conference of the Parties, until the objective of the Convention is met;

(e) Each of these Parties shall:

- (i) coordinate as appropriate with other such Parties, relevant economic and administrative instruments developed to achieve the objective of the Convention; and
- (ii) identify and periodically review its own policies and practices which encourage activities that lead to greater levels of anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol than would otherwise occur;

(f) The Conference of the Parties shall review, not later than 31 December 1998, available information with a view to taking decisions regarding such amendments to the lists in Annexes I and II as may be appropriate, with the approval of the Party concerned;

(g) Any Party not included in Annex I may, in its instrument of ratification, acceptance, approval or accession, or at any time thereafter, notify the Depositary that it intends to be bound by subparagraphs (a) and (b) above. The Depositary shall inform the other signatories and Parties of any such notification.



3. The developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1. They shall also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing measures that are covered by paragraph 1 of this Article and that are agreed between a developing country Party and the international entity or entities referred to in Article 11, in accordance with that Article. The implementation of these commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among the developed country Parties.

4. The developed country Parties and other developed Parties included in Annex II shall also assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects.

5. The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies.

6. In the implementation of their commitments under paragraph 2 above, a certain degree of flexibility shall be allowed by the Conference of the Parties to the Parties included in Annex I undergoing the process of transition to a market economy, in order to enhance the ability of these Parties to address climate change, including with regard to the historical level of anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol chosen as a reference.

7. The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.

8. In the implementation of the commitments in this Article, the Parties shall give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures, especially on:

- (a) Small island countries;
- (b) Countries with low-lying coastal areas;
- (c) Countries with arid and semi-arid areas, forested areas and areas liable to forest decay;

- (d) Countries with areas prone to natural disasters;
- (e) Countries with areas liable to drought and desertification;
- (f) Countries with areas of high urban atmospheric pollution;
- (g) Countries with areas with fragile ecosystems, including mountainous ecosystems;
- (h) Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products; and
- (i) Landlocked and transit countries.

Further, the Conference of the Parties may take actions, as appropriate, with respect to this paragraph.

9. The Parties shall take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology.

10. The Parties shall, in accordance with Article 10, take into consideration in the implementation of the commitments of the Convention the situation of Parties, particularly developing country Parties, with economies that are vulnerable to the adverse effects of the implementation of measures to respond to climate change. This applies notably to Parties with economies that are highly dependent on income generated from the production, processing and export, and/or consumption of fossil fuels and associated energy-intensive products and/or the use of fossil fuels for which such Parties have serious difficulties in switching to alternatives.

## **Article 5**

### **RESEARCH AND SYSTEMATIC OBSERVATION**

In carrying out their commitments under Article 4, paragraph 1 (g), the Parties shall:

- (a) Support and further develop, as appropriate, international and intergovernmental programmes and networks or organizations aimed at defining, conducting, assessing and financing research, data collection and systematic observation, taking into account the need to minimize duplication of effort;
- (b) Support international and intergovernmental efforts to strengthen systematic observation and national scientific and technical research capacities and capabilities, particularly in developing countries, and to promote access to, and the exchange of, data and analyses thereof obtained from areas beyond national jurisdiction; and
- (c) Take into account the particular concerns and needs of developing countries and cooperate in improving their endogenous capacities and capabilities to participate in the efforts referred to in subparagraphs (a) and (b) above.

## **Article 6**

### **EDUCATION, TRAINING AND PUBLIC AWARENESS**

In carrying out their commitments under Article 4, paragraph 1 (i), the Parties shall:

(a) Promote and facilitate at the national and, as appropriate, subregional and regional levels, and in accordance with national laws and regulations, and within their respective capacities:

- (i) the development and implementation of educational and public awareness programmes on climate change and its effects;
- (ii) public access to information on climate change and its effects;
- (iii) public participation in addressing climate change and its effects and developing adequate responses; and
- (iv) training of scientific, technical and managerial personnel;

(b) Cooperate in and promote, at the international level, and, where appropriate, using existing bodies:

- (i) the development and exchange of educational and public awareness material on climate change and its effects; and
- (ii) the development and implementation of education and training programmes, including the strengthening of national institutions and the exchange or secondment of personnel to train experts in this field, in particular for developing countries.

## **Article 7**

### **CONFERENCE OF THE PARTIES**

1. A Conference of the Parties is hereby established.
2. The Conference of the Parties, as the supreme body of this Convention, shall keep under regular review the implementation of the Convention and any related legal instruments that the Conference of the Parties may adopt, and shall make, within its mandate, the decisions necessary to promote the effective implementation of the Convention. To this end, it shall:

(a) Periodically examine the obligations of the Parties and the institutional arrangements under the Convention, in the light of the objective of the Convention, the experience gained in its implementation and the evolution of scientific and technological knowledge;

- (b) Promote and facilitate the exchange of information on measures adopted by the Parties to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under the Convention;
- (c) Facilitate, at the request of two or more Parties, the coordination of measures adopted by them to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under the Convention;
- (d) Promote and guide, in accordance with the objective and provisions of the Convention, the development and periodic refinement of comparable methodologies, to be agreed on by the Conference of the Parties, inter alia, for preparing inventories of greenhouse gas emissions by sources and removals by sinks, and for evaluating the effectiveness of measures to limit the emissions and enhance the removals of these gases;
- (e) Assess, on the basis of all information made available to it in accordance with the provisions of the Convention, the implementation of the Convention by the Parties, the overall effects of the measures taken pursuant to the Convention, in particular environmental, economic and social effects as well as their cumulative impacts and the extent to which progress towards the objective of the Convention is being achieved;
- (f) Consider and adopt regular reports on the implementation of the Convention and ensure their publication;
- (g) Make recommendations on any matters necessary for the implementation of the Convention;
- (h) Seek to mobilize financial resources in accordance with Article 4, paragraphs 3, 4 and 5, and Article 11;
- (i) Establish such subsidiary bodies as are deemed necessary for the implementation of the Convention;
- (j) Review reports submitted by its subsidiary bodies and provide guidance to them;
- (k) Agree upon and adopt, by consensus, rules of procedure and financial rules for itself and for any subsidiary bodies;
- (l) Seek and utilize, where appropriate, the services and cooperation of, and information provided by, competent international organizations and intergovernmental and non-governmental bodies; and
- (m) Exercise such other functions as are required for the achievement of the objective of the Convention as well as all other functions assigned to it under the Convention.

3. The Conference of the Parties shall, at its first session, adopt its own rules of procedure as well as those of the subsidiary bodies established by the Convention, which shall include decision-making procedures for matters not already covered by decision-making procedures stipulated in the Convention. Such procedures may include specified majorities required for the adoption of particular decisions.

4. The first session of the Conference of the Parties shall be convened by the interim secretariat referred to in Article 21 and shall take place not later than one year after the date of entry into force of the Convention. Thereafter, ordinary sessions of the Conference of the Parties shall be held every year unless otherwise decided by the Conference of the Parties.

5. Extraordinary sessions of the Conference of the Parties shall be held at such other times as may be deemed necessary by the Conference, or at the written request of any Party, provided that, within six months of the request being communicated to the Parties by the secretariat, it is supported by at least one third of the Parties.

6. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any State member thereof or observers thereto not Party to the Convention, may be represented at sessions of the Conference of the Parties as observers. Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by the Convention, and which has informed the secretariat of its wish to be represented at a session of the Conference of the Parties as an observer, may be so admitted unless at least one third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure adopted by the Conference of the Parties.

## **Article 8**

### **SECRETARIAT**

1. A secretariat is hereby established.
2. The functions of the secretariat shall be:
  - (a) To make arrangements for sessions of the Conference of the Parties and its subsidiary bodies established under the Convention and to provide them with services as required;
  - (b) To compile and transmit reports submitted to it;
  - (c) To facilitate assistance to the Parties, particularly developing country Parties, on request, in the compilation and communication of information required in accordance with the provisions of the Convention;
  - (d) To prepare reports on its activities and present them to the Conference of the Parties;

- (e) To ensure the necessary coordination with the secretariats of other relevant international bodies;
  - (f) To enter, under the overall guidance of the Conference of the Parties, into such administrative and contractual arrangements as may be required for the effective discharge of its functions; and
  - (g) To perform the other secretariat functions specified in the Convention and in any of its protocols and such other functions as may be determined by the Conference of the Parties.
3. The Conference of the Parties, at its first session, shall designate a permanent secretariat and make arrangements for its functioning.

## **Article 9**

### **SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE**

1. A subsidiary body for scientific and technological advice is hereby established to provide the Conference of the Parties and, as appropriate, its other subsidiary bodies with timely information and advice on scientific and technological matters relating to the Convention. This body shall be open to participation by all Parties and shall be multidisciplinary. It shall comprise government representatives competent in the relevant field of expertise. It shall report regularly to the Conference of the Parties on all aspects of its work.
2. Under the guidance of the Conference of the Parties, and drawing upon existing competent international bodies, this body shall:
- (a) Provide assessments of the state of scientific knowledge relating to climate change and its effects;
  - (b) Prepare scientific assessments on the effects of measures taken in the implementation of the Convention;
  - (c) Identify innovative, efficient and state-of-the-art technologies and know-how and advise on the ways and means of promoting development and/or transferring such technologies;
  - (d) Provide advice on scientific programmes, international cooperation in research and development related to climate change, as well as on ways and means of supporting endogenous capacity-building in developing countries; and
  - (e) Respond to scientific, technological and methodological questions that the Conference of the Parties and its subsidiary bodies may put to the body.
3. The functions and terms of reference of this body may be further elaborated by the Conference of the Parties.

## **Article 10**

### **SUBSIDIARY BODY FOR IMPLEMENTATION**

1. A subsidiary body for implementation is hereby established to assist the Conference of the Parties in the assessment and review of the effective implementation of the Convention. This body shall be open to participation by all Parties and comprise government representatives who are experts on matters related to climate change. It shall report regularly to the Conference of the Parties on all aspects of its work.
2. Under the guidance of the Conference of the Parties, this body shall:
  - (a) Consider the information communicated in accordance with Article 12, paragraph 1, to assess the overall aggregated effect of the steps taken by the Parties in the light of the latest scientific assessments concerning climate change;
  - (b) Consider the information communicated in accordance with Article 12, paragraph 2, in order to assist the Conference of the Parties in carrying out the reviews required by Article 4, paragraph 2 (d); and
  - (c) Assist the Conference of the Parties, as appropriate, in the preparation and implementation of its decisions.

## **Article 11**

### **FINANCIAL MECHANISM**

1. A mechanism for the provision of financial resources on a grant or concessional basis, including for the transfer of technology, is hereby defined. It shall function under the guidance of and be accountable to the Conference of the Parties, which shall decide on its policies, programme priorities and eligibility criteria related to this Convention. Its operation shall be entrusted to one or more existing international entities.
2. The financial mechanism shall have an equitable and balanced representation of all Parties within a transparent system of governance.
3. The Conference of the Parties and the entity or entities entrusted with the operation of the financial mechanism shall agree upon arrangements to give effect to the above paragraphs, which shall include the following:
  - (a) Modalities to ensure that the funded projects to address climate change are in conformity with the policies, programme priorities and eligibility criteria established by the Conference of the Parties;
  - (b) Modalities by which a particular funding decision may be reconsidered in light of these policies, programme priorities and eligibility criteria;

(c) Provision by the entity or entities of regular reports to the Conference of the Parties on its funding operations, which is consistent with the requirement for accountability set out in paragraph 1 above; and

(d) Determination in a predictable and identifiable manner of the amount of funding necessary and available for the implementation of this Convention and the conditions under which that amount shall be periodically reviewed.

4. The Conference of the Parties shall make arrangements to implement the above-mentioned provisions at its first session, reviewing and taking into account the interim arrangements referred to in Article 21, paragraph 3, and shall decide whether these interim arrangements shall be maintained. Within four years thereafter, the Conference of the Parties shall review the financial mechanism and take appropriate measures.

5. The developed country Parties may also provide and developing country Parties avail themselves of, financial resources related to the implementation of the Convention through bilateral, regional and other multilateral channels.

## **Article 12**

### **COMMUNICATION OF INFORMATION RELATED TO IMPLEMENTATION**

1. In accordance with Article 4, paragraph 1, each Party shall communicate to the Conference of the Parties, through the secretariat, the following elements of information:

(a) A national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, to the extent its capacities permit, using comparable methodologies to be promoted and agreed upon by the Conference of the Parties;

(b) A general description of steps taken or envisaged by the Party to implement the Convention; and

(c) Any other information that the Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication, including, if feasible, material relevant for calculations of global emission trends.

2. Each developed country Party and each other Party included in Annex I shall incorporate in its communication the following elements of information:

(a) A detailed description of the policies and measures that it has adopted to implement its commitment under Article 4, paragraphs 2 (a) and 2 (b); and

(b) A specific estimate of the effects that the policies and measures referred to in subparagraph (a) immediately above will have on anthropogenic emissions by its sources and removals by its sinks of greenhouse gases during the period referred to in Article 4, paragraph 2 (a).



3. In addition, each developed country Party and each other developed Party included in Annex II shall incorporate details of measures taken in accordance with Article 4, paragraphs 3, 4 and 5.
4. Developing country Parties may, on a voluntary basis, propose projects for financing, including specific technologies, materials, equipment, techniques or practices that would be needed to implement such projects, along with, if possible, an estimate of all incremental costs, of the reductions of emissions and increments of removals of greenhouse gases, as well as an estimate of the consequent benefits.
5. Each developed country Party and each other Party included in Annex I shall make its initial communication within six months of the entry into force of the Convention for that Party. Each Party not so listed shall make its initial communication within three years of the entry into force of the Convention for that Party, or of the availability of financial resources in accordance with Article 4, paragraph 3. Parties that are least developed countries may make their initial communication at their discretion. The frequency of subsequent communications by all Parties shall be determined by the Conference of the Parties, taking into account the differentiated timetable set by this paragraph.
6. Information communicated by Parties under this Article shall be transmitted by the secretariat as soon as possible to the Conference of the Parties and to any subsidiary bodies concerned. If necessary, the procedures for the communication of information may be further considered by the Conference of the Parties.
7. From its first session, the Conference of the Parties shall arrange for the provision to developing country Parties of technical and financial support, on request, in compiling and communicating information under this Article, as well as in identifying the technical and financial needs associated with proposed projects and response measures under Article 4. Such support may be provided by other Parties, by competent international organizations and by the secretariat, as appropriate.
8. Any group of Parties may, subject to guidelines adopted by the Conference of the Parties, and to prior notification to the Conference of the Parties, make a joint communication in fulfilment of their obligations under this Article, provided that such a communication includes information on the fulfilment by each of these Parties of its individual obligations under the Convention.
9. Information received by the secretariat that is designated by a Party as confidential, in accordance with criteria to be established by the Conference of the Parties, shall be aggregated by the secretariat to protect its confidentiality before being made available to any of the bodies involved in the communication and review of information.
10. Subject to paragraph 9 above, and without prejudice to the ability of any Party to make public its communication at any time, the secretariat shall make communications by Parties under this Article publicly available at the time they are submitted to the Conference of the Parties.

## Article 13

### RESOLUTION OF QUESTIONS REGARDING IMPLEMENTATION

The Conference of the Parties shall, at its first session, consider the establishment of a multilateral consultative process, available to Parties on their request, for the resolution of questions regarding the implementation of the Convention.

## Article 14

### SETTLEMENT OF DISPUTES

1. In the event of a dispute between any two or more Parties concerning the interpretation or application of the Convention, the Parties concerned shall seek a settlement of the dispute through negotiation or any other peaceful means of their own choice.

2. When ratifying, accepting, approving or acceding to the Convention, or at any time thereafter, a Party which is not a regional economic integration organization may declare in a written instrument submitted to the Depositary that, in respect of any dispute concerning the interpretation or application of the Convention, it recognizes as compulsory ipso facto and without special agreement, in relation to any Party accepting the same obligation:

- (a) Submission of the dispute to the International Court of Justice; and/or
- (b) Arbitration in accordance with procedures to be adopted by the Conference of the Parties as soon as practicable, in an annex on arbitration.

A Party which is a regional economic integration organization may make a declaration with like effect in relation to arbitration in accordance with the procedures referred to in subparagraph (b) above.

3. A declaration made under paragraph 2 above shall remain in force until it expires in accordance with its terms or until three months after written notice of its revocation has been deposited with the Depositary.

4. A new declaration, a notice of revocation or the expiry of a declaration shall not in any way affect proceedings pending before the International Court of Justice or the arbitral tribunal, unless the parties to the dispute otherwise agree.

5. Subject to the operation of paragraph 2 above, if after twelve months following notification by one Party to another that a dispute exists between them, the Parties concerned have not been able to settle their dispute through the means mentioned in paragraph 1 above, the dispute shall be submitted, at the request of any of the parties to the dispute, to conciliation.

6. A conciliation commission shall be created upon the request of one of the parties to the dispute. The commission shall be composed of an equal number of members appointed by each party concerned and a chairman chosen jointly by the members appointed by each party. The commission shall render a recommendatory award, which the parties shall consider in good faith.

7. Additional procedures relating to conciliation shall be adopted by the Conference of the Parties, as soon as practicable, in an annex on conciliation.

8. The provisions of this Article shall apply to any related legal instrument which the Conference of the Parties may adopt, unless the instrument provides otherwise.

## **Article 15**

### **AMENDMENTS TO THE CONVENTION**

1. Any Party may propose amendments to the Convention.

2. Amendments to the Convention shall be adopted at an ordinary session of the Conference of the Parties. The text of any proposed amendment to the Convention shall be communicated to the Parties by the secretariat at least six months before the meeting at which it is proposed for adoption. The secretariat shall also communicate proposed amendments to the signatories to the Convention and, for information, to the Depositary.

3. The Parties shall make every effort to reach agreement on any proposed amendment to the Convention by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the amendment shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting. The adopted amendment shall be communicated by the secretariat to the Depositary, who shall circulate it to all Parties for their acceptance.

4. Instruments of acceptance in respect of an amendment shall be deposited with the Depositary. An amendment adopted in accordance with paragraph 3 above shall enter into force for those Parties having accepted it on the ninetieth day after the date of receipt by the Depositary of an instrument of acceptance by at least three fourths of the Parties to the Convention.

5. The amendment shall enter into force for any other Party on the ninetieth day after the date on which that Party deposits with the Depositary its instrument of acceptance of the said amendment.

6. For the purposes of this Article, "Parties present and voting" means Parties present and casting an affirmative or negative vote.

## **Article 16**

### **ADOPTION AND AMENDMENT OF ANNEXES TO THE CONVENTION**

1. Annexes to the Convention shall form an integral part thereof and, unless otherwise expressly provided, a reference to the Convention constitutes at the same time a reference to any annexes thereto. Without prejudice to the provisions of Article 14, paragraphs 2 (b) and 7, such annexes shall be restricted to lists, forms and any other material of a descriptive nature that is of a scientific, technical, procedural or administrative character.

2. Annexes to the Convention shall be proposed and adopted in accordance with the procedure set forth in Article 15, paragraphs 2, 3 and 4.
3. An annex that has been adopted in accordance with paragraph 2 above shall enter into force for all Parties to the Convention six months after the date of the communication by the Depository to such Parties of the adoption of the annex, except for those Parties that have notified the Depository, in writing, within that period of their non-acceptance of the annex. The annex shall enter into force for Parties which withdraw their notification of non-acceptance on the ninetieth day after the date on which withdrawal of such notification has been received by the Depository.
4. The proposal, adoption and entry into force of amendments to annexes to the Convention shall be subject to the same procedure as that for the proposal, adoption and entry into force of annexes to the Convention in accordance with paragraphs 2 and 3 above.
5. If the adoption of an annex or an amendment to an annex involves an amendment to the Convention, that annex or amendment to an annex shall not enter into force until such time as the amendment to the Convention enters into force.

#### **Article 17**

#### **PROTOCOLS**

1. The Conference of the Parties may, at any ordinary session, adopt protocols to the Convention.
2. The text of any proposed protocol shall be communicated to the Parties by the secretariat at least six months before such a session.
3. The requirements for the entry into force of any protocol shall be established by that instrument.
4. Only Parties to the Convention may be Parties to a protocol.
5. Decisions under any protocol shall be taken only by the Parties to the protocol concerned.

#### **Article 18**

#### **RIGHT TO VOTE**

1. Each Party to the Convention shall have one vote, except as provided for in paragraph 2 below.
2. Regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States that are Parties to the Convention. Such an organization shall not exercise its right to vote if any of its member States exercises its right, and vice versa.

## **Article 19**

### **DEPOSITARY**

The Secretary-General of the United Nations shall be the Depositary of the Convention and of protocols adopted in accordance with Article 17.

## **Article 20**

### **SIGNATURE**

This Convention shall be open for signature by States Members of the United Nations or of any of its specialized agencies or that are Parties to the Statute of the International Court of Justice and by regional economic integration organizations at Rio de Janeiro, during the United Nations Conference on Environment and Development, and thereafter at United Nations Headquarters in New York from 20 June 1992 to 19 June 1993.

## **Article 21**

### **INTERIM ARRANGEMENTS**

1. The secretariat functions referred to in Article 8 will be carried out on an interim basis by the secretariat established by the General Assembly of the United Nations in its resolution 45/212 of 21 December 1990, until the completion of the first session of the Conference of the Parties.
2. The head of the interim secretariat referred to in paragraph 1 above will cooperate closely with the Intergovernmental Panel on Climate Change to ensure that the Panel can respond to the need for objective scientific and technical advice. Other relevant scientific bodies could also be consulted.
3. The Global Environment Facility of the United Nations Development Programme, the United Nations Environment Programme and the International Bank for Reconstruction and Development shall be the international entity entrusted with the operation of the financial mechanism referred to in Article 11 on an interim basis. In this connection, the Global Environment Facility should be appropriately restructured and its membership made universal to enable it to fulfil the requirements of Article 11.

## **Article 22**

### **RATIFICATION, ACCEPTANCE, APPROVAL OR ACCESSION**

1. The Convention shall be subject to ratification, acceptance, approval or accession by States and by regional economic integration organizations. It shall be open for accession from the day after the date on which the Convention is closed for signature. Instruments of ratification, acceptance, approval or accession shall be deposited with the Depositary.

2. Any regional economic integration organization which becomes a Party to the Convention without any of its member States being a Party shall be bound by all the obligations under the Convention. In the case of such organizations, one or more of whose member States is a Party to the Convention, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under the Convention. In such cases, the organization and the member States shall not be entitled to exercise rights under the Convention concurrently.

3. In their instruments of ratification, acceptance, approval or accession, regional economic integration organizations shall declare the extent of their competence with respect to the matters governed by the Convention. These organizations shall also inform the Depositary, who shall in turn inform the Parties, of any substantial modification in the extent of their competence.

### **Article 23**

#### **ENTRY INTO FORCE**

1. The Convention shall enter into force on the ninetieth day after the date of deposit of the fiftieth instrument of ratification, acceptance, approval or accession.

2. For each State or regional economic integration organization that ratifies, accepts or approves the Convention or accedes thereto after the deposit of the fiftieth instrument of ratification, acceptance, approval or accession, the Convention shall enter into force on the ninetieth day after the date of deposit by such State or regional economic integration organization of its instrument of ratification, acceptance, approval or accession.

3. For the purposes of paragraphs 1 and 2 above, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by States members of the organization.

### **Article 24**

#### **RESERVATIONS**

No reservations may be made to the Convention.

### **Article 25**

#### **WITHDRAWAL**

1. At any time after three years from the date on which the Convention has entered into force for a Party, that Party may withdraw from the Convention by giving written notification to the Depositary.

2. Any such withdrawal shall take effect upon expiry of one year from the date of receipt by the Depositary of the notification of withdrawal, or on such later date as may be specified in the notification of withdrawal.

3. Any Party that withdraws from the Convention shall be considered as also having withdrawn from any protocol to which it is a Party.

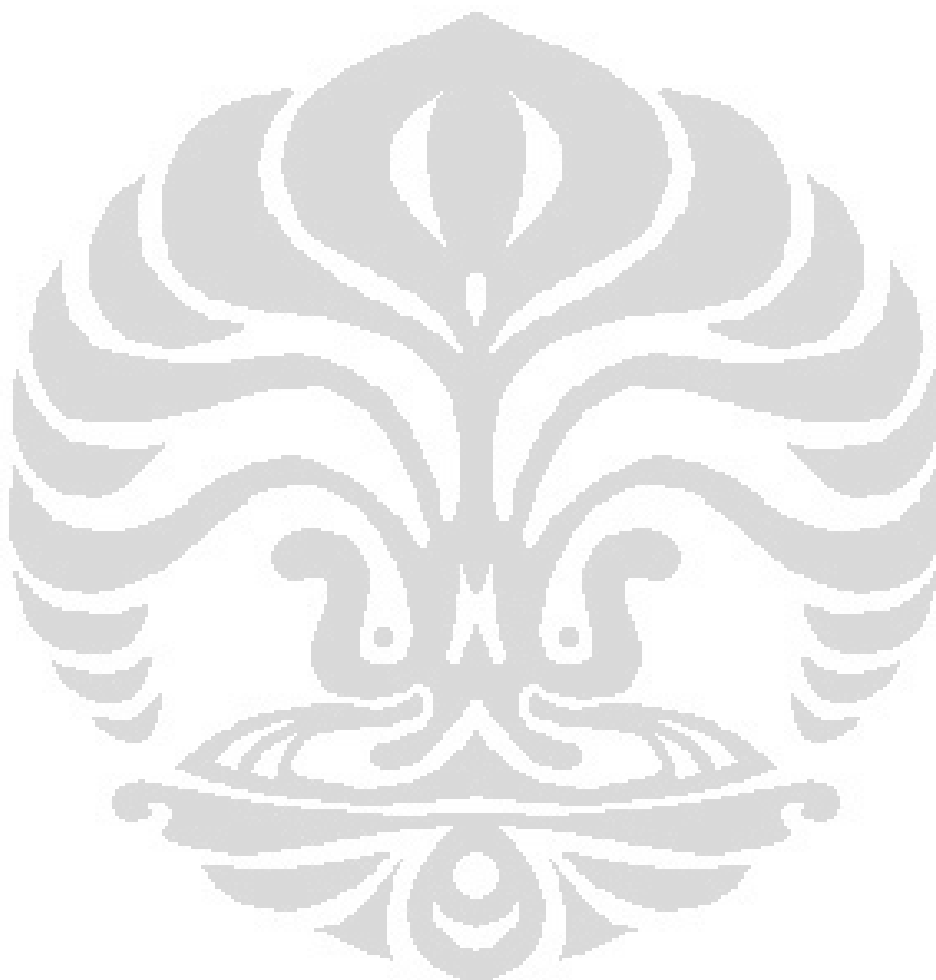
## Article 26

### AUTHENTIC TEXTS

The original of this Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

**IN WITNESS WHEREOF** the undersigned, being duly authorized to that effect, have signed this Convention.

**DONE** at New York this ninth day of May one thousand nine hundred and ninety-two.



## Annex I

Australia  
Austria  
Belarus<sup>a</sup>  
Belgium  
Bulgaria<sup>a</sup>  
Canada  
Croatia<sup>a</sup> \*  
Czech Republic<sup>a</sup> \*  
Denmark  
European Economic Community  
Estonia<sup>a</sup>  
Finland  
France  
Germany  
Greece  
Hungary<sup>a</sup>  
Iceland  
Ireland  
Italy  
Japan  
Latvia<sup>a</sup>  
Liechtenstein\*  
Lithuania<sup>a</sup>  
Luxembourg  
Monaco\*  
Netherlands  
New Zealand  
Norway  
Poland<sup>a</sup>  
Portugal  
Romania<sup>a</sup>  
Russian Federation<sup>a</sup>  
Slovakia<sup>a</sup> \*  
Slovenia<sup>a</sup> \*  
Spain  
Sweden  
Switzerland  
Turkey  
Ukraine<sup>a</sup>  
United Kingdom of Great Britain and Northern Ireland  
United States of America

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<sup>a</sup> Countries that are undergoing the process of transition to a market economy.

\* *Publisher's note:* Countries added to Annex I by an amendment that entered into force on 13 August 1998, pursuant to decision 4/CP.3 adopted at COP.3.



## Annex II

Australia  
Austria  
Belgium  
Canada  
Denmark  
European Economic Community  
Finland  
France  
Germany  
Greece  
Iceland  
Ireland  
Italy  
Japan  
Luxembourg  
Netherlands  
New Zealand  
Norway  
Portugal  
Spain  
Sweden  
Switzerland  
United Kingdom of Great Britain and Northern Ireland  
United States of America

*Publisher's note:* Turkey was deleted from Annex II by an amendment that entered into force 28 June 2002, pursuant to decision 26/CP.7 adopted at COP.7.

**KYOTO PROTOCOL TO THE UNITED NATIONS FRAMEWORK  
CONVENTION ON CLIMATE CHANGE**



UNITED NATIONS

1998

# KYOTO PROTOCOL TO THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

*The Parties to this Protocol,*

*Being Parties to the United Nations Framework Convention on Climate Change, hereinafter referred to as “the Convention”,*

*In pursuit of the ultimate objective of the Convention as stated in its Article 2,*

*Recalling the provisions of the Convention,*

*Being guided by Article 3 of the Convention,*

*Pursuant to the Berlin Mandate adopted by decision 1/CP.1 of the Conference of the Parties to the Convention at its first session,*

Have agreed as follows:

## **Article 1**

For the purposes of this Protocol, the definitions contained in Article 1 of the Convention shall apply. In addition:

1. “Conference of the Parties” means the Conference of the Parties to the Convention.
2. “Convention” means the United Nations Framework Convention on Climate Change, adopted in New York on 9 May 1992.
3. “Intergovernmental Panel on Climate Change” means the Intergovernmental Panel on Climate Change established in 1988 jointly by the World Meteorological Organization and the United Nations Environment Programme.
4. “Montreal Protocol” means the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in Montreal on 16 September 1987 and as subsequently adjusted and amended.
5. “Parties present and voting” means Parties present and casting an affirmative or negative vote.
6. “Party” means, unless the context otherwise indicates, a Party to this Protocol.
7. “Party included in Annex I” means a Party included in Annex I to the Convention, as may be amended, or a Party which has made a notification under Article 4, paragraph 2 (g), of the Convention.

## **Article 2**

1. Each Party included in Annex I, in achieving its quantified emission limitation and reduction commitments under Article 3, in order to promote sustainable development, shall:

(a) Implement and/or further elaborate policies and measures in accordance with its national circumstances, such as:

- (i) Enhancement of energy efficiency in relevant sectors of the national economy;
- (ii) Protection and enhancement of sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol, taking into account its commitments under relevant international environmental agreements; promotion of sustainable forest management practices, afforestation and reforestation;
- (iii) Promotion of sustainable forms of agriculture in light of climate change considerations;
- (iv) Research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies;
- (v) Progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments;
- (vi) Encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases not controlled by the Montreal Protocol;
- (vii) Measures to limit and/or reduce emissions of greenhouse gases not controlled by the Montreal Protocol in the transport sector;
- (viii) Limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy;

(b) Cooperate with other such Parties to enhance the individual and combined effectiveness of their policies and measures adopted under this Article, pursuant to Article 4, paragraph 2 (e) (i), of the Convention. To this end, these Parties shall take steps to share their experience and exchange information on such policies and measures, including developing ways of improving their comparability, transparency and effectiveness. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session or as soon as practicable thereafter, consider ways to facilitate such cooperation, taking into account all relevant information.

2. The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.

3. The Parties included in Annex I shall strive to implement policies and measures under this Article in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties and in particular those identified in Article 4, paragraphs 8 and 9, of the Convention, taking into account Article 3 of the Convention. The Conference of the Parties serving as the meeting of the Parties to this Protocol may take further action, as appropriate, to promote the implementation of the provisions of this paragraph.

4. The Conference of the Parties serving as the meeting of the Parties to this Protocol, if it decides that it would be beneficial to coordinate any of the policies and measures in paragraph 1 (a) above, taking into account different national circumstances and potential effects, shall consider ways and means to elaborate the coordination of such policies and measures.

### **Article 3**

1. The Parties included in Annex I shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts, calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B and in accordance with the provisions of this Article, with a view to reducing their overall emissions of such gases by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012.

2. Each Party included in Annex I shall, by 2005, have made demonstrable progress in achieving its commitments under this Protocol.

3. The net changes in greenhouse gas emissions by sources and removals by sinks resulting from direct human-induced land-use change and forestry activities, limited to afforestation, reforestation and deforestation since 1990, measured as verifiable changes in carbon stocks in each commitment period, shall be used to meet the commitments under this Article of each Party included in Annex I. The greenhouse gas emissions by sources and removals by sinks associated with those activities shall be reported in a transparent and verifiable manner and reviewed in accordance with Articles 7 and 8.

4. Prior to the first session of the Conference of the Parties serving as the meeting of the Parties to this Protocol, each Party included in Annex I shall provide, for consideration by the Subsidiary Body for Scientific and Technological Advice, data to establish its level of carbon stocks in 1990 and to enable an estimate to be made of its changes in carbon stocks in subsequent years. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session or as soon as practicable thereafter, decide upon modalities, rules and guidelines as to how, and which, additional human-induced activities related to changes in greenhouse gas emissions by sources and removals by sinks in the agricultural soils and the land-use change and forestry categories shall be added to, or subtracted from, the assigned amounts for Parties included in Annex I, taking into account uncertainties, transparency in reporting, verifiability, the methodological work of the Intergovernmental Panel on Climate Change, the advice provided by the Subsidiary Body for Scientific and Technological Advice in accordance with Article 5 and the decisions of the Conference of the Parties. Such a decision shall apply in the second and subsequent commitment periods. A Party may choose to apply such a decision on these additional human-induced activities for its first commitment period, provided that these activities have taken place since 1990.

5. The Parties included in Annex I undergoing the process of transition to a market economy whose base year or period was established pursuant to decision 9/CP.2 of the Conference of the Parties at its second session shall use that base year or period for the implementation of their commitments under this Article. Any other Party included in Annex I undergoing the process of transition to a market economy which has not yet submitted its first national communication under Article 12 of the Convention may also notify the Conference of the Parties serving as the meeting of the Parties to this Protocol that it intends to use an historical base year or period other than 1990 for the implementation of its commitments under this Article. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall decide on the acceptance of such notification.
6. Taking into account Article 4, paragraph 6, of the Convention, in the implementation of their commitments under this Protocol other than those under this Article, a certain degree of flexibility shall be allowed by the Conference of the Parties serving as the meeting of the Parties to this Protocol to the Parties included in Annex I undergoing the process of transition to a market economy.
7. In the first quantified emission limitation and reduction commitment period, from 2008 to 2012, the assigned amount for each Party included in Annex I shall be equal to the percentage inscribed for it in Annex B of its aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A in 1990, or the base year or period determined in accordance with paragraph 5 above, multiplied by five. Those Parties included in Annex I for whom land-use change and forestry constituted a net source of greenhouse gas emissions in 1990 shall include in their 1990 emissions base year or period the aggregate anthropogenic carbon dioxide equivalent emissions by sources minus removals by sinks in 1990 from land-use change for the purposes of calculating their assigned amount.
8. Any Party included in Annex I may use 1995 as its base year for hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride, for the purposes of the calculation referred to in paragraph 7 above.
9. Commitments for subsequent periods for Parties included in Annex I shall be established in amendments to Annex B to this Protocol, which shall be adopted in accordance with the provisions of Article 21, paragraph 7. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall initiate the consideration of such commitments at least seven years before the end of the first commitment period referred to in paragraph 1 above.
10. Any emission reduction units, or any part of an assigned amount, which a Party acquires from another Party in accordance with the provisions of Article 6 or of Article 17 shall be added to the assigned amount for the acquiring Party.
11. Any emission reduction units, or any part of an assigned amount, which a Party transfers to another Party in accordance with the provisions of Article 6 or of Article 17 shall be subtracted from the assigned amount for the transferring Party.
12. Any certified emission reductions which a Party acquires from another Party in accordance with the provisions of Article 12 shall be added to the assigned amount for the acquiring Party.

13. If the emissions of a Party included in Annex I in a commitment period are less than its assigned amount under this Article, this difference shall, on request of that Party, be added to the assigned amount for that Party for subsequent commitment periods.

14. Each Party included in Annex I shall strive to implement the commitments mentioned in paragraph 1 above in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention. In line with relevant decisions of the Conference of the Parties on the implementation of those paragraphs, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, consider what actions are necessary to minimize the adverse effects of climate change and/or the impacts of response measures on Parties referred to in those paragraphs. Among the issues to be considered shall be the establishment of funding, insurance and transfer of technology.

#### Article 4

1. Any Parties included in Annex I that have reached an agreement to fulfil their commitments under Article 3 jointly, shall be deemed to have met those commitments provided that their total combined aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B and in accordance with the provisions of Article 3. The respective emission level allocated to each of the Parties to the agreement shall be set out in that agreement.

2. The Parties to any such agreement shall notify the secretariat of the terms of the agreement on the date of deposit of their instruments of ratification, acceptance or approval of this Protocol, or accession thereto. The secretariat shall in turn inform the Parties and signatories to the Convention of the terms of the agreement.

3. Any such agreement shall remain in operation for the duration of the commitment period specified in Article 3, paragraph 7.

4. If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization, any alteration in the composition of the organization after adoption of this Protocol shall not affect existing commitments under this Protocol. Any alteration in the composition of the organization shall only apply for the purposes of those commitments under Article 3 that are adopted subsequent to that alteration.

5. In the event of failure by the Parties to such an agreement to achieve their total combined level of emission reductions, each Party to that agreement shall be responsible for its own level of emissions set out in the agreement.

6. If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization which is itself a Party to this Protocol, each member State of that regional economic integration organization individually, and together with the regional economic integration organization acting in accordance with Article 24, shall, in the event of failure to achieve the total combined level of emission reductions, be responsible for its level of emissions as notified in accordance with this Article.

## Article 5

1. Each Party included in Annex I shall have in place, no later than one year prior to the start of the first commitment period, a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol. Guidelines for such national systems, which shall incorporate the methodologies specified in paragraph 2 below, shall be decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol at its first session.
2. Methodologies for estimating anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol shall be those accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties at its third session. Where such methodologies are not used, appropriate adjustments shall be applied according to methodologies agreed upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol at its first session. Based on the work of, *inter alia*, the Intergovernmental Panel on Climate Change and advice provided by the Subsidiary Body for Scientific and Technological Advice, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall regularly review and, as appropriate, revise such methodologies and adjustments, taking fully into account any relevant decisions by the Conference of the Parties. Any revision to methodologies or adjustments shall be used only for the purposes of ascertaining compliance with commitments under Article 3 in respect of any commitment period adopted subsequent to that revision.
3. The global warming potentials used to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks of greenhouse gases listed in Annex A shall be those accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties at its third session. Based on the work of, *inter alia*, the Intergovernmental Panel on Climate Change and advice provided by the Subsidiary Body for Scientific and Technological Advice, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall regularly review and, as appropriate, revise the global warming potential of each such greenhouse gas, taking fully into account any relevant decisions by the Conference of the Parties. Any revision to a global warming potential shall apply only to commitments under Article 3 in respect of any commitment period adopted subsequent to that revision.

## Article 6

1. For the purpose of meeting its commitments under Article 3, any Party included in Annex I may transfer to, or acquire from, any other such Party emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:
  - (a) Any such project has the approval of the Parties involved;
  - (b) Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;



(c) It does not acquire any emission reduction units if it is not in compliance with its obligations under Articles 5 and 7; and

(d) The acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting commitments under Article 3.

2. The Conference of the Parties serving as the meeting of the Parties to this Protocol may, at its first session or as soon as practicable thereafter, further elaborate guidelines for the implementation of this Article, including for verification and reporting.

3. A Party included in Annex I may authorize legal entities to participate, under its responsibility, in actions leading to the generation, transfer or acquisition under this Article of emission reduction units.

4. If a question of implementation by a Party included in Annex I of the requirements referred to in this Article is identified in accordance with the relevant provisions of Article 8, transfers and acquisitions of emission reduction units may continue to be made after the question has been identified, provided that any such units may not be used by a Party to meet its commitments under Article 3 until any issue of compliance is resolved.

### **Article 7**

1. Each Party included in Annex I shall incorporate in its annual inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol, submitted in accordance with the relevant decisions of the Conference of the Parties, the necessary supplementary information for the purposes of ensuring compliance with Article 3, to be determined in accordance with paragraph 4 below.

2. Each Party included in Annex I shall incorporate in its national communication, submitted under Article 12 of the Convention, the supplementary information necessary to demonstrate compliance with its commitments under this Protocol, to be determined in accordance with paragraph 4 below.

3. Each Party included in Annex I shall submit the information required under paragraph 1 above annually, beginning with the first inventory due under the Convention for the first year of the commitment period after this Protocol has entered into force for that Party. Each such Party shall submit the information required under paragraph 2 above as part of the first national communication due under the Convention after this Protocol has entered into force for it and after the adoption of guidelines as provided for in paragraph 4 below. The frequency of subsequent submission of information required under this Article shall be determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol, taking into account any timetable for the submission of national communications decided upon by the Conference of the Parties.

4. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the preparation of the information required under this Article, taking into account guidelines for the preparation of

national communications by Parties included in Annex I adopted by the Conference of the Parties. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall also, prior to the first commitment period, decide upon modalities for the accounting of assigned amounts.

## Article 8

1. The information submitted under Article 7 by each Party included in Annex I shall be reviewed by expert review teams pursuant to the relevant decisions of the Conference of the Parties and in accordance with guidelines adopted for this purpose by the Conference of the Parties serving as the meeting of the Parties to this Protocol under paragraph 4 below. The information submitted under Article 7, paragraph 1, by each Party included in Annex I shall be reviewed as part of the annual compilation and accounting of emissions inventories and assigned amounts. Additionally, the information submitted under Article 7, paragraph 2, by each Party included in Annex I shall be reviewed as part of the review of communications.
2. Expert review teams shall be coordinated by the secretariat and shall be composed of experts selected from those nominated by Parties to the Convention and, as appropriate, by intergovernmental organizations, in accordance with guidance provided for this purpose by the Conference of the Parties.
3. The review process shall provide a thorough and comprehensive technical assessment of all aspects of the implementation by a Party of this Protocol. The expert review teams shall prepare a report to the Conference of the Parties serving as the meeting of the Parties to this Protocol, assessing the implementation of the commitments of the Party and identifying any potential problems in, and factors influencing, the fulfilment of commitments. Such reports shall be circulated by the secretariat to all Parties to the Convention. The secretariat shall list those questions of implementation indicated in such reports for further consideration by the Conference of the Parties serving as the meeting of the Parties to this Protocol.
4. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the review of implementation of this Protocol by expert review teams taking into account the relevant decisions of the Conference of the Parties.
5. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, with the assistance of the Subsidiary Body for Implementation and, as appropriate, the Subsidiary Body for Scientific and Technological Advice, consider:
  - (a) The information submitted by Parties under Article 7 and the reports of the expert reviews thereon conducted under this Article; and
  - (b) Those questions of implementation listed by the secretariat under paragraph 3 above, as well as any questions raised by Parties.
6. Pursuant to its consideration of the information referred to in paragraph 5 above, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take decisions on any matter required for the implementation of this Protocol.

## Article 9

1. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall periodically review this Protocol in the light of the best available scientific information and assessments on climate change and its impacts, as well as relevant technical, social and economic information. Such reviews shall be coordinated with pertinent reviews under the Convention, in particular those required by Article 4, paragraph 2 (d), and Article 7, paragraph 2 (a), of the Convention. Based on these reviews, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take appropriate action.
2. The first review shall take place at the second session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. Further reviews shall take place at regular intervals and in a timely manner.

## Article 10

All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, without introducing any new commitments for Parties not included in Annex I, but reaffirming existing commitments under Article 4, paragraph 1, of the Convention, and continuing to advance the implementation of these commitments in order to achieve sustainable development, taking into account Article 4, paragraphs 3, 5 and 7, of the Convention, shall:

- (a) Formulate, where relevant and to the extent possible, cost-effective national and, where appropriate, regional programmes to improve the quality of local emission factors, activity data and/or models which reflect the socio-economic conditions of each Party for the preparation and periodic updating of national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies to be agreed upon by the Conference of the Parties, and consistent with the guidelines for the preparation of national communications adopted by the Conference of the Parties;
- (b) Formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change and measures to facilitate adequate adaptation to climate change:
  - (i) Such programmes would, *inter alia*, concern the energy, transport and industry sectors as well as agriculture, forestry and waste management. Furthermore, adaptation technologies and methods for improving spatial planning would improve adaptation to climate change; and
  - (ii) Parties included in Annex I shall submit information on action under this Protocol, including national programmes, in accordance with Article 7; and other Parties shall seek to include in their national communications, as appropriate, information on programmes which contain measures that the Party believes contribute to addressing climate change and its adverse impacts, including the abatement of increases in greenhouse gas emissions, and enhancement of and removals by sinks, capacity building and adaptation measures;

(c) Cooperate in the promotion of effective modalities for the development, application and diffusion of, and take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies, know-how, practices and processes pertinent to climate change, in particular to developing countries, including the formulation of policies and programmes for the effective transfer of environmentally sound technologies that are publicly owned or in the public domain and the creation of an enabling environment for the private sector, to promote and enhance the transfer of, and access to, environmentally sound technologies;

(d) Cooperate in scientific and technical research and promote the maintenance and the development of systematic observation systems and development of data archives to reduce uncertainties related to the climate system, the adverse impacts of climate change and the economic and social consequences of various response strategies, and promote the development and strengthening of endogenous capacities and capabilities to participate in international and intergovernmental efforts, programmes and networks on research and systematic observation, taking into account Article 5 of the Convention;

(e) Cooperate in and promote at the international level, and, where appropriate, using existing bodies, the development and implementation of education and training programmes, including the strengthening of national capacity building, in particular human and institutional capacities and the exchange or secondment of personnel to train experts in this field, in particular for developing countries, and facilitate at the national level public awareness of, and public access to information on, climate change. Suitable modalities should be developed to implement these activities through the relevant bodies of the Convention, taking into account Article 6 of the Convention;

(f) Include in their national communications information on programmes and activities undertaken pursuant to this Article in accordance with relevant decisions of the Conference of the Parties; and

(g) Give full consideration, in implementing the commitments under this Article, to Article 4, paragraph 8, of the Convention.

#### **Article 11**

1. In the implementation of Article 10, Parties shall take into account the provisions of Article 4, paragraphs 4, 5, 7, 8 and 9, of the Convention.

2. In the context of the implementation of Article 4, paragraph 1, of the Convention, in accordance with the provisions of Article 4, paragraph 3, and Article 11 of the Convention, and through the entity or entities entrusted with the operation of the financial mechanism of the Convention, the developed country Parties and other developed Parties included in Annex II to the Convention shall:

(a) Provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in advancing the implementation of existing commitments under Article 4, paragraph 1 (a), of the Convention that are covered in Article 10, subparagraph (a); and

(b) Also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of advancing the implementation of existing commitments under Article 4, paragraph 1, of the Convention that are covered by Article 10 and that are agreed between a developing country Party and the international entity or entities referred to in Article 11 of the Convention, in accordance with that Article.

The implementation of these existing commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among developed country Parties. The guidance to the entity or entities entrusted with the operation of the financial mechanism of the Convention in relevant decisions of the Conference of the Parties, including those agreed before the adoption of this Protocol, shall apply *mutatis mutandis* to the provisions of this paragraph.

3. The developed country Parties and other developed Parties in Annex II to the Convention may also provide, and developing country Parties avail themselves of, financial resources for the implementation of Article 10, through bilateral, regional and other multilateral channels.

## Article 12

1. A clean development mechanism is hereby defined.
2. The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.
3. Under the clean development mechanism:
  - (a) Parties not included in Annex I will benefit from project activities resulting in certified emission reductions; and
  - (b) Parties included in Annex I may use the certified emission reductions accruing from such project activities to contribute to compliance with part of their quantified emission limitation and reduction commitments under Article 3, as determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol.
4. The clean development mechanism shall be subject to the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Protocol and be supervised by an executive board of the clean development mechanism.
5. Emission reductions resulting from each project activity shall be certified by operational entities to be designated by the Conference of the Parties serving as the meeting of the Parties to this Protocol, on the basis of:
  - (a) Voluntary participation approved by each Party involved;

- (b) Real, measurable, and long-term benefits related to the mitigation of climate change; and
- (c) Reductions in emissions that are additional to any that would occur in the absence of the certified project activity.
6. The clean development mechanism shall assist in arranging funding of certified project activities as necessary.
7. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, elaborate modalities and procedures with the objective of ensuring transparency, efficiency and accountability through independent auditing and verification of project activities.
8. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall ensure that a share of the proceeds from certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.
9. Participation under the clean development mechanism, including in activities mentioned in paragraph 3 (a) above and in the acquisition of certified emission reductions, may involve private and/or public entities, and is to be subject to whatever guidance may be provided by the executive board of the clean development mechanism.
10. Certified emission reductions obtained during the period from the year 2000 up to the beginning of the first commitment period can be used to assist in achieving compliance in the first commitment period.

### **Article 13**

1. The Conference of the Parties, the supreme body of the Convention, shall serve as the meeting of the Parties to this Protocol.
2. Parties to the Convention that are not Parties to this Protocol may participate as observers in the proceedings of any session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. When the Conference of the Parties serves as the meeting of the Parties to this Protocol, decisions under this Protocol shall be taken only by those that are Parties to this Protocol.
3. When the Conference of the Parties serves as the meeting of the Parties to this Protocol, any member of the Bureau of the Conference of the Parties representing a Party to the Convention but, at that time, not a Party to this Protocol, shall be replaced by an additional member to be elected by and from amongst the Parties to this Protocol.
4. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall keep under regular review the implementation of this Protocol and shall make, within its mandate, the decisions necessary to promote its effective implementation. It shall perform the functions assigned to it by this Protocol and shall:

(a) Assess, on the basis of all information made available to it in accordance with the provisions of this Protocol, the implementation of this Protocol by the Parties, the overall effects of the measures taken pursuant to this Protocol, in particular environmental, economic and social effects as well as their cumulative impacts and the extent to which progress towards the objective of the Convention is being achieved;

(b) Periodically examine the obligations of the Parties under this Protocol, giving due consideration to any reviews required by Article 4, paragraph 2 (d), and Article 7, paragraph 2, of the Convention, in the light of the objective of the Convention, the experience gained in its implementation and the evolution of scientific and technological knowledge, and in this respect consider and adopt regular reports on the implementation of this Protocol;

(c) Promote and facilitate the exchange of information on measures adopted by the Parties to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under this Protocol;

(d) Facilitate, at the request of two or more Parties, the coordination of measures adopted by them to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under this Protocol;

(e) Promote and guide, in accordance with the objective of the Convention and the provisions of this Protocol, and taking fully into account the relevant decisions by the Conference of the Parties, the development and periodic refinement of comparable methodologies for the effective implementation of this Protocol, to be agreed on by the Conference of the Parties serving as the meeting of the Parties to this Protocol;

(f) Make recommendations on any matters necessary for the implementation of this Protocol;

(g) Seek to mobilize additional financial resources in accordance with Article 11, paragraph 2;

(h) Establish such subsidiary bodies as are deemed necessary for the implementation of this Protocol;

(i) Seek and utilize, where appropriate, the services and cooperation of, and information provided by, competent international organizations and intergovernmental and non-governmental bodies; and

(j) Exercise such other functions as may be required for the implementation of this Protocol, and consider any assignment resulting from a decision by the Conference of the Parties.

5. The rules of procedure of the Conference of the Parties and financial procedures applied under the Convention shall be applied *mutatis mutandis* under this Protocol, except as may be otherwise decided by consensus by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

6. The first session of the Conference of the Parties serving as the meeting of the Parties to this Protocol shall be convened by the secretariat in conjunction with the first session of the Conference of the Parties that is scheduled after the date of the entry into force of this Protocol. Subsequent ordinary sessions of the Conference of the Parties serving as the meeting of the Parties to this Protocol shall be held every year and in conjunction with ordinary sessions of the Conference of the Parties, unless otherwise decided by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

7. Extraordinary sessions of the Conference of the Parties serving as the meeting of the Parties to this Protocol shall be held at such other times as may be deemed necessary by the Conference of the Parties serving as the meeting of the Parties to this Protocol, or at the written request of any Party, provided that, within six months of the request being communicated to the Parties by the secretariat, it is supported by at least one third of the Parties.

8. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any State member thereof or observers thereto not party to the Convention, may be represented at sessions of the Conference of the Parties serving as the meeting of the Parties to this Protocol as observers. Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by this Protocol and which has informed the secretariat of its wish to be represented at a session of the Conference of the Parties serving as the meeting of the Parties to this Protocol as an observer, may be so admitted unless at least one third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure, as referred to in paragraph 5 above.

#### **Article 14**

1. The secretariat established by Article 8 of the Convention shall serve as the secretariat of this Protocol.

2. Article 8, paragraph 2, of the Convention on the functions of the secretariat, and Article 8, paragraph 3, of the Convention on arrangements made for the functioning of the secretariat, shall apply *mutatis mutandis* to this Protocol. The secretariat shall, in addition, exercise the functions assigned to it under this Protocol.

#### **Article 15**

1. The Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation established by Articles 9 and 10 of the Convention shall serve as, respectively, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of this Protocol. The provisions relating to the functioning of these two bodies under the Convention shall apply *mutatis mutandis* to this Protocol. Sessions of the meetings of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of this Protocol shall be held in conjunction with the meetings of, respectively, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of the Convention.



2. Parties to the Convention that are not Parties to this Protocol may participate as observers in the proceedings of any session of the subsidiary bodies. When the subsidiary bodies serve as the subsidiary bodies of this Protocol, decisions under this Protocol shall be taken only by those that are Parties to this Protocol.

3. When the subsidiary bodies established by Articles 9 and 10 of the Convention exercise their functions with regard to matters concerning this Protocol, any member of the Bureaux of those subsidiary bodies representing a Party to the Convention but, at that time, not a party to this Protocol, shall be replaced by an additional member to be elected by and from amongst the Parties to this Protocol.

#### **Article 16**

The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, as soon as practicable, consider the application to this Protocol of, and modify as appropriate, the multilateral consultative process referred to in Article 13 of the Convention, in the light of any relevant decisions that may be taken by the Conference of the Parties. Any multilateral consultative process that may be applied to this Protocol shall operate without prejudice to the procedures and mechanisms established in accordance with Article 18.

#### **Article 17**

The Conference of the Parties shall define the relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability for emissions trading. The Parties included in Annex B may participate in emissions trading for the purposes of fulfilling their commitments under Article 3. Any such trading shall be supplemental to domestic actions for the purpose of meeting quantified emission limitation and reduction commitments under that Article.

#### **Article 18**

The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol, including through the development of an indicative list of consequences, taking into account the cause, type, degree and frequency of non-compliance. Any procedures and mechanisms under this Article entailing binding consequences shall be adopted by means of an amendment to this Protocol.

#### **Article 19**

The provisions of Article 14 of the Convention on settlement of disputes shall apply *mutatis mutandis* to this Protocol.

#### **Article 20**

1. Any Party may propose amendments to this Protocol.
2. Amendments to this Protocol shall be adopted at an ordinary session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. The text of any proposed amendment to this Protocol shall be communicated to the Parties by the secretariat at least

six months before the meeting at which it is proposed for adoption. The secretariat shall also communicate the text of any proposed amendments to the Parties and signatories to the Convention and, for information, to the Depositary.

3. The Parties shall make every effort to reach agreement on any proposed amendment to this Protocol by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the amendment shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting. The adopted amendment shall be communicated by the secretariat to the Depositary, who shall circulate it to all Parties for their acceptance.

4. Instruments of acceptance in respect of an amendment shall be deposited with the Depositary. An amendment adopted in accordance with paragraph 3 above shall enter into force for those Parties having accepted it on the ninetieth day after the date of receipt by the Depositary of an instrument of acceptance by at least three fourths of the Parties to this Protocol.

5. The amendment shall enter into force for any other Party on the ninetieth day after the date on which that Party deposits with the Depositary its instrument of acceptance of the said amendment.

### **Article 21**

1. Annexes to this Protocol shall form an integral part thereof and, unless otherwise expressly provided, a reference to this Protocol constitutes at the same time a reference to any annexes thereto. Any annexes adopted after the entry into force of this Protocol shall be restricted to lists, forms and any other material of a descriptive nature that is of a scientific, technical, procedural or administrative character.

2. Any Party may make proposals for an annex to this Protocol and may propose amendments to annexes to this Protocol.

3. Annexes to this Protocol and amendments to annexes to this Protocol shall be adopted at an ordinary session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. The text of any proposed annex or amendment to an annex shall be communicated to the Parties by the secretariat at least six months before the meeting at which it is proposed for adoption. The secretariat shall also communicate the text of any proposed annex or amendment to an annex to the Parties and signatories to the Convention and, for information, to the Depositary.

4. The Parties shall make every effort to reach agreement on any proposed annex or amendment to an annex by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the annex or amendment to an annex shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting. The adopted annex or amendment to an annex shall be communicated by the secretariat to the Depositary, who shall circulate it to all Parties for their acceptance.

5. An annex, or amendment to an annex other than Annex A or B, that has been adopted in accordance with paragraphs 3 and 4 above shall enter into force for all Parties to this Protocol six months after the date of the communication by the Depositary to such Parties of the adoption of the annex or adoption of the amendment to the annex, except for those Parties that have

notified the Depositary, in writing, within that period of their non-acceptance of the annex or amendment to the annex. The annex or amendment to an annex shall enter into force for Parties which withdraw their notification of non-acceptance on the ninetieth day after the date on which withdrawal of such notification has been received by the Depositary.

6. If the adoption of an annex or an amendment to an annex involves an amendment to this Protocol, that annex or amendment to an annex shall not enter into force until such time as the amendment to this Protocol enters into force.

7. Amendments to Annexes A and B to this Protocol shall be adopted and enter into force in accordance with the procedure set out in Article 20, provided that any amendment to Annex B shall be adopted only with the written consent of the Party concerned.

#### **Article 22**

1. Each Party shall have one vote, except as provided for in paragraph 2 below.

2. Regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States that are Parties to this Protocol. Such an organization shall not exercise its right to vote if any of its member States exercises its right, and vice versa.

#### **Article 23**

The Secretary-General of the United Nations shall be the Depositary of this Protocol.

#### **Article 24**

1. This Protocol shall be open for signature and subject to ratification, acceptance or approval by States and regional economic integration organizations which are Parties to the Convention. It shall be open for signature at United Nations Headquarters in New York from 16 March 1998 to 15 March 1999. This Protocol shall be open for accession from the day after the date on which it is closed for signature. Instruments of ratification, acceptance, approval or accession shall be deposited with the Depositary.

2. Any regional economic integration organization which becomes a Party to this Protocol without any of its member States being a Party shall be bound by all the obligations under this Protocol. In the case of such organizations, one or more of whose member States is a Party to this Protocol, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under this Protocol. In such cases, the organization and the member States shall not be entitled to exercise rights under this Protocol concurrently.

3. In their instruments of ratification, acceptance, approval or accession, regional economic integration organizations shall declare the extent of their competence with respect to the matters governed by this Protocol. These organizations shall also inform the Depositary, who shall in turn inform the Parties, of any substantial modification in the extent of their competence.

## Article 25

1. This Protocol shall enter into force on the ninetieth day after the date on which not less than 55 Parties to the Convention, incorporating Parties included in Annex I which accounted in total for at least 55 per cent of the total carbon dioxide emissions for 1990 of the Parties included in Annex I, have deposited their instruments of ratification, acceptance, approval or accession.
2. For the purposes of this Article, “the total carbon dioxide emissions for 1990 of the Parties included in Annex I” means the amount communicated on or before the date of adoption of this Protocol by the Parties included in Annex I in their first national communications submitted in accordance with Article 12 of the Convention.
3. For each State or regional economic integration organization that ratifies, accepts or approves this Protocol or accedes thereto after the conditions set out in paragraph 1 above for entry into force have been fulfilled, this Protocol shall enter into force on the ninetieth day following the date of deposit of its instrument of ratification, acceptance, approval or accession.
4. For the purposes of this Article, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by States members of the organization.

## Article 26

No reservations may be made to this Protocol.

## Article 27

1. At any time after three years from the date on which this Protocol has entered into force for a Party, that Party may withdraw from this Protocol by giving written notification to the Depository.
2. Any such withdrawal shall take effect upon expiry of one year from the date of receipt by the Depository of the notification of withdrawal, or on such later date as may be specified in the notification of withdrawal.
3. Any Party that withdraws from the Convention shall be considered as also having withdrawn from this Protocol.

## Article 28

The original of this Protocol, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

**DONE** at Kyoto this eleventh day of December one thousand nine hundred and ninety-seven.

**IN WITNESS WHEREOF** the undersigned, being duly authorized to that effect, have affixed their signatures to this Protocol on the dates indicated.

## Annex A

### Greenhouse gases

Carbon dioxide (CO<sub>2</sub>)  
Methane (CH<sub>4</sub>)  
Nitrous oxide (N<sub>2</sub>O)  
Hydrofluorocarbons (HFCs)  
Perfluorocarbons (PFCs)  
Sulphur hexafluoride (SF<sub>6</sub>)

### Sectors/source categories

#### Energy

Fuel combustion  
    Energy industries  
    Manufacturing industries and construction  
    Transport  
    Other sectors  
    Other  
Fugitive emissions from fuels  
    Solid fuels  
    Oil and natural gas  
    Other

#### Industrial processes

Mineral products  
Chemical industry  
Metal production  
Other production  
Production of halocarbons and sulphur hexafluoride  
Consumption of halocarbons and sulphur hexafluoride  
Other

#### Solvent and other product use

#### Agriculture

Enteric fermentation  
Manure management  
Rice cultivation  
Agricultural soils  
Prescribed burning of savannas  
Field burning of agricultural residues  
Other

#### Waste

Solid waste disposal on land  
Wastewater handling  
Waste incineration  
Other

## Annex B

| Party   | Quantified emission limitation or reduction commitment<br>(percentage of base year or period) |
|---|---|
| Australia   | 108   |
| Austria   | 92  |
| Belgium   | 92  |
| Bulgaria*   | 92  |
| Canada  | 94  |
| Croatia*  | 95  |
| Czech Republic*   | 92  |
| Denmark   | 92  |
| Estonia*  | 92  |
| European Community                                      | 92  |
| Finland   | 92  |
| France  | 92  |
| Germany   | 92  |
| Greece  | 92  |
| Hungary*  | 94  |
| Iceland   | 110   |
| Ireland   | 92  |
| Italy   | 92  |
| Japan   | 94  |
| Latvia*   | 92  |
| Liechtenstein   | 92  |
| Lithuania*  | 92  |
| Luxembourg  | 92  |
| Monaco  | 92  |
| Netherlands   | 92  |
| New Zealand   | 100   |
| Norway  | 101   |
| Poland*   | 94  |
| Portugal  | 92  |
| Romania*  | 92  |
| Russian Federation*                                     | 100   |
| Slovakia*   | 92  |
| Slovenia*   | 92  |
| Spain   | 92  |
| Sweden  | 92  |
| Switzerland   | 92  |
| Ukraine*  | 100   |
| United Kingdom of Great<br>Britain and Northern Ireland | 92  |
| United States of America                                | 93  |

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\* Countries that are undergoing the process of transition to a market economy.



CONFERENCE OF THE PARTIES

REPORT OF THE CONFERENCE OF THE PARTIES ON ITS  
FOURTH SESSION, HELD AT BUENOS AIRES FROM  
2 TO 14 NOVEMBER 1998

Addendum

PART TWO: ACTION TAKEN BY THE CONFERENCE OF THE PARTIES  
AT ITS FOURTH SESSION

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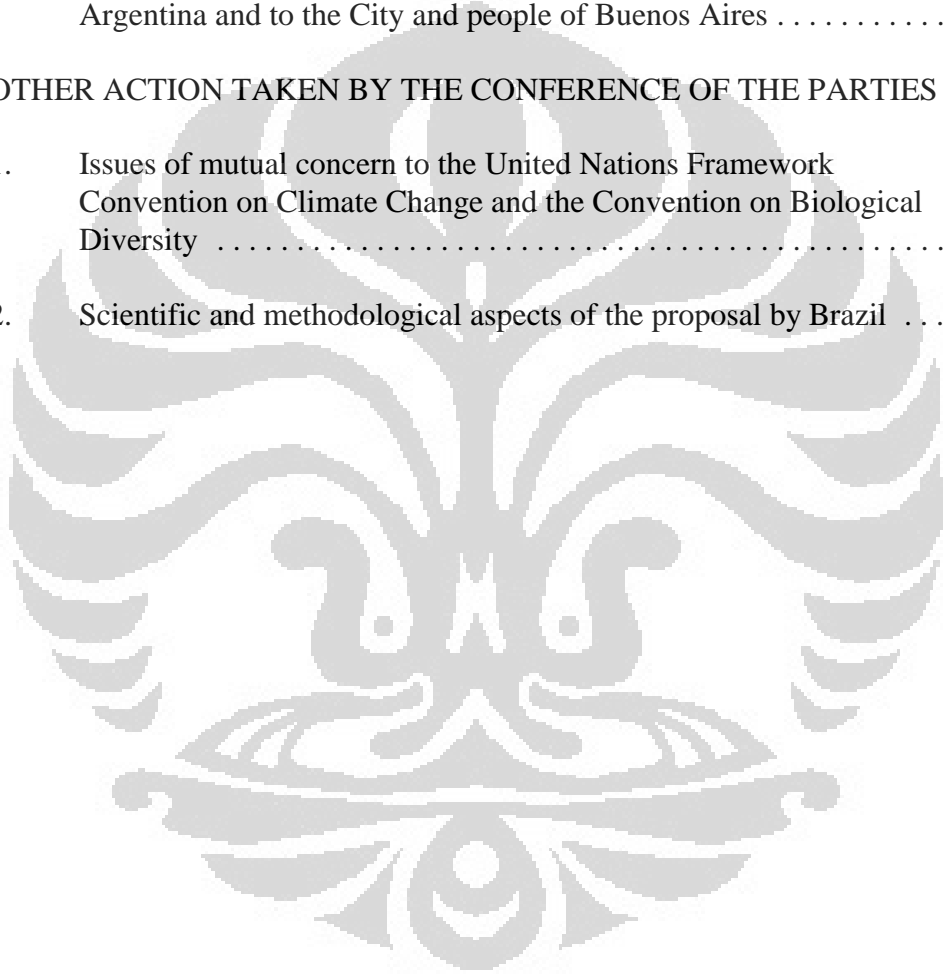
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## I. DECISIONS ADOPTED BY THE CONFERENCE OF THE PARTIES

### Decision 1/CP.4

#### The Buenos Aires Plan of Action

*The Conference of the Parties,*

*Having considered and reached conclusions upon the items included in its agenda at its fourth session,<sup>1</sup>*

*Determined to strengthen the implementation of the United Nations Framework Convention on Climate Change and prepare for the future entry into force of the Kyoto Protocol to the Convention, and to maintain political momentum towards these aims,*

1. Adopts the Buenos Aires Plan of Action, as specified in its separate decisions on:
  - (a) The financial mechanism (decisions 2/CP.4 and 3/CP.4);
  - (b) Development and transfer of technologies (decision 4/CP.4);
  - (c) Implementation of Article 4.8 and 4.9 of the Convention (covering also Articles 2.3 and 3.14 of the Kyoto Protocol) (decision 5/CP.4);
  - (d) Activities implemented jointly under the pilot phase (decision 6/CP.4);
  - (e) The work programme on mechanisms of the Kyoto Protocol (decision 7/CP.4);
  - (f) Preparations for the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, including work on the elements of the Protocol related to compliance and on policies and measures for the mitigation of climate change (decision 8/CP.4);
2. *Resolves to demonstrate substantial progress on each of the above-mentioned issues in accordance with the time-frames contained in the relevant decisions.*

*8th plenary meeting  
14 November 1998*

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<sup>1</sup> FCCC/CP/1998/15.

## Decision 2/CP.4

### Additional guidance to the operating entity of the financial mechanism

*The Conference of the Parties,*

*Recalling* its decisions 11/CP.1, 10/CP.2, 11/CP.2 and 12/CP.2,

*Recalling further* that the Global Environment Facility (GEF), as stated in its operational principles for the development and implementation of its work programme,<sup>1</sup> will maintain sufficient flexibility to respond to changing circumstances, including evolving guidance of the Conference of the Parties and experience gained from monitoring and evaluation activities,

*Welcoming* the New Delhi Statement of the First GEF Assembly<sup>2</sup> and the Report on the Second Replenishment of the GEF Trust Fund, completed in March 1998,<sup>3</sup>

*Noting* the continued concerns and difficulties encountered by developing country Parties with the availability and disbursement of financial resources, including for the transfer of technology, the problems arising from the GEF project cycle, the application of the concept of incremental costs, and the availability of resources through the GEF implementing/executing agencies,

*Noting also* the current and ongoing efforts of the GEF to address these concerns, *inter alia*, by streamlining its project cycle, increasing support for country-level coordination, strengthening its monitoring and evaluation programme, ensuring that its activities are country-driven and consistent with national priorities and objectives, further developing its resource allocation strategy to maximize the effectiveness of its climate change activities and making the process of determining incremental costs more transparent and pragmatic,

*Noting further* the need to examine and address climate change impacts and minimize the adverse impacts, in particular for the Parties identified in Article 4.8 of the United Nations Framework Convention on Climate Change,

1. Decides that, in accordance with Articles 4.3, 4.5 and 11.1 of the Convention, the GEF should provide funding to developing country Parties to:

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<sup>1</sup> Global Environment Facility, *Operational Strategy* (Washington, D.C., February 1996), p. 2.

<sup>2</sup> See document FCCC/CP/1998/12, annex B.

<sup>3</sup> Document GEF/C.11/6 of 24 March 1998.

- (a) Implement adaptation response measures under Article 4.1 of the Convention for adaptation activities envisaged in decision 11/CP.1, paragraph 1(d)(ii) (Stage II activities) in particularly vulnerable countries and regions identified in Stage I activities, and especially in countries vulnerable to climate-related natural disasters, taking into account their preparatory adaptation planning frameworks in priority sectors, the completion of Stage I activities, and in the context of their national communications;
- (b) Enable them, in light of their social and economic conditions and taking into account state-of-the-art environmentally sound technologies, to identify and submit to the Conference of the Parties their prioritized technology needs, especially as concerns key technologies needed in particular sectors of their national economies conducive to addressing climate change and minimizing its adverse effects;
- (c) Build capacity for participation in systematic observational networks to reduce scientific uncertainties relating to the causes, effects, magnitude and timing of climate change, in accordance with Article 5 of the Convention;
- (d) Meet the agreed full costs of preparing initial and subsequent national communications, in accordance with Articles 4.3 and 12.5 of the Convention and decision 11/CP.2, paragraph 1(d), by maintaining and enhancing relevant national capacity, so as to prepare the initial and second national communications which will take into account experiences, including gaps and problems identified in previous national communications, and guidelines established by the Conference of the Parties. Guidance on subsequent national communications will be provided by the Conference of the Parties;
- (e) Assist them with studies leading to the preparation of national programmes to address climate change, compatible with national plans for sustainable development, in accordance with Article 4.1(b) of the Convention and paragraph 13 of the annex to decision 10/CP.2;
- (f) Assist in developing, strengthening and/or improving national activities for public awareness and education on climate change and response measures, in full accordance with Article 6 of the Convention and decision 11/CP.1, paragraph 1(b)(iii), and taking into account, where appropriate, relevant GEF operational programmes;
- (g) Support capacity-building for:
- (i) The assessment of technology needs to fulfil the commitments of developing countries under the Convention, the identification of sources and suppliers of these technologies, and the determination of modalities for the acquisition and absorption thereof;

- (ii) Country-driven activities and projects to enable Parties not included in Annex I to the Convention (non-Annex I Parties) to design, evaluate and manage these projects;
  - (iii) Strengthening the capacity of non-Annex I Parties to host projects, including from project formulation and development to their implementation;
  - (iv) Facilitating national/regional access to the information provided by international centres and networks, and for working with those centres for the dissemination of information, information services, and transfer of environmentally sound technologies and know-how in support of the Convention;
2. *Requests* the GEF to continue to provide, and developing country Parties to avail themselves of, funding to translate, reproduce, disseminate and make available their initial national communications electronically;
3. *Encourages* the GEF to:
- (a) Further streamline its project cycle with a view to making project preparation simpler, less prescriptive, more transparent and country-driven;
  - (b) Further simplify and expedite its procedures for the approval and implementation of GEF-funded projects, including disbursements for such projects;
  - (c) Make the process for the determination of incremental costs more transparent, and its application more pragmatic;
4. *Requests* the GEF to ensure that its implementing/executing agencies are made aware of Convention provisions and decisions adopted by the Conference of the Parties in the performance of their GEF obligations and are encouraged, as a first priority, whenever possible, to use national experts/consultants in all aspects of project development and implementation;
5. *Further requests* the GEF to include in its report to the Conference of the Parties the specific steps it has undertaken to implement the provisions of this decision.

*8th plenary meeting  
14 November 1998*

## Decision 3/CP.4

### Review of the financial mechanism

*The Conference of the Parties,*

*Recalling* its decisions 9/CP.1, 11/CP.2, 12/CP.2 and 11/CP.3,

*Taking note* of the study of the overall performance of the restructured Global Environment Facility,<sup>1</sup>

1. *Decides* that the restructured Global Environment Facility shall be an entity entrusted with the operation of the financial mechanism referred to in Article 11 of the United Nations Framework Convention on Climate Change;
2. *Decides also*, in accordance with Article 11.4 of the Convention, to review the financial mechanism every four years, on the basis of the guidelines as contained in the annex to this decision or as they may subsequently be amended, and to take appropriate measures.

*8th plenary meeting  
14 November 1998*

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<sup>1</sup> Gareth Porter, Raymond Cléménçon, Waafas Ofosu-Amaah and Michael Philips, *Study of GEF's Overall Performance*, Global Environment Facility, March 1998.

## Annex

### **GUIDELINES FOR THE REVIEW OF THE FINANCIAL MECHANISM**

#### **A. Objectives**

In accordance with Article 11.4 of the Convention, the objectives will be to review the financial mechanism and take appropriate measures regarding:

- (a) Its conformity with the provisions of Article 11 of the Convention;
- (b) Its conformity with the guidance of the Conference of the Parties (COP);
- (c) The effectiveness of the activities it funds in implementing the Convention;
- (d) Its effectiveness in providing financial resources on a grant or concessional basis, including for the transfer of technology, for the implementation of the Convention's objective on the basis of the guidance provided by the COP;
- (e) Its effectiveness in providing resources to developing country Parties under Article 4.3 of the Convention.

#### **B. Methodology**

The review shall draw upon the following sources of information:

- (a) Information provided by the Parties on their experiences regarding the financial mechanism;
- (b) Annual reviews by the COP on the conformity of the activities of the financial mechanism with the guidance of the COP;
- (c) The annual report of the Global Environment Facility (GEF) to the COP on its activities as the operating entity of the financial mechanism, the annual reports of the GEF and other relevant GEF policy and information documents;
- (d) Reports from the GEF monitoring and evaluation programme;
- (e) Reports from the United Nations Commission on Sustainable Development and relevant bilateral and multilateral funding institutions;
- (f) Relevant information provided by other intergovernmental and non-governmental organizations.

### **C. Criteria**

The effectiveness of the financial mechanism will be assessed taking into account the following:

- (a) The transparency of decision-making processes;
- (b) The adequacy, predictability and timely disbursement of funds for activities in developing country Parties;
- (c) The responsiveness and efficiency of the GEF project cycle and expedited procedures, including its operational strategy, as they relate to climate change;
- (d) The amount of resources provided to developing country Parties, including financing for technical assistance and investment projects;
- (e) The amount of finance leveraged;
- (f) The sustainability of funded projects.



## Decision 4/CP.4

### Development and transfer of technologies

*The Conference of the Parties,*

*Recalling* the relevant provisions of the programme for the further implementation of Agenda 21 on the transfer of environmentally sound technologies adopted by the United Nations General Assembly at its nineteenth special session, and decision 6/3 of the Commission on Sustainable Development,

*Further recalling* the provisions of the United Nations Framework Convention on Climate Change, including its Article 4.1, 4.3, 4.5, 4.7, 4.8 and 4.9 and Articles 9.2, 11.1, 11.5, 12.3 and 12.4,

*Noting* that reports are under preparation which will contribute substantially to the understanding of technology transfer issues, including the secretariat technical papers on terms of transfer and adaptation technologies, and the Intergovernmental Panel on Climate Change (IPCC) special report on technology transfer,

*Recognizing* the need for continued efforts by Parties to promote and cooperate in the development, application, diffusion and transfer of technologies,

*Recognizing* that the private sector plays, in some countries, an important role in the development, transfer and finance of technologies, and that the creation of enabling environments at all levels provides a platform to support the development, use and transfer of environmentally sound technologies and know-how,

*Having considered* the progress reports presented by the Convention secretariat on the development and transfer of technologies,

*Recalling and reaffirming* its decisions 13/CP.1, 7/CP.2 and 9/CP.3,

1. *Agrees* that strengthening the capacities and capabilities of developing country Parties to address climate change will help these Parties to contribute to the ultimate objective of the Convention and to achieve sustainable development;
2. *Encourages* all relevant international organizations to mobilize and facilitate efforts to provide financial resources needed by developing country Parties to meet their agreed incremental costs, including development and transfer of technologies, enhancement of endogenous capacities, implementation of such measures as improving energy efficiency,

exploiting renewable energies, enhancing sinks and preparing for adaptation to adverse effects of climate change;

3. *Requests* Parties included in Annex II to the Convention (Annex II Parties):

(a) To take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of environmentally sound technologies and know-how to developing country Parties and their access thereto;

(b) To support capacity-building and the strengthening of appropriate institutions in developing countries to enable the transfer of environmentally sound technologies and know-how;

4. *Further requests* Parties included in Annex I to the Convention (Annex I Parties), and in particular Annex II Parties:

(a) To assist developing country Parties in their efforts to build capacity and institutional frameworks to improve energy efficiency and utilization of renewable energies through multilateral and bilateral cooperative efforts;

(b) To provide assistance to developing country Parties to build capacity for sustainable management, conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems;

(c) To assist developing country Parties to build capacity to adapt to the adverse effects of climate change;

(d) To assist developing country Parties to strengthen their endogenous capacities and capabilities in the areas of technological and socio-economic research and systematic observation relevant to climate change and its associated adverse effects;

(e) Taking into account Article 6 of the Convention, to cooperate in and promote capacity-building of developing country Parties at the international, regional, sub-regional and national levels through cooperation programmes supported by United Nations and other multilateral agencies, as well as bilateral agencies;

5. *Requests* all Parties to enhance reporting in their national communications of technology cooperation and transfer activities and *invites* Parties not included in Annex I to the Convention (non-Annex I Parties) to include, where possible, their technology needs;

6. *Encourages* Parties to implement practical cooperation programmes and projects to promote and facilitate the transfer of technologies to reduce greenhouse gas emissions and facilitate adaptation to climate change and its adverse effects, while supporting sustainable development;

7. *Urges:*

(a) Annex I Parties, in their technology transfer activities, to take into account support for the development and enhancement of the endogenous capacities and technologies of developing country Parties;

(b) Annex II Parties to provide, as appropriate, for reference by developing country Parties, a list of environmentally sound technologies and know-how related to adaptation to and mitigation of climate change that are publicly owned, and to report in their national communications steps taken to implement Article 4.5 of the Convention;

(c) Non-Annex I Parties, in the light of their social and economic conditions, to submit their prioritized technology needs, especially those relating to key technologies to address climate change in particular sectors of their national economies, taking into account state-of-the-art environmentally sound technologies;

(d) Both developed and developing country Parties to create an enabling environment, as referred to in paragraph 2(e) of decision 6/3 of the Commission on Sustainable Development, to stimulate private sector investment in the transfer of environmentally sound technologies and know-how to developing countries and to promote the implementation of endogenous know-how;

8. *Invites* all Parties and interested international and non-governmental organizations to identify projects and programmes incorporating cooperative approaches to the transfer of technologies which they believe can serve as models for improving the diffusion and implementation of clean technologies under the Convention, and to provide information thereon to the secretariat, by 15 March 1999, for compilation into a miscellaneous document to be considered by the Subsidiary Body for Scientific and Technological Advice (SBSTA) at its tenth session;

9. *Requests* the Chairman of the SBSTA to establish a consultative process to consider the list of issues and questions contained in the annex to this decision, as well as any additional issues and questions subsequently identified by Parties, and to make recommendations on how they should be addressed in order to achieve agreement on a framework for meaningful and effective actions to enhance implementation of Article 4.5 of the Convention. Such a process should also consider issues identified in the secretariat progress report on transfer of

technology<sup>1</sup> and in submissions from Parties. The consultative process could include, resources permitting, regional meetings, regional workshops and a SBSTA workshop, arranged with the assistance of the secretariat and drawing upon the roster of experts and, as appropriate, experts engaged in the IPCC process;

10. *Further requests* the Chairman of the SBSTA to report on the outcome of the consultative process to the SBSTA at its eleventh session, with a view to recommending a decision for adoption by the Conference of the Parties at its fifth session;

11. *Invites* Parties to provide submissions to the secretariat, by 15 March 1999, on how the issues and questions listed in the annex to this decision should be addressed, as well as suggestions for additional issues and questions;

12. *Requests* the Convention secretariat:

(a) To continue its work on the synthesis and dissemination of information on environmentally sound technologies and know-how conducive to mitigating, and adapting to, climate change, and in so doing to complete its ongoing activities for 1999 as defined in the secretariat progress report;<sup>2</sup>

(b) In preparing the budget for the next biennium, to give priority to activities on the theme of building the capacity of Parties to enhance the transfer of environmentally sound technologies, as defined in the secretariat progress report,<sup>2</sup> including assessing and synthesizing information on environmentally sound technologies and know-how, and in so doing to identify specific tasks;

(c) To further strengthen its activities in support of capacity-building in developing country Parties with regard to the transfer of environmentally sound technologies and know-how.

*8th plenary meeting  
14 November 1998*

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<sup>1</sup> FCCC/CP/1998/6.

<sup>2</sup> Ibid.

**Annex**

| Issues  | Questions  |
|---|--|
| <b>Practical steps to promote, facilitate and finance, as appropriate, transfer of, and access to, environmentally sound technologies and know-how</b>                  |  |
| Promote the removal of barriers to technology transfer.   | How should Parties promote the removal of barriers to technology transfer? Which barriers are a priority and what practical steps should be taken?   |
| Initiate and promote the transfer of publicly owned technology and those in the public domain.  | What publicly owned technologies are available? How could Annex II Parties report upon them? How should Annex II Parties promote the transfer of publicly owned technologies?  |
| Promote bilateral and multilateral technology cooperation to facilitate technology transfer.  | What additional bilateral and multilateral efforts to promote technology cooperation to facilitate technology transfer should be initiated? What should be the priority?   |
| Consider appropriate mechanisms for technology transfer under the Convention.   | Are existing multilateral mechanisms sufficient? Are new mechanisms needed for technology transfer? If so, what are appropriate mechanisms for the transfer of technologies among Parties in pursuance of Article 4.5 of the Convention? |
| Collaborate with relevant multilateral institutions to promote technology transfer.   | What should be the objective of collaboration with relevant multilateral institutions to promote technology transfer and what practical steps should be taken?   |
| Promote and facilitate, in collaboration with the financial mechanism and multilateral and bilateral institutions, the arrangement of financing of technology transfer. | What additional guidance should be given to the financial mechanism?   |
| Promote and assist developing country Parties to access technology information.   | What sort of information is needed and how can this best be done?  |
| Facilitate access to emerging technologies.   | How could access to emerging technologies be facilitated?  |
| Facilitate the appropriate role of the private sector.  | What role is the private sector playing in technology transfer? What additional role can the private sector play? What barriers prevent their greater participation?   |
| <b>Support for the development and enhancement of endogenous capacities and technologies of developing country Parties</b>  |  |
| Provide technical advice on technology transfer to Parties, particularly developing country Parties.  | What technical advice on technology transfer is needed? How should such advice be provided?  |

| Issues   | Questions   |
|--|---|
| Promote capacity-building in developing country Parties through provision of concrete programmes.  | What areas should be the focus of capacity- building and how should it be undertaken, e.g. what kinds of activities, programmes and institutional arrangements?   |
| Assist developing country Parties, on request, to assess required technologies.  | How, to whom and in what format should developing country Parties make their request for assistance to assess required technologies?  |
| Promote and enhance access to relevant technical, legal and economic information at national and regional centres.   | What technical, legal and economic information is needed ? What practical steps should be taken to promote and enhance access to such information by national and regional centres?   |
| Develop a consensus on practical next steps to improve existing technology centres and networks in order to accelerate the diffusion of clean technologies in non-Annex I Party markets.   | What type of process is needed to develop a consensus on practical next steps to improve existing technology centres and networks in order to accelerate the diffusion of clean technologies in non-Annex I Party markets. What type of arrangement is needed to monitor progress?  |
| Promote an enabling environment for private sector participation.  | What measures, programmes and activities can best help to create an appropriate enabling environment for private sector investment ?  |
| <b>Assistance in facilitating the transfer of environmentally sound technologies and know-how</b>  |   |
| Oversee the exchange of information among Parties and other interested organizations on innovative technology cooperation approaches, and the assessment and synthesis of such information.  | How should the Convention oversee the exchange of information among Parties and other interested organizations on innovative technology cooperation approaches, and the assessment and synthesis of such information?   |
| Consider information on innovative technology cooperation approaches and develop recommendations to the Conference of the Parties which could be recognized more formally and widely implemented under the Convention.   | How should information be compiled and synthesized on innovative technology cooperation approaches? When should recommendations on such approaches be forwarded to the Conference of the Parties?   |
| Identify projects and programmes on technology cooperation, which can serve as models for improving the diffusion and implementation of clean technologies internationally under the Convention, and to provide information on these projects to the Convention secretariat. | How and when should information on projects and programmes of technology cooperation which Parties believe can serve as models for improving the diffusion and implementation of clean technologies internationally under the Convention be provided to the secretariat? How could information on such model programmes be evaluated? |
| <b>Other questions</b>   |   |
| <p>Can specific technology transfer goals be set?</p> <p>Can we develop indicators and accounting systems to track progress on technology transfer?</p> <p>Are particular institutional arrangements needed to monitor progress?</p>   |   |

**Decision 5/CP.4****Implementation of Article 4.8 and 4.9 of the Convention  
(decision 3/CP.3 and Articles 2.3 and 3.14 of the Kyoto Protocol)**

*The Conference of the Parties,*

*Recalling* its decision 3/CP.3 on implementation of Article 4, paragraphs 8 and 9, of the United Nations Framework Convention on Climate Change,

*Recalling also* the provisions of Article 4.8 and 4.9 of the Convention,

*Noting* the provisions of Article 2.3 and Article 3.14 of the Kyoto Protocol to the Convention,

*Recognizing* that, in the implementation of the commitments in Article 4 of the Convention, the Parties shall give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures,

*Noting* the provision under Article 12.8 of the Kyoto Protocol,

*Recognizing* the concern for sustainable development of the countries referred to in Article 4.8 and 4.9 of the Convention,

*Welcoming* the relevant work of the Intergovernmental Panel on Climate Change (IPCC), in particular its First and Second Assessment Reports, its recent Special Report on the Regional Impacts of Climate Change and its forthcoming Third Assessment Report, which will *inter alia* address issues relevant to Article 4.8 and 4.9 of the Convention,

*Noting*, however, that considerable uncertainties still persist with regard to the assessment of the adverse effects of climate change, particularly at the regional, sub-regional and national levels, and that in this context information gaps need to be filled, using in particular information contained in national communications from Parties included in Annex I to the Convention (Annex I Parties) and Parties not included in Annex I to the Convention (non-Annex I Parties),

*Noting also* that there is not enough information available on the adverse effects of climate change and the impact of the implementation of response measures, and that in this context also information gaps need to be filled, using in particular information contained in national communications from Annex I Parties and non-Annex I Parties,

1. *Decides* that the basic elements for further analysis should include the following:
  - (a) Identification of the adverse effects of climate change;
  - (b) Identification of the impacts of the implementation of response measures under the Convention;
  - (c) Identification of the specific needs and concerns of developing country Parties arising from such adverse effects and impacts defined through *inter alia* the national communications from non-Annex I Parties;
  - (d) Identification and consideration of actions, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns referred to in subparagraph (c) above;
2. *Requests* the Subsidiary Body for Scientific and Technological Advice (SBSTA) to initiate a process of compilation and analysis of available information, which is needed to elaborate any actions necessary to implement Article 4.8 and 4.9 of the Convention;
3. *Further requests* the SBSTA to take into account information needs arising from the basic elements mentioned in paragraph 1 above, as well as the programme of work set out in the annex to this decision, in revising the guidelines for the preparation of national communications by Annex I Parties and non-Annex I Parties;
4. *Requests* the Subsidiary Body for Implementation (SBI) and the SBSTA to continue consideration of the implementation of Article 4.8 and 4.9 of the Convention at their tenth and eleventh sessions and to report thereon to the Conference of the Parties at its fifth session;
5. *Invites* the IPCC to provide, in its Third Assessment Report, a further scientific and technical assessment on matters related to Article 4.8 and 4.9 of the Convention;
6. *Decides* to adopt and implement the programme of work set out in the annex to this decision.

*8th plenary meeting  
14 November 1998*



**Annex  
PROGRAMME OF WORK**

| ITEM | ACTION   | OBJECTIVE   | RESPONSIBILITY  | DEADLINE                   |
|------|--|---|---|----------------------------|
| 1    | Submission of views on the issues to be discussed in the expert workshop   | Identify factors that will help determine the adverse effects of climate change and/or the impact of implementation of response measures, the information available, existing information gaps and further information needed as well as views on methodologies, taking into account <i>inter alia</i> submissions already made to the COP and the subsidiary bodies on the implementation of Article 4.8 and 4.9 of the Convention | All Parties   | End of April 1999          |
| 2    | Consideration of the secretariat's compilation of national submissions   | Define the expert workshop terms of reference   | SBI 10, SBSTA 10  | June 1999                  |
| 3    | Organization of the expert workshop, including budgetary issues  | Produce input for SBSTA 11 and SBI 11   | Chairman of SBSTA, with the assistance of the secretariat | September 1999             |
| 4    | Further discussion on the implementation of Article 4.8 and 4.9 of the Convention considering the outcome of the workshop  | Prepare report including conclusions and/or draft decision for COP 5  | SBI 11, SBSTA 11  | October/<br>November 1999  |
| 5    | Identification of initial actions to address the implementation of Article 4.8 and 4.9 of the Convention, as well as Articles 2.3 and 3.14 of the Kyoto Protocol               | Identify initial actions, including initial input for COP/MOP 1, in accordance with Articles 2.3 and 3.14 of the Kyoto Protocol   | COP 5   | October/<br>November 1999  |
| 6    | Identification of any additional actions needed to address the implementation of Article 4.8 and 4.9 of the Convention, as well as Articles 2.3 and 3.14 of the Kyoto Protocol | Take a decision on any further actions  | COP 6   | November/<br>December 2000 |

## Decision 6/CP.4

### Activities implemented jointly under the pilot phase

*The Conference of the Parties,*

*Recalling* its decision 5/CP.1,

*Noting* its decision 7/CP.4 on the work programme on mechanisms of the Kyoto Protocol to the United Nations Framework Convention on Climate Change,

*Taking note* of the second synthesis report<sup>1</sup> and the update<sup>2</sup> on activities implemented jointly under the pilot phase prepared by the secretariat, and of the views expressed by Parties,<sup>3</sup>

*Recognizing* the need to address the issues identified in the second synthesis report, particularly in its main conclusions (chapter II),

1. *Decides* to continue the pilot phase, recognizing that such continuation should provide developing country Parties, in particular the least developed and small island developing States amongst them, as well as Parties with economies in transition, with the opportunity to enhance their capacity-building, and all Parties with the opportunity to gain further experience with activities implemented jointly;

2. *Invites* Parties to continue to submit new reports or updates on activities implemented jointly under the pilot phase, endorsed by designated national authorities for activities implemented jointly, using the uniform reporting format adopted by its decision 10/CP.3. The deadline for submission of reports to be considered in the third synthesis report is 8 June 1999;

3. *Reiterates* the invitation to Parties contained in decision 10/CP.3 to provide inputs to the secretariat on their experience in using the uniform reporting format. The deadline for submission of these inputs to be considered by the Subsidiary Body for Scientific and Technological Advice at its tenth session is 12 February 1999;

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<sup>1</sup> FCCC/CP/1998/2.

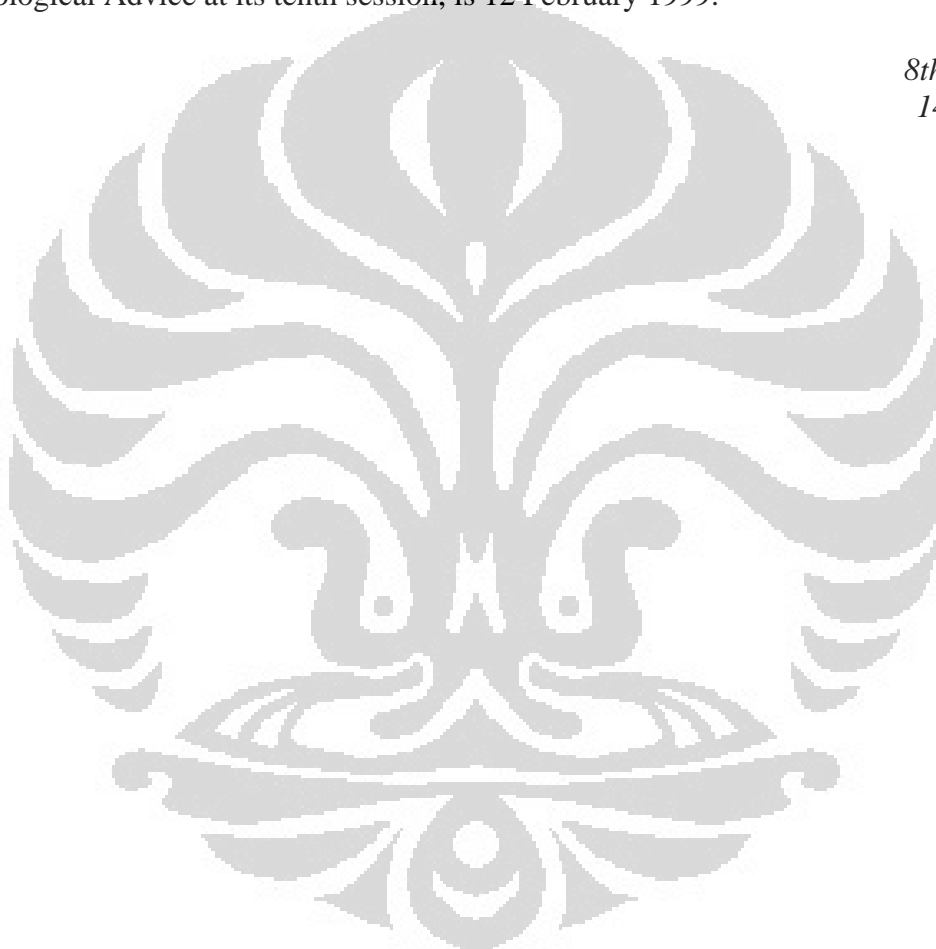
<sup>2</sup> FCCC/CP/1998/INF.3.

<sup>3</sup> FCCC/CP/1998/MISC.7 and Add. 1-4.

4. *Decides* to begin preparations for a review process of the pilot phase and *requests* the subsidiary bodies to address the process at their tenth sessions, with a view to the Conference of the Parties taking a conclusive decision on the pilot phase, and the progression beyond that, no later than the end of the present decade;

5. *Invites* Parties to submit to the secretariat their views on the process and information on experience gained and lessons learned with activities implemented jointly under the pilot phase, in order to facilitate the review process referred to in paragraph 4 above. The deadline for such submissions, to be considered by the Subsidiary Body for Scientific and Technological Advice at its tenth session, is 12 February 1999.

*8th plenary meeting  
14 November 1998*



## Decision 7/CP.4

### Work programme on mechanisms of the Kyoto Protocol

*The Conference of the Parties,*

*Being guided by Article 3 of the United Nations Framework Convention on Climate Change,*

*Recalling Articles 6, 12 and 17 on mechanisms of the Kyoto Protocol to the Convention,*

*Recalling also Article 3 of the Kyoto Protocol,*

*Recalling its decision 1/CP.3, paragraphs 5 and 6,*

*Having considered views submitted by Parties related to matters contained in decision 1/CP.3, paragraph 5 (b), (c) and (e) and paragraph 6,<sup>1</sup>*

1. *Decides* on the following work programme on mechanisms, including the list of elements in the annex to this decision, to be undertaken with priority given to the clean development mechanism, and with a view to taking decisions on all the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol at its sixth session, including, where appropriate, recommendations to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session on:

- (a) Guidelines concerning provisions under Article 6 of the Kyoto Protocol;
- (b) Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol, with the objective of ensuring transparency, efficiency and accountability through independent auditing and verification of project activities, and including implications of Article 12.10 of the Kyoto Protocol;
- (c) Relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability of emissions trading, pursuant to Article 17 of the Kyoto Protocol;

2. *Invites* Parties to submit further proposals on principles, modalities, rules and guidelines for the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol by the end of February 1999 as an input to technical workshops, and additional proposals, by 31 March 1999,

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<sup>1</sup> FCCC/CP/1998/MISC.7 and Add. 1-4; and FCCC/SB/1998/MISC.1 and Add.1/Rev.1, Add.2, Add.3/Rev.1 and Add. 4-6.

for compilation by the secretariat as a miscellaneous document for the subsidiary bodies at their tenth sessions;

3. *Requests* the secretariat, under the guidance of the Chairmen of the subsidiary bodies, to convene two technical workshops before 15 April 1999, based on inputs by Parties and drawing upon relevant contributions from United Nations agencies and intergovernmental and non-governmental organizations, in a manner that promotes coordination and cooperation and the effective use of scarce resources;

4. *Requests* the secretariat to prepare, for consideration by the subsidiary bodies at their tenth sessions, a plan for facilitating capacity-building in developing country Parties, especially the small island States and the least developed amongst them, for project activities under the clean development mechanism, and for facilitating the participation of Parties with economies in transition in the other mechanisms;

5. *Requests* the Chairmen of the subsidiary bodies, supported by the secretariat, to produce, based on submissions by Parties and bearing in mind linkages among the provisions relating to the mechanisms and other issues related to the Kyoto Protocol, a synthesis of proposals by Parties on matters addressed in paragraph 1 above for initial consideration by the subsidiary bodies at their tenth sessions.

*8th plenary meeting  
14 November 1998*

**Annex****Work programme on mechanisms of the Kyoto Protocol: list of elements<sup>a</sup>**

| <b>Provisions<br/>in the Kyoto<br/>Protocol</b> | <b>Elements</b>   | <b>Subsi-<br/>diary<br/>bodies</b> |
|---|---|------------------------------------|
|   | <b>General</b>  | SBSTA<br>/SBI                      |
|   | (1) Application of relevant principles<br>(2) Nature and scope of the mechanisms<br>(3) Equity and transparency<br>(4) Supplementarity<br>(5) Climate change effectiveness<br>(6) Institutional framework<br>(7) Capacity-building<br>(8) Adaptation<br>(9) Compliance<br>(10) Linkages<br>(11) Inapplicability of Article 4.8 and 4.9 of the Convention and/or Article 2.3 and 3.14 of the Kyoto Protocol to the mechanisms <sup>b</sup><br>(12) Dependence of the ambitious environmental targets of the Kyoto Protocol upon availability of mechanisms<br>(13) Importance of prompt decisions on workable mechanisms for ratification/entry into force<br>(14) Principle of cost-effectiveness<br>(15) Role of mechanisms in promoting compliance<br>(16) Comparable treatment among Parties included in Annex B to the Kyoto Protocol, whether using Articles 6, 12, 17 or other means to achieve their Article 3 commitments<br>(17) Maximizing the environmental benefits of mechanisms by assuring the lowest possible cost structures |                                    |

<sup>a</sup> The existence of elements in this list is without prejudice to inclusion of these items in the rules, modalities and guidelines developed for these mechanisms. Additional items can be added to this list.

<sup>b</sup> Unless otherwise specified, all references to Articles in this annex are to Articles of the Kyoto Protocol.

| Provisions in the Kyoto Protocol   | Elements  | Subsidiary bodies     |
|--|---|-----------------------|
|  | <p>(18) Application of any quantification of "supplemental to domestic actions" to each individual State within a regional economic integration organization</p> <p>(19) Supplementarity (concrete ceiling defined in quantitative and qualitative terms based on equitable criteria)</p> <p>(20) Linkages, inter alia interchangeability</p> <p>(21) Prerequisites for the use of the mechanisms (compliance, linkage with Articles 5, 7, 8)</p> <p>(22) Articles 2.3 and 3.14</p>   |                       |
|  | <b>Article 12 - Clean development mechanism (CDM)</b>   |                       |
| <p>12.2</p> <p>3, 12.2</p> <p>12.2</p> <p>12.2</p> <p>12.2</p> <p>12.2</p> <p>12.8</p> <p>12.2, 12.7</p> | <p><u>Basic</u></p> <p>(1) Purpose of CDM projects</p> <p>(2) The "part of" commitments under Article 3</p> <p>(3) Compatibility with sustainable development priorities/strategies</p> <p>(4) Special needs of least developed countries</p> <p>(5) Criteria for project eligibility</p> <p>(6) Adaptation</p> <p>(7) Transparency, non-discrimination, prevention of distortion of competition</p> <p>(8) Application of any quantification of "supplemental to domestic actions" to each individual State within a regional economic integration organization</p> <p>(9) Supplementarity to domestic actions for achieving compliance with reduction commitments under Article 3 (concrete ceiling defined in quantitative and qualitative terms based on equitable criteria)</p> <p>(10) Prerequisites for the use of the CDM (compliance, linkage with Articles 5, 7, 8)</p> | <p>SBSTA<br/>/SBI</p> |

| Provisions in the Kyoto Protocol  | Elements   | Subsidiary bodies |
|---|--|-------------------|
| 12.3 (b)<br>12.5 (c)<br>12.5 (b)<br>12.5<br>12.5 (c)<br>12.3(a), 12.9<br>12.7<br>12.5, 12.7<br>12.10<br>3.3 & 3.4 | <u>Methodological and technical</u><br>(11) "Part of " Annex I commitments<br>(12) Additionality criteria in project funding<br>(13) Should there be any distinction between public/private funding?<br>(14) Criteria for real, measurable and long-term benefits related to climate change<br>(15) Criteria for certification<br>(16) Criteria for project baseline<br>(17) Definition of the concept of certified emission reductions<br>(18) Systems for independent auditing and verification of project activities<br>(19) Format for reporting<br>(20) Implication of Article 12.10, including implications for a possible interim phase approach to the CDM and of the activities implemented jointly (AIJ) under the pilot phase<br>(21) Outcome of methodological work on Articles 3.3 and 3.4<br>(22) Environmental additionality and baselines<br>(23) Categorization of projects<br>(24) Criteria for sustainable development<br>(25) Determination of additionality of emissions reductions/removals<br>(26) Tracking of certified emission reductions<br>(27) Fungibility among mechanisms<br>(28) Compliance-related issues<br>(29) Inclusion of sinks projects; all six greenhouse gases specified in the Kyoto Protocol | SBSTA             |
| 3, 12, 12.9, 12.10<br>12.8<br>12.8  | <u>Process</u><br>(30) Acquisition and transfer of certified emission reduction units<br>(31) Determination of share of proceeds for adaptation<br>(32) Determination of share of proceeds for administration  | SBI               |



| Provisions<br>in the Kyoto<br>Protocol | Elements   | Subsidiary<br>bodies |
|--|--|----------------------|
| 12.6                                   | (33) Criteria and procedures for arranging funding for certified project activities  |                      |
| 12.8                                   | (34) Criteria and procedures for assisting developing country Parties that are particularly vulnerable to meet adaptation costs  |                      |
| 12.2                                   | (35) Approval by involved Parties of sustainable development<br>(36) Approval by involved Parties of project<br>(37) Certification of project activities and reductions<br>(38) Reporting<br>(39) Auditing and verification<br>(40) Eligibility of AIJ projects under the CDM beginning in 2000<br>(41) Credit (starting from 2000) for qualifying projects begun before CDM rules become effective<br>(42) Implications for benefits from CDM in considering whether to elaborate 'part of' in Article 12.3 (b) |                      |
|  | <u>Institutional</u>   | SBI                  |
| 12.4                                   | (43) Authority and guidance of the Conference of the Parties   |                      |
| 12.4                                   | (44) Accountability of the executive board to the Conference of the Parties serving as the meeting of the Parties to the Protocol  |                      |
| 12.4, 12.5, 12.6, 12.7, 12.8, 12.9     | (45) Functions of, relationship among and operational procedures of the Conference of the Parties, Conference of the Parties serving as the meeting of the Parties to the Protocol, the executive board and operational entities   |                      |
| 12.4, 12.7                             | (46) Executive board - constitution, composition, and functions - membership and rules of procedure, provisions for institutional and administrative support   |                      |
| 12.9                                   | (47) Guidance regarding involvement of public and/or private entities  |                      |
| 12.5, 12.7                             | (48) Operational entities - identification/designation/accreditation; monitoring/auditing of operational entities  |                      |
| 12.2                                   | (49) Responsibility of Parties<br>(50) Overall institutional framework   |                      |

| Provisions in the Kyoto Protocol    | Elements   | Subsidiary bodies |
|-------------------------------------|--|-------------------|
| <b>Article 6 - Projects</b>         |  |                   |
| <u>Basic</u>                        |  |                   |
| 6.1                                 | (1) Criteria for Article 6 projects  | SBSTA/SBI         |
| 6.1(d)                              | (2) "Supplemental to domestic actions"   |                   |
| 6.1                                 | (3) Transparency   |                   |
|                                     | (4) Implications of the AIJ pilot phase  |                   |
|                                     | (5) Application of any quantification of "supplemental to domestic actions" to each individual State within a regional economic integration organization |                   |
|                                     | (6) Complementarity to domestic actions (concrete ceiling defined in quantitative and qualitative terms based on equitable criteria)                     |                   |
|                                     | (7) Prerequisites for the use of Article 6 (compliance, linkage with Articles 5, 7 and 8)  |                   |
|                                     | (8) Lack of authority to elaborate "supplemental to domestic actions"; inadvisability of doing so  |                   |
|                                     | (9) Lack of authority to impose a charge for adaptation  |                   |
| <u>Methodological and technical</u> |  |                   |
| 6.1                                 | (10) Criteria for project baselines  | SBSTA             |
| 6.1(b)                              | (11) Assessment of additionality   |                   |
| 6.2                                 | (12) Verification and reporting  |                   |
| 8.4                                 | (13) Guidelines for review of implementation of Article 6 by expert review teams   |                   |
| 6.2                                 | (14) Guidelines for monitoring, reporting, verification  |                   |
| 3.3, 3.4                            | (15) Outcome of methodological work on Articles 3.3 and 3.4  |                   |
|                                     | (16) Categorization of projects  |                   |
|                                     | (17) Real, measurable and long-term environmental benefits   |                   |
|                                     | (18) Independent certification and verification  |                   |
|                                     | (19) Is further elaboration of guidelines necessary?   |                   |
|                                     | (20) Fungibility among mechanisms  |                   |

| Provisions<br>in the Kyoto<br>Protocol  | Elements   | Subsidiary<br>bodies |
|---|--|----------------------|
| 6.1(a)<br>6.1(c), 3.10, 3.11,<br>6.3, 6.4<br>6.3<br>8.4<br>6.4, 16, 18<br>6.1 | (21) Other compliance-related issues<br>(22) How to assess project additionality/baselines<br>(23) Tracking of emission reduction units<br><br><u>Process</u><br>(24) Process for approval by Parties involved in projects<br>(25) Acquisition and transfer of emission reduction units<br><br>(26) Authorization of legal entities<br>(27) Process for reviewing Article 6 according to Article 8.4<br>(28) Consequences of non-compliance<br>(29) Process for assessing compliance with Articles 5 and 7<br>(30) Independent certification and verification<br>(31) Certification of emission reductions<br>(32) Monitoring<br>(33) Reporting<br>(34) Eligibility of AIJ projects under Article 6<br>(35) Starting date for Article 6 projects | SBI                  |
| 6.2<br><br>6.2<br>6.3.  | <u>Institutional</u><br>(36) Role of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation<br><br>(37) Elaboration of guidelines as per Article 6.2<br>(38) Involvement of legal entities  | SBI                  |

| Provisions in the Kyoto Protocol                   | Elements   | Subsidiary bodies |
|--|--|-------------------|
|  | <b>Article 17 - Emissions trading between Parties included in Annex B to the Kyoto Protocol</b>  | SBSTA /SBI        |
| 17<br>3, 17<br>17, Convention<br>3, 17<br>17<br>17 | <p>(1) Basis of rights and entitlements for emissions trading of Parties included in Annex B</p> <p>(2) "Supplemental to domestic actions"</p> <p>(3) Conformity with the principle of equity in the Convention</p> <p>(4) Real and verifiable reduction of greenhouse gas emissions</p> <p>(5) Elaboration of principles, modalities, rules and guidelines</p> <p>(6) Matters relating to verification, reporting and accountability</p> <p>(7) Application of any quantification of "supplemental to domestic actions" to each individual State within a regional economic integration organization</p> <p>(8) Complementarity to domestic actions for the purpose of meeting commitments under Article 3 (concrete ceiling defined in quantitative and qualitative terms based on equitable criteria)</p> <p>(9) Prerequisites for the use of Article 17 (compliance, linkage with Articles 5, 7 and 8)</p> <p>(10) Participation by legal entities</p> <p>(11) "Hot air "</p> <p>(12) Transparency</p> <p>(13) Accessibility</p> <p>(14) Non-discrimination</p> <p>(15) Non-distortion of competition</p> <p>(16) Liability</p> <p>(17) Reporting and tracking of trades</p> <p>(18) Interchangeability</p> <p>(19) Definition of tradeable unit</p> <p>(20) Determination and creation of rights and entitlements for emissions trading of Parties included in Annex B</p> <p>(21) Elements of principles, modalities, rules and guidelines for emissions trading</p> |                   |

| Provisions<br>in the Kyoto<br>Protocol | Elements   | Subsi-<br>diary<br>bodies |
|--|--|---------------------------|
|  | (22) Assigned amounts as basis for emissions trading<br>(23) Tracking transfers and acquisitions in assigned amounts<br>(24) Reporting on transfers and acquisitions in assigned amounts<br>(25) National registries<br>(26) Compliance-related issues<br>(27) Eligibility (e.g. links to Articles 5 and 7)<br>(28) Legal entities<br>(29) Lack of authority to elaborate "supplemental to domestic actions"; inadvisability of doing so<br>(30) Fungibility among mechanisms<br>(31) Competitiveness issues<br>(32) Lack of authority to impose a charge for adaptation |                           |

## Decision 8/CP.4

### **Preparations for the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol: matters related to decision 1/CP.3, paragraph 6**

*The Conference of the Parties,*

*Recalling* its decision 1/CP.3 on the adoption of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, in particular paragraph 6 of that decision on the allocation of preparatory work for the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

*Further recalling* the functions and terms of reference of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation, as contained in Articles 9 and 10 of the Convention and as elaborated by its decisions 6/CP.1 and 13/CP.3, and *noting* Article 15 of the Kyoto Protocol,

*Having considered* the proposal by the Chairmen of the subsidiary bodies on the allocation to those bodies of preparatory work for the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,<sup>1</sup>

*Recognizing* the need to maximize efficiency in the work of the subsidiary bodies and to avoid duplication and overlap,

*Taking into account* decisions<sup>2</sup> taken at its fourth session related to issues addressed in annexes I and II to this decision,

*Decides:*

(a) That the preparatory work for the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol shall be allocated to the subsidiary bodies as shown in annex I to this decision;

(b) That this work shall be carried out according to the initial list of work set out in annex II to this decision;

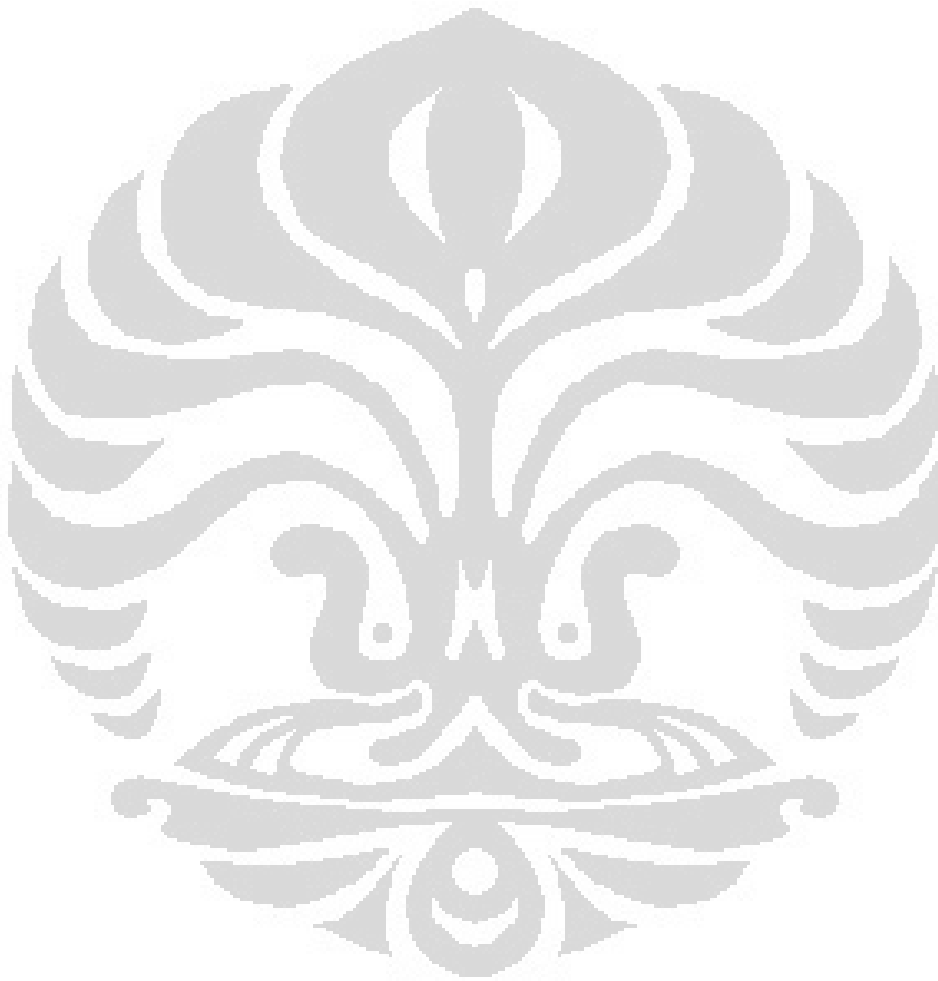
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<sup>1</sup> FCCC/CP/1998/3.

<sup>2</sup> Decisions 5/CP.4, 7/CP.4, 9/CP.4, 10/CP.4 and 11/CP.4.

(c) To invite the subsidiary bodies to report on these matters to the Conference of the Parties at its fifth session.

*8th plenary meeting  
14 November 1998*



**Annex I****ALLOCATION OF PREPARATORY WORK FOR THE CONFERENCE OF THE PARTIES SERVING AS THE MEETING OF THE PARTIES TO THE KYOTO PROTOCOL AT ITS FIRST SESSION**

| <b>Task</b>   | <b>Allocation</b>                                     |
|---|---|
| <b>Tasks assigned to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session</b>                 |   |
| Actions relating to Article 3.14 <sup>a</sup>   | See decision 5/CP.4                                   |
| Guidelines for national systems under Article 5.1 and methodologies for the application of adjustments under Article 5.2                                | SBSTA   |
| Guidelines for the preparation of information under Article 7, with respect to both annual inventories and national communications from Annex I Parties | SBSTA, in cooperation with SBI                        |
| Guidelines for the review of implementation by expert review teams under Article 8  | SBI, in cooperation with SBSTA                        |
| Modalities and procedures relating to the clean development mechanism under Article 12  | See decision 7/CP.4 <sup>b</sup>                      |
| Procedures and mechanisms relating to compliance  | Joint working group on compliance under SBI and SBSTA |

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<sup>a</sup> Unless otherwise stated, references to Articles in annexes I and II to this decision are to Articles of the Kyoto Protocol.

<sup>b</sup> This decision also covers other mechanisms under the Kyoto Protocol.



| <b>Tasks assigned to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session or as soon as practicable thereafter</b>   |   |
|--|---|
| Consideration of ways to facilitate cooperation to enhance the individual and combined effectiveness of policies and measures under Article 2.1(b)   | SBSTA   |
| Modalities, rules and guidelines as to how, and which, additional human-induced activities related to changes in GHG emissions by sources and removals by sinks in the agricultural soils and the land-use change and forestry categories might be included under Article 3.4 <sup>c</sup> | SBSTA   |
| Possible further elaboration of guidelines for the implementation of Article 6   | See decision 7/CP.4 <sup>d</sup>  |
| <b>Tasks to be accomplished by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol prior to the first commitment period</b>  |   |
| Modalities for the accounting of assigned amounts under Article 7.4  | SBSTA   |
| <b>Tasks to be accomplished by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol as soon as practicable</b>  |   |
| Consideration of the application to the Protocol and modification, as appropriate, of the multilateral consultative process referred to in Article 13 of the Convention.   | To be considered upon the establishment of the multilateral consultative process referred to in Article 13 of the Convention. |

<sup>c</sup> See also decision 9/CP.4, paragraph 3, relating to Article 3.3 of the Kyoto Protocol.

<sup>d</sup> This decision also covers other mechanisms under the Kyoto Protocol.

**Annex II**

**INITIAL LIST OF WORK FOR THE CONFERENCE OF THE PARTIES  
SERVING AS THE MEETING OF THE PARTIES TO THE KYOTO  
PROTOCOL AT ITS FIRST SESSION**

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| <b>Tasks assigned to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session</b>  |
| <b>Actions relating to Article 3.14</b>  |
| <ul style="list-style-type: none"> <li>• See decision 5/CP.4</li> </ul>  |
| <b>Guidelines for national systems under Article 5.1 and methodologies for the application of adjustments under Article 5.2</b>  |
| <ul style="list-style-type: none"> <li>• Work programme on methodological issues related to Article 5 referred to in FCCC/SBSTA/1998/9, para. 51(h), with a view to completion by COP 6</li> </ul>   |
| <b>Guidelines for the preparation of information under Article 7, with respect to both annual inventories and national communications from Annex I Parties</b>   |
| <ul style="list-style-type: none"> <li>• Work programme on issues related to Article 7.1 referred to in FCCC/SBSTA/1998/9, para. 51(h); decision 11/CP.4 and FCCC/SBI/1998/7, para. 20, with a view to completion by COP 6</li> <li>• Work programme on issues related to Article 7.2 referred to in FCCC/SBSTA/1998/9, para. 51(h); decision 11/CP.4 and FCCC/SBI/1998/7, para. 20, with a view to completion by COP 6</li> </ul> |
| <b>Guidelines for the review of implementation by expert review teams under Article 8</b>  |
| <ul style="list-style-type: none"> <li>• Work programme on issues related to Article 8 referred to in FCCC/SBSTA/1998/9, para. 51(h); decision 11/CP.4 and FCCC/SBI/1998/7, para. 20, with a view to completion by COP 6</li> </ul>  |

**Modalities and procedures relating to the clean development mechanism under Article 12**

- See decision 7/CP.4<sup>e</sup>

**Procedures and mechanisms relating to compliance**

- Invitation to Parties to submit views to the secretariat on matters relating to compliance under the Kyoto Protocol by 1 March 1999, to be made available by the secretariat in a miscellaneous document
- Request to the secretariat to facilitate a one-day consultation among Parties<sup>f</sup> on matters related to compliance under the Kyoto Protocol immediately prior to the tenth session of the subsidiary bodies
- Establishment of a joint working group on compliance under the SBI and the SBSTA to:
  - Identify compliance-related elements in the Kyoto Protocol
  - Follow the development of these elements in various groups including, for example, elements on substantive rules and consequences of non-compliance, and identify gaps in order that they are addressed in the suitable forum
  - Develop procedures by which compliance with obligations under the Kyoto Protocol should be addressed, to the extent that they are not being considered by other groups
  - Ensure coherent approaches to developing a comprehensive compliance system
- Request to the joint working group on compliance, through the SBI and the SBSTA, to report on progress to COP 5
- Request to the COP 5 to take further steps including, if necessary, the establishment of an ad hoc working group on compliance or other procedure, with a view to adopting a decision at COP 6

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<sup>e</sup> This decision also covers other mechanisms under the Kyoto Protocol.

<sup>f</sup> Open to observers under rules 6 and 7 of the draft rules of procedure, as applied (see FCCC/CP/1996/2).

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| <b>Tasks assigned to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session or as soon as practicable thereafter</b>   |
| <b>Consideration of ways to facilitate cooperation to enhance the individual and combined effectiveness of policies and measures under Article 2.1(b)</b>  |
| <ul style="list-style-type: none"> <li>• Request to the secretariat to:             <ul style="list-style-type: none"> <li>– Prepare a report on "best practices" in policies and measures for consideration by SBSTA 11, based on Annex I Party national communications and their reviews and additional information submitted by Parties by 15 August 1999, as well as any other relevant information, with a view to strengthening the sharing of experience and exchange of information</li> <li>– Organize a workshop to assess "best practices" in policies and measures on the basis of the conclusions of SBSTA 11, and report the results to COP 6</li> </ul> </li> </ul> |
| <b>Modalities, rules and guidelines as to how, and which, additional human-induced activities related to changes in GHG emissions by sources and removals by sinks in the agricultural soils and the land-use change and forestry categories might be included under Article 3.4<sup>g</sup></b>   |
| <ul style="list-style-type: none"> <li>• Work programme as set forth in decision 9/CP.4, in accordance with the time-frames set out in that decision</li> </ul>  |
| <b>Possible further elaboration of guidelines for the implementation of Article 6</b>  |
| <ul style="list-style-type: none"> <li>• See decision 7/CP.4<sup>h</sup></li> </ul>  |

<sup>g</sup> See also decision 9/CP.4, paragraph 3, relating to Article 3.3 of the Kyoto Protocol.

<sup>h</sup> This decision also covers other mechanisms under the Kyoto Protocol.

**Tasks to be accomplished by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol prior to the first commitment period**

**Modalities for the accounting of assigned amounts under Article 7.4**

- Work programme on methodological issues related to Article 7 referred to in FCCC/SBSTA/1998/9, para. 55(h), with a view to completion by COP 6, or as soon as practicable

**Tasks to be accomplished by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol as soon as practicable**

**Consideration of the application to the Protocol, and modification as appropriate, of the multilateral consultative process referred to in Article 13 of the Convention**

To be considered upon the establishment of the multilateral consultative process referred to in Article 13 of the Convention

## Decision 9/CP.4

### Land-use, land-use change and forestry

*The Conference of the Parties,*

*Recalling* decision 1/CP.3 on the adoption of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, in particular its paragraph 5(a),

*Noting* the conclusions on land-use, land-use change and forestry adopted by the Subsidiary Body for Scientific and Technological Advice (SBSTA) at its eighth session,

*Noting also with appreciation* the decision of the Intergovernmental Panel on Climate Change (IPCC) to prepare a special report on land-use, land-use change and forestry,

*Having considered* the report<sup>1</sup> prepared by the secretariat on a SBSTA workshop on data availability based on definitions used by Parties and international organizations in relation to Article 3.3 of the Kyoto Protocol, which was held coincident with an IPCC expert meeting from 24 to 25 September 1998, and the submissions by Parties on land-use, land-use change and forestry,<sup>2</sup>

1. *Decides* to confirm the understanding expressed in the conclusions of the SBSTA at its eighth session that the meaning of Article 3.3 of the Kyoto Protocol is as follows: the adjustment to a Party's assigned amount shall be equal to verifiable changes in carbon stocks during the period 2008 to 2012 resulting from direct human-induced activities of afforestation, reforestation and deforestation since 1 January 1990. Where the result of this calculation is a net sink, this value shall be added to the Party's assigned amount. Where the result of this calculation is a net emission, this value shall be subtracted from the Party's assigned amount;

2. *Decides* to endorse the other relevant conclusions on land-use, land-use change and forestry made by the SBSTA at its eighth session;

3. *Decides* to recommend, at its first session following the completion of the IPCC special report and its consideration by the SBSTA, a draft decision, for adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session, on definitions related to activities under Article 3.3 of the Kyoto Protocol;

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<sup>1</sup> FCCC/CP/1998/INF.4.

<sup>2</sup> FCCC/CP/1998/MISC.1 and Add.1-2, and FCCC/CP/1998/MISC.9 and Add.1-2.

4. *Decides* to recommend, at its first session following the completion of the IPCC special report and its consideration by the SBSTA, a draft decision, for adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session, on modalities, rules and guidelines as to how, and which, additional human-induced activities related to changes in greenhouse gas emissions by sources and removals by sinks in the agricultural soils and the land-use change and forestry categories might be included under Article 3.4 of the Kyoto Protocol;

5. *Further decides* to recommend, at the first session practicable following the completion of the IPCC special report and its consideration by the SBSTA, a draft decision, for adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session, on guidelines for necessary supplementary information with respect to annual greenhouse gas inventories under the provisions of Article 7.1 and 7.4 of the Kyoto Protocol for reporting required in connection with Article 3.3 and 3.4 of the Kyoto Protocol;

6. *Requests* the SBSTA to consider, at its tenth session, the requirements necessary to fulfil the provisions of the first sentence of Article 3.4 of the Kyoto Protocol, and *invites* Parties to provide submissions on such requirements to the secretariat by 1 March 1999;

7. *Affirms* the importance of broad participation by Parties, particularly developing country Parties, in the work of the SBSTA on land-use, land-use change and forestry;

8. *Requests* the secretariat to compile, for consideration by the SBSTA at its tenth session, a list of policy and procedural issues associated with Article 3.3 and 3.4 of the Kyoto Protocol, based on existing submissions by Parties and any further submissions by Parties, and *invites* Parties to provide submissions on these issues to the secretariat by 1 March 1999;

9. *Also requests* the SBSTA, at its tenth session, to give further consideration to planning its work on land-use, land-use change and forestry;

10. *Invites* the IPCC to continue to provide the SBSTA with progress reports on its activities related to land-use, land-use change and forestry.

*5th plenary meeting  
11 November 1998*

## **Decision 10/CP.4**

### **Multilateral consultative process**

*The Conference of the Parties,*

*Recalling* Article 13 of the United Nations Framework Convention on Climate Change,

*Recalling also* its decisions 20/CP.1, 4/CP.2 and 14/CP.3,

*Recognizing* with appreciation the work done by the Ad Hoc Group on Article 13 on the issues relating to the establishment of a multilateral consultative process and its design,

*Noting* that the Ad Hoc Group has completed the task assigned to it in decision 20/CP.1,

*Having considered* the final report of the Ad Hoc Group on its sixth session,<sup>1</sup>

*Decides:*

(a) To approve the text of the multilateral consultative process prepared by the Ad Hoc Group on Article 13 and set out in the annex to this decision, with the exception of the issues in square brackets in paragraphs 8 and 9 thereof;

(b) To review those issues at the fifth session of the Conference of the Parties, with a view, when those issues have been resolved, to adopting a multilateral consultative process, to establishing the Multilateral Consultative Committee referred to therein, and to bringing the process into operation;

(c) To invite the President of the Conference of the Parties to conduct consultations on those issues during the inter-sessional period with the aim of identifying solutions thereto.

*3rd plenary meeting  
6 November 1998*

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<sup>1</sup> FCCC/AG13/1998/2.



## Annex

### MULTILATERAL CONSULTATIVE PROCESS

#### TERMS OF REFERENCE

##### Establishment

1. Pursuant to Article 13 of the United Nations Framework Convention on Climate Change, the Conference of the Parties hereby establishes a multilateral consultative process ("the process") in the form of a set of procedures to be served by a standing Multilateral Consultative Committee ("the Committee").

##### Objective

2. The objective of the process is to resolve questions regarding the implementation of the Convention, by:

- (a) Providing advice on assistance to Parties to overcome difficulties encountered in their implementation of the Convention;
- (b) Promoting understanding of the Convention;
- (c) Preventing disputes from arising.

##### Nature

3. The process shall be conducted in a facilitative, cooperative, non-confrontational, transparent and timely manner, and be non-judicial. Parties concerned shall be entitled to participate fully in the process.

4. The process shall be separate from, and without prejudice to, the provisions of Article 14 of the Convention (Settlement of Disputes).

##### How issues would be taken up

5. Questions regarding the implementation of the Convention may be raised, with supporting information, by:

- (a) A Party with respect to its own implementation;
- (b) A group of Parties with respect to their own implementation;

(c) A Party or a group of Parties with respect to the implementation by another Party or group of Parties;

(d) The Conference of the Parties.

#### Mandate of the Committee

6. The Committee shall, upon a request received in accordance with paragraph 5, consider questions regarding the implementation of the Convention in consultation with the Party or Parties concerned and, in light of the nature of the question, provide the appropriate assistance in relation to difficulties encountered in the course of implementation, by:

(a) Clarifying and resolving questions;

(b) Providing advice and recommendations on the procurement of technical and financial resources for the resolution of these difficulties;

(c) Providing advice on the compilation and communication of information.

7. The Committee shall not duplicate activities performed by other Convention bodies.

#### Constitution

8. The Committee shall consist of [10] [15] [25] members. It shall be composed of persons nominated by Parties who are experts in relevant fields, such as those of science, socio-economics and the environment. The Committee may draw upon such outside expertise as it deems necessary.

9. [The members of the Committee shall be designated by the Conference of the Parties for three years, based on equitable geographical distribution<sup>a</sup> and the principle of rotation [with one

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<sup>a</sup> The Group of 77 and China stated that they uphold the principle of "equitable geographical distribution" which is a well-established practice within the United Nations and strongly objected to the placement of the phrase "equitable geographical distribution" in square brackets by some Parties.

half to be designated by Annex I Parties and one half to be designated by non-Annex I Parties]<sup>b</sup>. Outgoing members may be re-appointed for one immediate consecutive term. The Chairmen of the subsidiary bodies of the Convention may participate in the meetings of the Committee as observers.]

### Deliberations

10. The Committee shall meet at least once a year. Meetings of the Committee shall, whenever practicable, take place in conjunction with sessions of the Conference of the Parties or its subsidiary bodies.

11. The Committee shall report to each ordinary session of the Conference of the Parties on all aspects of its work, with a view to the Conference of the Parties taking whatever decisions it considers necessary.

### Outcome

12. The conclusions and any recommendations of the Committee shall be sent to the Party or Parties concerned for its, or their, consideration. Such conclusions and recommendations shall be consistent with the mandate as described in paragraph 6 above. They may include:

(a) Recommendations regarding cooperation between the Party or Parties concerned and other Parties to further the objective of the Convention; and

(b) Measures that the Committee deems suitable to be taken by the Party or Parties concerned for the effective implementation of the Convention.

13. The Party or Parties concerned shall be given the opportunity to comment on the conclusions and recommendations. The Committee shall, in addition, forward its conclusions and recommendations and any written comments of the Party or Parties concerned to the Conference of the Parties in due time before its ordinary sessions.

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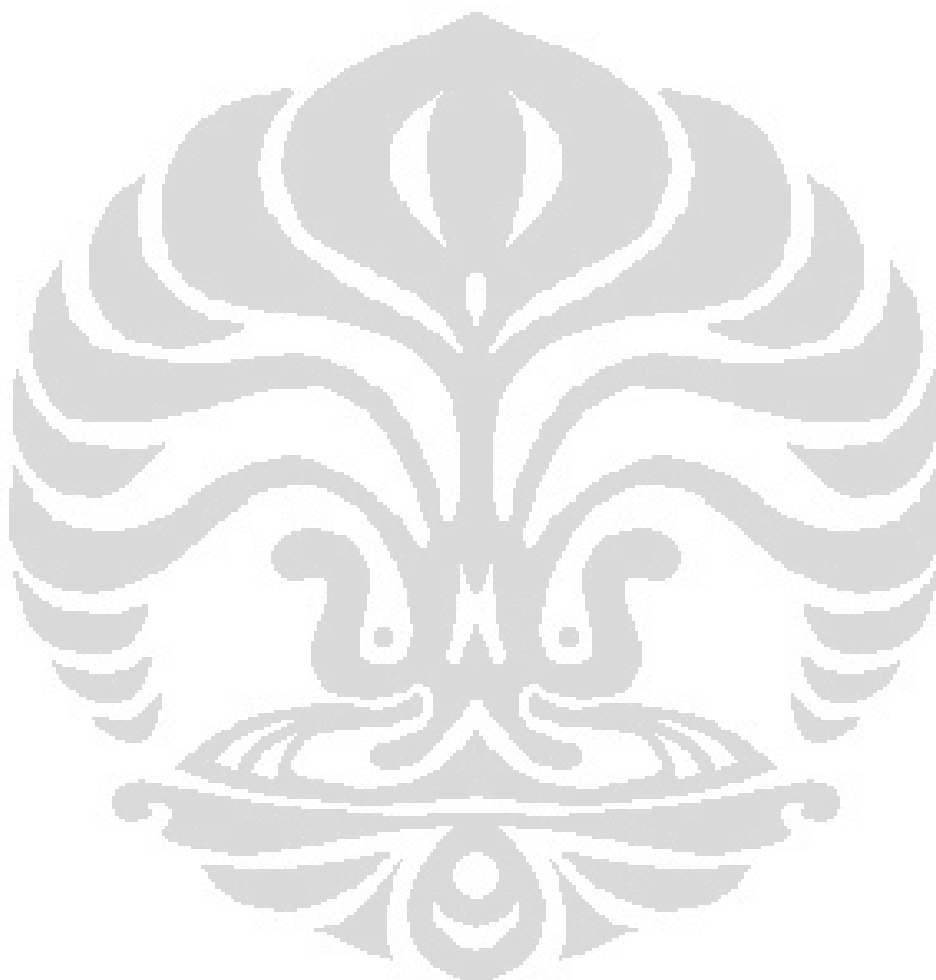
<sup>b</sup> Some Parties stated that the phrase "equitable geographical distribution" was not acceptable and that the following language should be inserted after the word "rotation":

with one half to be designated by Annex I Parties and one half to be designated by non-Annex I Parties.

These Parties also noted their view that "equitable geographical distribution" was not a well-established practice and was not applicable in this context.

### Evolution

14. These terms of reference may be amended by the Conference of the Parties to take account of any amendment to the Convention, decisions of the Conference of the Parties or experience gained with the working of the process.



## Decision 11/CP.4

### National communications from Parties included in Annex I to the Convention

*The Conference of the Parties,*

*Recalling* the relevant provisions of the United Nations Framework Convention on Climate Change, in particular Articles 4, 5, 6, 7.2 and 9.2(b) and Articles 10.2, 11 and 12 thereof,

*Recalling* its decisions 9/CP.2 and 6/CP.3 on communications from Parties included in Annex I to the Convention (Annex I Parties), and decision 4/CP.3, which amended the list in Annex I to the Convention,

*Having considered* the relevant recommendations of the Subsidiary Body for Implementation,

*Noting with appreciation* the second compilation and synthesis of second national communications from Annex I Parties,<sup>1</sup> prepared by the secretariat pursuant to decision 6/CP.3, paragraph 2(a), and the summary compilation of annual greenhouse gas inventory data from Annex I Parties,<sup>2</sup>

1. *Decides* that those Parties included in Annex I to the Convention by decision 4/CP.3 which have not submitted a first national communication should do so no later than six months after the entry into force of the amendment to Annex I, namely by 13 February 1999, or as soon as possible thereafter;

2. *Requests* Annex I Parties to submit to the secretariat, in accordance with Article 12.1 and 12.2 of the Convention:

(a) A third national communication<sup>3</sup> by 30 November 2001 and subsequent national communications on a regular basis, at intervals of three to five years, to be decided at a future session. The Parties referred to in paragraph 1 above should submit their second and subsequent national communications by the same dates;

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<sup>1</sup> FCCC/CP/1998/11 and Add. 1-2.

<sup>2</sup> FCCC/CP/1998/INF.9.

<sup>3</sup> This term includes communications from the regional economic integration organization included in Annex I to the Convention.

(b) National inventory data on emissions of greenhouse gases by sources and removals by sinks on an annual basis by 15 April for the period up to the last but one year prior to the year of submission;

(c) Summary tables of national inventory data in electronic format and in hard copy. Additional and explanatory information should also, to the extent possible, be submitted in electronic format as well as hard copy;

3. *Requests* its subsidiary bodies to consider the scope, modalities and options for the review process, including the review of annual inventory information, and the need for more thorough consideration of national circumstances and reporting requirements under the Kyoto Protocol to the Convention, and to report, as appropriate, to the Conference of the Parties, at its fifth session, on any proposed changes, with a view to adopting revised guidelines for the review process at its sixth session;

4. *Decides* that each national communication referred to in paragraph 2(a) above should be subject to an in-depth review coordinated by the secretariat and in accordance with the revised guidelines;

5. *Requests* the secretariat to explore options for interim reporting by Parties on specific issues, including via on-line forms or tables, and for the analysis and publication of such reporting as interim compilation and synthesis reports by the secretariat;

6. *Urges* Annex I Parties that have not already done so to submit their second national communications, which were due by 15 April 1997 or 1998, as soon as possible,

7. *Urges* Annex I Parties that have not already done so to submit national inventory data, which were due by April 15 1998, as soon as possible,

8. *Concludes*, with respect to the reporting of information in national communications from Annex I Parties, that:

(a) Those Parties are fulfilling their Article 4.2(b) commitments to report detailed information on national policies and measures on the mitigation of climate change, as described in the compilation and synthesis of second national communications;

(b) Information contained in second national communications was generally of a higher quality than in the first national communications, thus providing a better basis for evaluating the scope and achievements of national climate change mitigation strategies;

(c) Further efforts are required to improve adherence to the relevant guidelines so as to ensure greater completeness, consistency and comparability of the data and information, including on the implementation of Article 4.3, 4.4 and 4.5 of the Convention;

9. *Concludes*, with respect to the reporting of information in national communications from Parties included in Annex II to the Convention (Annex II Parties), that those Parties are fulfilling their Article 12.3 commitments by reporting on their commitments regarding the transfer of technology and the provision of financial resources, as described in the second compilation and synthesis, but that most of them do not follow the tabular format requested by the revised guidelines annexed to decision 9/CP.2. In this regard, every effort should be made by Annex II Parties to use the tabular format;

10. *Concludes*, with respect to the implementation of the Convention by Annex I Parties, and recognizing the need to take further action to achieve the ultimate objective of the Convention, that:

(a) As described in the second compilation and synthesis report, Annex I Parties collectively had by 1995 reduced their greenhouse gas emissions from 1990 levels by about 4.6 per cent; aggregate greenhouse gas emissions by Annex I Parties are projected to be approximately 3 per cent below 1990 levels in the year 2000 and about 8 per cent above 1990 levels in the year 2010;

(b) As described in the second compilation and synthesis report, greenhouse gas emissions from Annex I Parties with economies in transition declined by 28 per cent, while Annex II Parties as a whole exhibited growing aggregate greenhouse gas emissions, with an increase of 3.5 per cent from 1990 to 1995;

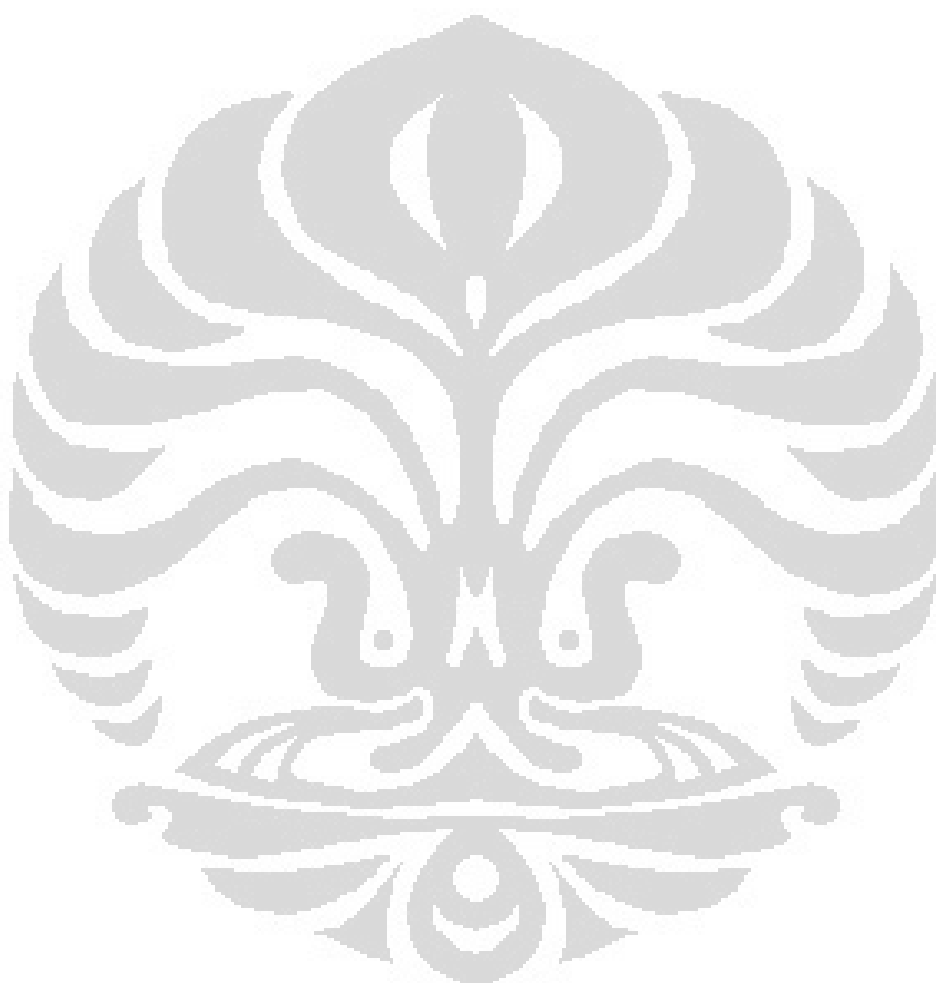
(c) Annex I Parties are fulfilling their Article 4.2 commitments to implement national policies and measures to mitigate climate change but, according to available information in the second compilation and synthesis report, many Annex I Parties will not return greenhouse gas emissions to 1990 levels by the year 2000;

11. *Notes* that Annex II Parties are providing bilateral contributions and all Annex II Parties contribute to the Global Environment Facility, and that there is a need to address the concern expressed by some Parties that Annex II Parties are falling short of their commitments related to the transfer of technology and the provision of financial resources;

12. *Invites* the SBSTA to consider the means by which the reporting requirements under the guidelines for the preparation of national communications by Annex I Parties in relation to the transfer of technology and the provision of financial resources might better identify and reflect the range of actions being taken by Annex II Parties. In this context, additional guidance should be provided by the SBI with respect to information needs and reporting on technology transfer and financial assistance;

13. *Decides* that Slovenia, having invoked Article 4.6 of the Convention requesting flexibility to use a base year other than 1990, should be allowed to use 1986 as a base year.

*8th plenary meeting  
14 November 1998*





## Decision 12/CP.4

### Initial national communications from Parties not included in Annex I to the Convention

*The Conference of the Parties,*

*Recalling* the relevant provisions of the United Nations Framework Convention on Climate Change, in particular Articles 4.1 and 10.2 (a) and Article 12.1, 12.4, 12.5, 12.6 and 12.7 thereof,

*Recalling* also its decisions on first communications from Parties not included in Annex I to the Convention (non-Annex I Parties), in particular decisions 10/CP.2 and 11/CP.2,

*Noting* that, in accordance with Article 12.5 of the Convention, each non-Annex I Party shall make its initial communication within three years of entry into force of the Convention for that Party, or of the availability of financial resources in accordance with Article 4.3 of the Convention, and that Parties that are least developed may make their initial communications at their discretion,

*Noting* further the differentiated timetable for the submission of initial national communications from non-Annex I Parties,

*Having considered* that from its first session, in accordance with Article 12.7 of the Convention, the Conference of the Parties shall arrange for the provision to developing country Parties of technical and financial support, on request, in compiling and communicating information under that Article, as well as in identifying the technical and financial needs associated with proposed projects and response measures under Article 4 of the Convention, and *having also considered* Article 12.4 of the Convention,

1. *Decides:*

(a) To consider the information communicated by non-Annex I Parties in assessing the overall aggregated effect of the steps taken by the Parties, pursuant to Article 10.2(a) of the Convention;

(b) That communications from non-Annex I Parties shall be considered in a facilitative, non-confrontational, open and transparent manner;

(c) That, pursuant to decision 10/CP.2, the national and regional development priorities, objectives and circumstances of non-Annex I Parties should, in accordance with Article 4.1 of the Convention and the provisions of Article 3 and Article 4.3, 4.4, 4.5, 4.7, 4.8,

4.9 and 4.10 of the Convention, be taken into account by the Conference of the Parties in considering matters related to their initial communications;

(d) To ensure that issues and concerns identified by non-Annex I Parties in their initial communications are brought to the attention of the Global Environment Facility (GEF) and, through it, as appropriate, its implementing agencies when undertaking the comprehensive review of enabling activities projects;

2. *Requests* the subsidiary bodies to consider issues raised in the first compilation and synthesis report of communications from non-Annex I Parties at their eleventh sessions under relevant items of their agendas;

3. *Requests* the Subsidiary Body for Implementation, at its eleventh session, to consider the information communicated by non-Annex I Parties in assessing the overall aggregated effect of the steps taken by Parties;

4. *Requests* the Subsidiary Body for Scientific and Technological Advice to prepare scientific assessments of the overall aggregated effects of measures taken, in accordance with Article 9.2 (b) of the Convention;

5. *Decides* to continue to address the consideration of communications from non-Annex I Parties at its fifth session, with a view to taking a further decision on this matter;

6. *Requests* Parties to submit their views to the secretariat by 31 March 1999 on the consideration of communications from non-Annex I Parties, as well as the timing of second national communications, taking into account Article 12.5 of the Convention, for consideration by the Subsidiary Body for Implementation at its tenth session.

7. *Requests* the secretariat:

(a) To further facilitate assistance to developing country Parties, on request, in the compilation and communication of information required, in accordance with Article 8.2 (c) of the Convention;

(b) To compile and synthesize the information provided in initial national communications from non-Annex I Parties, as indicated in decision 10/CP.2, and in so doing to report on the problems encountered in the use of guidelines for the preparation of initial communications by non-Annex I Parties, and on other issues communicated by non-Annex I Parties, with a view, among other things, to further enhancing the comparability and focus of the communications;

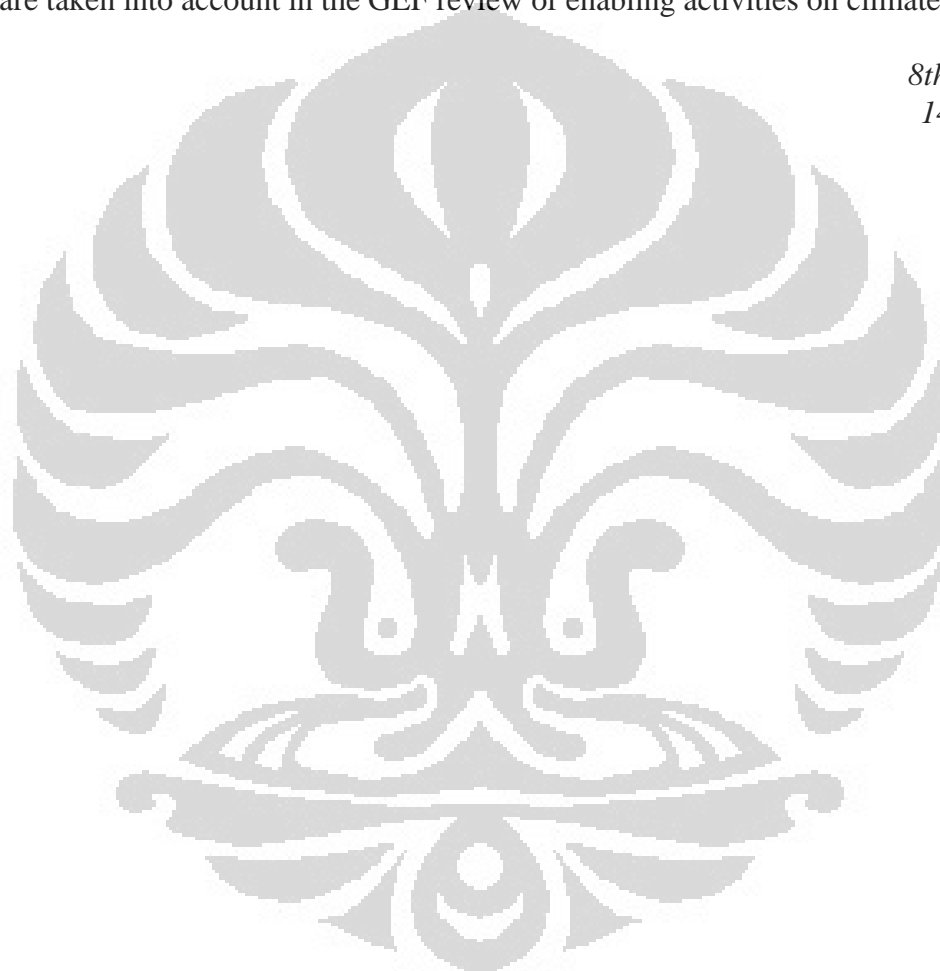
(c) To prepare the first compilation and synthesis report of communications from non-Annex I Parties based on submissions received from Parties by 1 June 1999 and make that

report available to the subsidiary bodies at their eleventh sessions and to the Conference of the Parties at its fifth session;

(d) To compile and make available to Parties a list of projects submitted by non-Annex I Parties in accordance with Article 12.4 of the Convention;

(e) To compile and make available to the Subsidiary Body for Implementation a report containing views and concerns identified by non-Annex I Parties, and to ensure that such views are taken into account in the GEF review of enabling activities on climate change;

*8th plenary meeting  
14 November 1998*



#### Decision 13/CP.4

### **Relationship between efforts to protect the stratospheric ozone layer and efforts to safeguard the global climate system: issues related to hydrofluorocarbons and perfluorocarbons**

*The Conference of the Parties,*

*Noting* the need to implement multilateral environmental agreements in a coherent way for the benefit of the global environment,

*Recalling* that the ultimate objective of the United Nations Framework Convention on Climate Change is to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system,

*Noting* the ongoing efforts to phase out ozone-depleting substances under the Montreal Protocol on Substances that Deplete the Ozone Layer, and that hydrofluorocarbons and perfluorocarbons are among the substances which are being used as replacements for ozone-depleting substances,

*Noting* further that hydrofluorocarbons and perfluorocarbons have high global warming potentials and are listed in Annex A to the Kyoto Protocol to the Convention for achieving quantified emission limitation and reduction commitments of aggregated anthropogenic carbon dioxide equivalent emissions of greenhouse gases by Parties included in Annex I to the Convention,

*Considering* that the Intergovernmental Panel on Climate Change (IPCC) is seeking to provide further scientific and technical information on present and future sources and levels of emissions of hydrofluorocarbons and perfluorocarbons, and options to mitigate those emissions,

*Noting* that the Subsidiary Body for Scientific and Technological Advice (SBSTA), with the assistance of the secretariat, is continuing its work on methodologies used by Parties for establishing estimates of emissions of hydrofluorocarbons and perfluorocarbons,

*Noting* further the need to consider available and potential ways and means of limiting emissions of hydrofluorocarbons and perfluorocarbons in the context of the Kyoto Protocol,

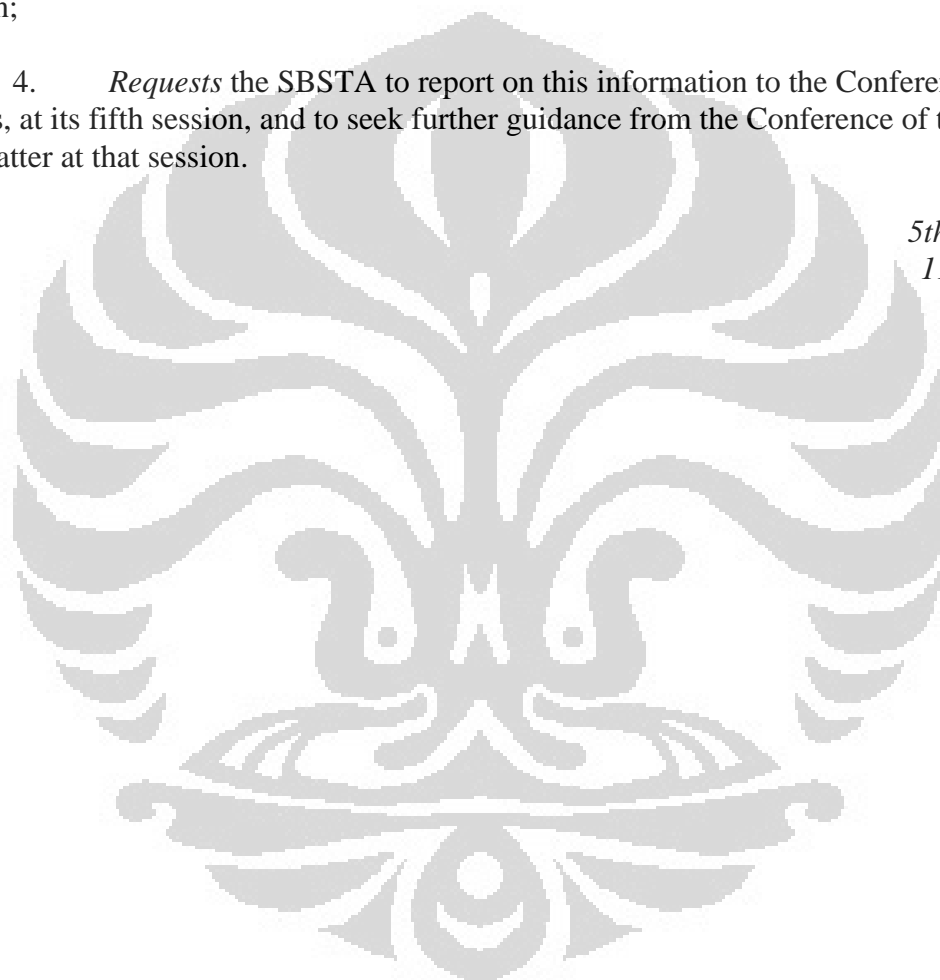
1. *Invites* Parties, the relevant bodies of the Montreal Protocol, the IPCC, intergovernmental organizations and non-governmental organizations to provide information to the secretariat, by 15 July 1999, on available and potential ways and means of limiting emissions of hydrofluorocarbons and perfluorocarbons, including their use as replacements for ozone-depleting substances;

2. *Encourages* the convening of a workshop by the IPCC and the Technology and Economic Assessment Panel of the Montreal Protocol in 1999 which will assist the SBSTA to establish information on available and potential ways and means of limiting emissions of hydrofluorocarbons and perfluorocarbons, and *invites* the IPCC to report on the results of such a joint workshop to the SBSTA at its eleventh session, if possible;

3. *Requests* the secretariat to compile the information provided, including, if available, the conclusions of the workshop, for consideration by the SBSTA at its eleventh session;

4. *Requests* the SBSTA to report on this information to the Conference of the Parties, at its fifth session, and to seek further guidance from the Conference of the Parties on this matter at that session.

*5th plenary meeting  
11 November 1998*



## Decision 14/CP.4

### Research and systematic observation

*The Conference of the Parties,*

*Recalling* Article 4.1(g)-(h) and Article 5 of the United Nations Framework Convention on Climate Change, and its decision 8/CP.3,

*Noting with appreciation* the comprehensive report on the adequacy of the global observing systems for climate,<sup>1</sup> prepared and coordinated by the Global Climate Observing System secretariat in the World Meteorological Organization on behalf of organizations participating in the Climate Agenda,

*Noting* the conclusions of the report that, *inter alia*, in many instances global and regional coverage is inadequate,

*Noting* the recommendations contained in the report to improve the global observing systems for climate,

*Noting* the ongoing work of the agencies participating in the Climate Agenda and others in support of global observing systems for climate, including their contributions to capacity-building,

*Recognizing* the significant national contributions made to the global observing systems for climate,

1. *Urges* Parties to undertake programmes of systematic observation, including the preparation of specific national plans, in response to requests from agencies participating in the Climate Agenda, based on the information developed by the Global Climate Observing System and its partner programmes;
2. *Urges* Parties to undertake free and unrestricted exchange of data to meet the needs of the Convention, recognizing the various policies on data exchange of relevant international and intergovernmental organizations;
3. *Urges* Parties to actively support capacity-building in developing countries to enable them to collect, exchange and utilize data to meet local, regional and international needs;

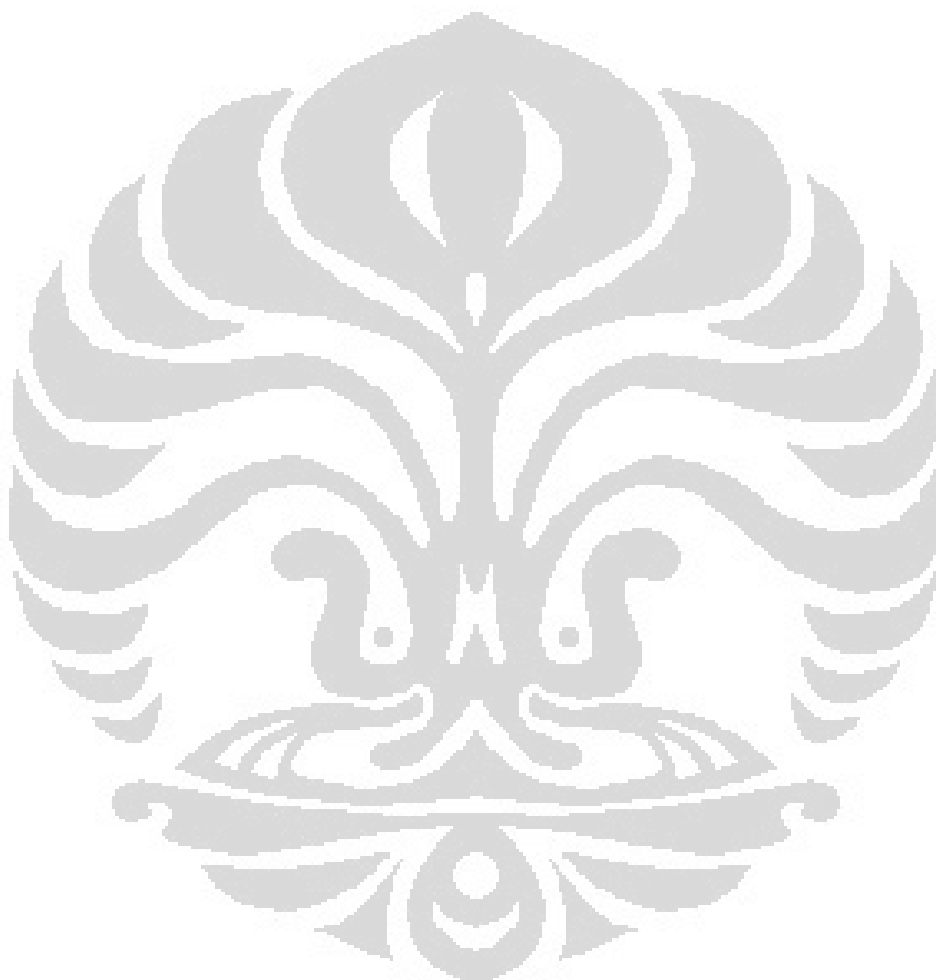
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<sup>1</sup> Contained in document FCCC/CP/1998/MISC.2 and summarized in document FCCC/CP/1998/7.

4. *Urges* Parties to strengthen international and intergovernmental programmes assisting countries to acquire and use climate information;
5. *Urges* Parties to actively support national meteorological and atmospheric observing systems, including measurement of greenhouse gases, in order to ensure that the stations identified as elements of the Global Climate Observing System networks, based on the World Weather Watch and Global Atmosphere Watch and underpinning the needs of the Convention, are fully operational and use best practices;
6. *Urges* Parties to actively support national oceanographic observing systems, in order to ensure that the elements of the Global Climate Observing System and Global Ocean Observing System networks in support of ocean climate observations are implemented, to support, to the extent possible, an increase in the number of ocean observations, particularly in remote locations, and to establish and maintain reference stations;
7. *Urges* Parties to actively support national terrestrial networks including observational programmes to collect, exchange and preserve terrestrial data according to the Global Climate Observing System and the Global Terrestrial Observing System climate priorities, particularly hydrosphere, cryosphere and ecosystem observations;
8. *Requests* Parties to submit information on national plans and programmes in relation to their participation in global observing systems for climate, in the context of reporting on research and systematic observation, as an element of national communications from Parties included in Annex I to the Convention (Annex I Parties) and, as appropriate, from Parties not included in Annex I to the Convention (non-Annex I Parties);
9. *Requests* the Subsidiary Body for Scientific and Technological Advice, in consultation with the agencies participating in the Climate Agenda, drawing *inter alia* on the information provided in the second national communications from Annex I Parties and, as appropriate, in the initial national communications from non-Annex I Parties, to inform the Conference of the Parties at its fifth session of developments regarding observational networks, difficulties encountered, *inter alia*, with respect to the needs of developing countries and options for financial support to reverse the decline in observational networks;
10. *Invites* the agencies participating in the Climate Agenda, through the Global Climate Observing System secretariat, to initiate an intergovernmental process for addressing the priorities for action to improve global observing systems for climate in relation to the needs of the Convention and, in consultation with the Convention secretariat and other relevant organizations, for identifying immediate, medium-term and long-term options for financial

support; and *requests* the secretariat to report results to the Subsidiary Body for Scientific and Technological Advice at its tenth session.

*5th plenary meeting  
11 November 1998*





## Decision 15/CP.4

### Review of information and possible decisions under Article 4.2(f) of the Convention

*The Conference of the Parties,*

*Recalling* Article 4.2(f) of the United Nations Framework Convention on Climate Change and its decision 4/CP.3,

*Recalling* also the discussions concerning the request by Pakistan and Azerbaijan at its third session for the deletion of the name of Turkey from the lists included in Annexes I and II to the Convention,

*Having received* the "National Report on Climate Change" of Turkey, and *having taken under consideration* the issue of the deletion of the name of Turkey from the lists included in Annexes I and II to the Convention,

1. *Takes note* of the new information submitted on this issue at this session;
2. *Decides* to continue the review of this matter under Article 4.2(f) of the Convention at its fifth session;
3. *Requests* the Executive Secretary to place this matter on the agenda for such further review by the Conference of the Parties at its fifth session.

*3rd plenary meeting  
6 November 1998*

## Decision 16/CP.4

### Impact of single projects on emissions in the commitment period

*The Conference of the Parties,*

*Recalling* its decision 1/CP.3, paragraph 5 (d), relating to consideration by the Conference of the Parties of and, as appropriate, action on suitable methodologies to address the situation of Parties listed in Annex B to the Kyoto Protocol to the United Nations Framework Convention on Climate Change for which single projects would have a significant proportional impact on emissions in the commitment period,

*Having considered* the conclusions of the Subsidiary Body for Scientific and Technological Advice on this matter at its eighth and ninth sessions,

1. *Requests* the Subsidiary Body for Scientific and Technological Advice to report any additional information to the Conference of the Parties at its fifth session;
2. *Resolves* to take a conclusive decision on this matter, as appropriate, at its fifth session.

*5th plenary meeting  
11 November 1998*

## Decision 17/CP.4

### Administrative and financial matters

*The Conference of the Parties,*

*Recalling* its decision 16/CP.3, paragraph 4, and decision 17/CP.3, paragraph 2,

*Bearing in mind* General Assembly resolution 52/215 of 22 December 1997 revising the United Nations scale of assessments, and considering the recommendation of the Subsidiary Body for Implementation (SBI) to revise the indicative scale of contributions to the core budget on the basis of the revised United Nations scale of assessments,

*Having considered* the information contained in documents FCCC/CP/1998/8 and Add.1, FCCC/CP/1998/9, FCCC/CP/1998/10, FCCC/CP/1998/INF.1 and FCCC/CP/1998/INF.6,

#### I. Financial statements and audited reports, 1996-1997

1. *Takes note* of the audited financial statements for the biennium 1996-1997, and the audit reports by the Office of Internal Oversight Services and by the Board of Auditors of the United Nations;
2. *Expresses appreciation* to the United Nations for arranging the audits of the operations of the Convention secretariat, and for the valuable audit observations and recommendations, and *takes note* of those recommendations;
3. *Takes note also* of the actions already taken by the Executive Secretary to implement the recommendations made by both the internal and external auditors, and *urges* that the implementation be completed as soon as possible;

#### II. Financial performance, 1998-1999

4. *Takes note* of the initial report on financial performance in 1998, including the status of contributions to all the trust funds of the Convention;
5. *Expresses appreciation* to Parties that have paid their contributions to the core budget and to Parties which have made additional voluntary contributions towards the Trust Fund for Supplementary Activities;
6. *Reiterates* its appreciation for the contributions received from Parties to assist the participation of developing country Parties, particularly the least developed and small island developing countries, and *invites* Parties to continue contributing generously towards this end;

7. *Reiterates* its appreciation to the Government of Germany for its annual contribution of DM 3.5 million and its special contribution to the core budget of DM 1.5 million as host Government to the secretariat in Bonn;

8. *Urges* Parties which have not paid their contributions to the core budget for 1996, 1997 or 1998 to do so without further delay, and *recalls* that contributions for 1999 are due on 1 January 1999;

9. *Notes with concern* the significant carry-over from one biennium to the next, arising *inter alia* from late payment of contributions, and *requests* the Executive Secretary to present options on how to deal with this issue for consideration and recommendation by the SBI at its tenth session, with a view to taking a decision on this matter, if needed, at a future session of the Conference of the Parties;

### III. Administrative arrangements

10. *Takes note* of the developments reported by the Executive Secretary in his discussions with the United Nations regarding administrative arrangements for the Convention;

11. *Endorses* the efforts of the United Nations and the Executive Secretary to achieve a more rational and efficient approach to the administrative arrangements between the secretariat and the United Nations;

12. *Requests* the Executive Secretary to report to the SBI at its tenth session on progress made in implementing the new administrative arrangements;

13. *Takes note* of the cooperation between the Convention secretariat and the secretariats of the United Nations Convention to Combat Desertification and the Convention on Biological Diversity, and *invites* the Executive Secretary to consult with the heads of the secretariats of those Conventions and report to the SBI at its eleventh session;

### IV. Financial procedures

14. *Adopts* the indicative scale of contributions to the core budget contained in the annex to this decision, which is based on the revised United Nations scale of assessments and which follows the principle that all Parties should contribute to the Convention budget;

15. *Adopts* the new indicative scale for the biennium 1998-1999 adjusted so as to ensure that no Party contributes less than 0.001 per cent of the total; that no one contribution exceeds 25 per cent of the total; and that no contribution from a least developed country Party exceeds 0.01 per cent;

16. *Amends* paragraph 7 (a) of the financial procedures (as contained in decision 15/CP.1, annex I) to read as follows: "Contributions made each year by Parties on the basis of the indicative scale adopted by consensus by the Conference of the Parties, and based on such a scale of assessments of the United Nations as may be adopted from time to time by the General Assembly";

#### V. Programme budget, 2000-2001

17. *Requests* the Executive Secretary to submit for consideration by the SBI at its tenth session a proposed programme budget for the biennium 2000-2001, including a contingency for conference services should this prove necessary in the light of decisions to be taken by the General Assembly at its fifty-fourth session;

18. *Requests* the SBI at its tenth session to recommend a programme budget for adoption by the Conference of the Parties at its fifth session.

*5th plenary meeting  
11 November 1998*

Annex

## INDICATIVE SCALE OF CONTRIBUTIONS TO THE CORE BUDGET OF UNFCCC: 1998-1999

| Party                                 | Indicative scale |       | Party                            | Indicative scale |        |
|---------------------------------------|------------------|-------|----------------------------------|------------------|--------|
|                                       | 1998             | 1999  |                                  | 1998             | 1999   |
| Albania                               | 0.003            | 0.003 | Denmark                          | 0.662            | 0.664  |
| Algeria                               | 0.112            | 0.09  | Djibouti                         | 0.001            | 0.001  |
| Antigua and Barbuda                   | 0.002            | 0.002 | Dominica                         | 0.001            | 0.001  |
| Argentina                             | 0.74             | 0.984 | Ecuador                          | 0.021            | 0.019  |
| Armenia                               | 0.026            | 0.011 | Egypt                            | 0.066            | 0.062  |
| Australia                             | 1.417            | 1.424 | El Salvador                      | 0.012            | 0.012  |
| Austria                               | 0.901            | 0.904 | Eritrea                          | 0.001            | 0.001  |
| Azerbaijan                            | 0.058            | 0.021 | Estonia                          | 0.022            | 0.014  |
| Bahamas                               | 0.014            | 0.014 | Ethiopia                         | 0.007            | 0.006  |
| Bahrain                               | 0.017            | 0.016 | European Community               | 2.5              | 2.5    |
| Bangladesh                            | 0.01             | 0.01  | Fiji                             | 0.004            | 0.004  |
| Barbados                              | 0.008            | 0.008 | Finland                          | 0.518            | 0.521  |
| Belgium                               | 1.056            | 1.06  | France                           | 6.256            | 6.285  |
| Belize                                | 0.001            | 0.001 | Gabon                            | (new)            | 0.014  |
| Benin                                 | 0.002            | 0.002 | Gambia                           | 0.001            | 0.001  |
| Bhutan                                | 0.001            | 0.001 | Georgia                          | 0.056            | 0.018  |
| Bolivia                               | 0.008            | 0.007 | Germany                          | 9.277            | 9.425  |
| Botswana                              | 0.01             | 0.01  | Ghana                            | 0.01             | 0.007  |
| Brazil                                | 1.459            | 1.413 | Greece                           | 0.355            | 0.337  |
| Bulgaria                              | 0.043            | 0.018 | Grenada                          | 0.001            | 0.001  |
| Burkina Faso                          | 0.002            | 0.002 | Guatemala                        | 0.018            | 0.017  |
| Burundi                               | 0.001            | 0.001 | Guinea                           | 0.003            | 0.003  |
| Cambodia                              | 0.001            | 0.001 | Guinea-Bissau                    | 0.001            | 0.001  |
| Cameroon                              | 0.013            | 0.012 | Guyana                           | 0.001            | 0.001  |
| Canada                                | 2.722            | 2.646 | Haiti                            | 0.002            | 0.002  |
| Cape Verde                            | 0.001            | 0.002 | Honduras                         | 0.004            | 0.003  |
| Central African Republic              | 0.002            | 0.001 | Hungary                          | 0.115            | 0.115  |
| Chad                                  | 0.001            | 0.001 | Iceland                          | 0.031            | 0.031  |
| Chile                                 | 0.109            | 0.126 | India                            | 0.294            | 0.287  |
| China                                 | 0.868            | 0.935 | Indonesia                        | 0.167            | 0.177  |
| Colombia                              | 0.104            | 0.105 | Iran (Islamic Republic of)       | 0.292            | 0.185  |
| Comoros                               | 0.001            | 0.001 | Ireland                          | 0.215            | 0.215  |
| Congo                                 | 0.003            | 0.003 | Israel                           | 0.317            | 0.332  |
| Cook Islands                          | 0.001            | 0.001 | Italy                            | 5.196            | 5.22   |
| Costa Rica                            | 0.016            | 0.015 | Jamaica                          | 0.006            | 0.006  |
| Côte d'Ivoire                         | 0.012            | 0.009 | Japan                            | 17.322           | 19.203 |
| Croatia                               | 0.054            | 0.035 | Jordan                           | 0.008            | 0.006  |
| Cuba                                  | 0.038            | 0.025 | Kazakhstan                       | 0.119            | 0.063  |
| Cyprus                                | 0.033            | 0.033 | Kenya                            | 0.007            | 0.007  |
| Czech Republic                        | 0.163            | 0.116 | Kiribati                         | 0.001            | 0.001  |
| Democratic People's Republic of Korea | 0.03             | 0.018 | Kuwait                           | 0.148            | 0.129  |
| Democratic Republic of the Congo      | 0.008            | 0.007 | Lao People's Democratic Republic | 0.001            | 0.001  |

| Party                            | Indicative scale |       | Party                                     | Indicative scale |       |
|----------------------------------|------------------|-------|---|------------------|-------|
|                                  | 1998             | 1999  |   | 1998             | 1999  |
| Latvia                           | 0.044            | 0.023 | Saint Lucia                               | 0.001            | 0.001 |
| Lebanon                          | 0.015            | 0.015 | Saint Vincent and the Grenadines          | 0.001            | 0.001 |
| Lesotho                          | 0.002            | 0.002 | Samoa                                     | 0.001            | 0.001 |
| Liechtenstein                    | 0.005            | 0.006 | San Marino                                | 0.002            | 0.002 |
| Lithuania                        | 0.043            | 0.021 | Saudi Arabia                              | 0.572            | 0.547 |
| Luxembourg                       | 0.064            | 0.065 | Senegal                                   | 0.006            | 0.006 |
| Malawi                           | 0.002            | 0.002 | Seychelles                                | 0.002            | 0.002 |
| Malaysia                         | 0.162            | 0.173 | Sierra Leone                              | 0.001            | 0.001 |
| Maldives                         | 0.001            | 0.001 | Singapore                                 | 0.161            | 0.169 |
| Mali                             | 0.003            | 0.002 | Slovakia                                  | 0.051            | 0.037 |
| Malta                            | 0.013            | 0.013 | Slovenia                                  | 0.058            | 0.059 |
| Marshall Islands                 | 0.001            | 0.001 | Solomon Islands                           | 0.001            | 0.001 |
| Mauritania                       | 0.001            | 0.001 | South Africa                              | 0.352            | 0.352 |
| Mauritius                        | 0.009            | 0.009 | Spain                                     | 2.477            | 2.488 |
| Mexico                           | 0.907            | 0.942 | Sri Lanka                                 | 0.013            | 0.012 |
| Micronesia (Federated States of) | 0.001            | 0.001 | Sudan                                     | 0.009            | 0.007 |
| Monaco                           | 0.003            | 0.004 | Suriname                                  | 0.004            | 0.004 |
| Mongolia                         | 0.002            | 0.002 | Swaziland                                 | 0.002            | 0.002 |
| Morocco                          | 0.039            | 0.039 | Sweden                                    | 1.059            | 1.042 |
| Mozambique                       | 0.002            | 0.001 | Switzerland                               | 1.17             | 1.168 |
| Myanmar                          | 0.009            | 0.008 | Syrian Arab Republic                      | 0.06             | 0.061 |
| Namibia                          | 0.007            | 0.007 | Tajikistan                                | (new)            | 0.005 |
| Nauru                            | 0.001            | 0.001 | Thailand                                  | 0.152            | 0.16  |
| Nepal                            | 0.004            | 0.004 | The Former Yugoslav Republic of Macedonia | (new)            | 0.004 |
| Netherlands                      | 1.56             | 1.567 | Togo                                      | 0.002            | 0.001 |
| New Zealand                      | 0.213            | 0.212 | Trinidad and Tobago                       | 0.017            | 0.016 |
| Nicaragua                        | 0.002            | 0.001 | Tunisia                                   | 0.027            | 0.027 |
| Niger                            | 0.002            | 0.002 | Turkmenistan                              | 0.014            | 0.008 |
| Nigeria                          | 0.067            | 0.038 | Tuvalu                                    | 0.001            | 0.001 |
| Niue                             | 0.001            | 0.001 | Uganda                                    | 0.004            | 0.004 |
| Norway                           | 0.583            | 0.586 | Ukraine                                   | 0.653            | 0.29  |
| Oman                             | 0.048            | 0.049 | United Arab Emirates                      | 0.171            | 0.171 |
| Pakistan                         | 0.058            | 0.057 | United Kingdom                            | 4.89             | 4.891 |
| Panama                           | 0.015            | 0.012 | United Republic of Tanzania               | 0.004            | 0.003 |
| Papua New Guinea                 | 0.007            | 0.007 | United States of America                  | 25               | 25    |
| Paraguay                         | 0.013            | 0.013 | Uruguay                                   | 0.047            | 0.046 |
| Peru                             | 0.082            | 0.091 | Uzbekistan                                | 0.074            | 0.036 |
| Philippines                      | 0.074            | 0.077 | Vanuatu                                   | 0.001            | 0.001 |
| Poland                           | 0.242            | 0.199 | Venezuela                                 | 0.226            | 0.169 |
| Portugal                         | 0.355            | 0.401 | Viet Nam                                  | 0.01             | 0.007 |
| Qatar                            | 0.032            | 0.032 | Yemen                                     | 0.01             | 0.01  |
| Republic of Korea                | 0.92             | 0.955 | Yugoslavia                                | 0.058            | 0.033 |
| Republic of Moldova              | 0.041            | 0.017 | Zambia                                    | 0.003            | 0.002 |
| Romania                          | 0.098            | 0.064 | Zimbabwe                                  | 0.009            | 0.009 |
| Russian Federation               | 2.768            | 1.429 |   |                  |       |
| Saint Kitts and Nevis            | 0.001            | 0.001 | TOTAL                                     | 100              | 100   |

## Decision 18/CP.4

### Attendance of intergovernmental and non-governmental organizations at contact groups

*The Conference of the Parties,*

*Having considered* the conclusions of the Subsidiary Body for Implementation at its eighth session on the involvement of non-governmental organizations in the Convention process,<sup>1</sup>

*Affirming* that negotiations under the Convention are a matter for the Parties,

*Considering* that arrangements for the attendance of observers at contact groups should also cover representatives of intergovernmental organizations,

*Recalling* Article 7.6 of the Convention and rules 6 and 7 of the draft rules of procedure being applied,<sup>2</sup>

1. *Decides* that the presiding officers of Convention bodies may invite representatives of intergovernmental and non-governmental organizations to attend as observers any open-ended contact group established under the Convention process, unless at least one third of the Parties present at the session of the Convention body setting up that contact group object, and on the understanding that the presiding officers of such contact groups may determine at any time during their proceedings that they should be closed to intergovernmental and non-governmental organizations;

2. *Invites* the presiding officers of Convention bodies, at the time of their establishment of such a contact group, to ascertain if there are objections from Parties to attendance by intergovernmental and non-governmental organizations at that contact group under the conditions set out in paragraph 1 above.

*2nd plenary meeting  
2 November 1998*

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<sup>1</sup> FCCC/SBI/1998/6, paras. 81-83.

<sup>2</sup> FCCC/CP/1996/2.



## Decision 19/CP.4

### Calendar of meetings of Convention bodies 2000 - 2001

*The Conference of the Parties,*

*Recalling* Article 7.4 of the United Nations Framework Convention on Climate Change,

1. *Decides* that the calendar of meetings of the Convention bodies for the years 2000-2001 shall be as follows:

- (a) First sessional period in 2000: from 5 to 16 June;
- (b) Second sessional period in 2000: November/December;<sup>1</sup>
- (c) First sessional period in 2001: from 21 May to 1 June;
- (d) Second sessional period in 2001: from 29 October to 9 November;

2. *Further decides* that, following current practice and assuming that the Conference of the Parties continues to meet annually, the second sessional period in each of these years would include a session of the Conference of the Parties.

*8th plenary meeting  
14 November 1998*

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<sup>1</sup> Dates to be determined.

## II. RESOLUTIONS ADOPTED BY THE CONFERENCE OF THE PARTIES

### Resolution 1/CP.4

#### Solidarity with Central America

*The Conference of the Parties,*

*Having learned*, with deep sadness, of the considerable loss of life and devastation caused by Hurricane Mitch in Honduras, Nicaragua, Guatemala, El Salvador, Belize, Costa Rica and Panama,

*Aware* of the high vulnerability of Central American countries to climate phenomena,

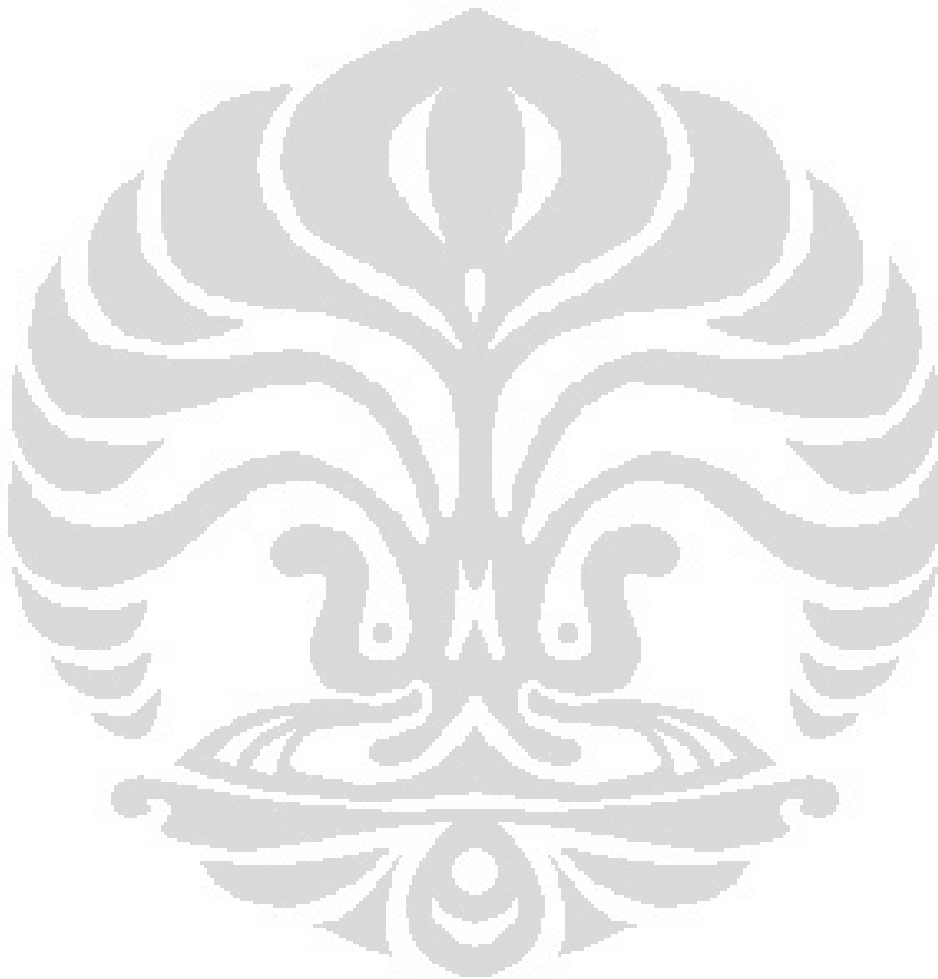
*Concerned* that global warming may be contributing to the worsening of weather, and *concluding* that further scientific investigation of the impacts of climate change and its relationship to extremes of weather is critical,

*Recognizing* as well that the unfortunate occurrences mentioned lend special urgency to our deliberations in this Conference, and oblige us to look for new opportunities for common cooperative actions,

1. *Expresses* to the people and governments of Central America its strongest solidarity in the tragic circumstances they are facing, which demonstrate the need to take action to prevent and mitigate the effects of climate change, particularly in the most vulnerable countries;
2. *Invites* the international community, including intergovernmental and non-governmental organizations, to lend immediate assistance;
3. *Urges* all governments, United Nations agencies, intergovernmental and non-governmental organizations, the private sector and society in general to continue their efforts to find permanent solutions to the factors which cause or may cause climate events, and to take steps to achieve the early entry into force of the Kyoto Protocol to the United Nations Framework Convention on Climate Change;
4. *Invites* support for the Central American initiatives from the Presidential Summit convened in San Salvador, El Salvador, on 9 November 1998, which calls for a sustainable

reconstruction plan for Central American countries, and for increased technical and financial assistance for Central America.

*8th plenary meeting  
14 November 1998*



**Resolution 2/CP.4**

**Expression of gratitude to the Government of the Republic of Argentina  
and to the City and people of Buenos Aires**

*The Conference of the Parties,*

*Having met* in Buenos Aires from 2 to 14 November 1998 at the invitation of the Government of the Republic of Argentina,

1. *Expresses its profound gratitude* to the Government of the Republic of Argentina for having made it possible for the fourth session of the Conference of the Parties to be held in Buenos Aires;
2. *Requests* the Government of the Republic of Argentina to convey to the City and to the people of Buenos Aires the gratitude of the Conference of the Parties for the hospitality and warm welcome extended to the participants.

*8th plenary meeting  
14 November 1998*

### III. OTHER ACTION TAKEN BY THE CONFERENCE OF THE PARTIES

1. Issues of mutual concern to the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity

At its 3<sup>rd</sup> plenary meeting, on 6 November 1998, the Conference of the Parties decided that issues of mutual concern to the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity should be taken up by the subsidiary bodies at their tenth sessions. The Chairmen of the subsidiary bodies, in consultation with the rest of the Bureau, should determine the allocation of those issues between the two subsidiary bodies (see Part One, section VIII, para. 92 of the present report).

2. Scientific and methodological aspects of the proposal by Brazil

At its 5<sup>th</sup> plenary meeting, on 11 November 1998, the Conference of the Parties took note of the following conclusions on this subject, adopted by the Subsidiary Body for Scientific and Technological Advice (SBSTA) at its ninth session:<sup>1</sup>

(a) The SBSTA noted the information provided by Brazil on recent scientific activities and on the workshop to be organized regarding the proposal presented by Brazil in document FCCC/AGBM/1997/MISC.1/Add.3. The SBSTA also noted the potential contribution of other relevant analyses to increase understanding of the methodological and scientific aspects of this proposal. The SBSTA invited the delegation of Brazil to inform the SBSTA at its tenth session of the results of its workshop and provide it with other relevant information;

(b) The SBSTA decided to further consider at its tenth session the scientific and methodological aspects of the proposal by Brazil.

The Conference of the Parties requested the SBSTA to inform it, at its fifth session, of any relevant information, taking into account the results of ongoing scientific activities and information from a workshop to be organized by Brazil on that issue (see Part One, section IV H, para. 73 of the present report).

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<sup>1</sup> See FCCC/SBSTA/1998/9, para. 29.



**UNITED  
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**Framework Convention  
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CONFERENCE OF THE PARTIES

**REPORT OF THE CONFERENCE OF THE PARTIES ON  
ITS SEVENTH SESSION, HELD AT MARRAKESH  
FROM 29 OCTOBER TO 10 NOVEMBER 2001**

Addendum

**PART TWO: ACTION TAKEN BY THE CONFERENCE OF THE PARTIES**

Volume I

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## I. THE MARRAKESH MINISTERIAL DECLARATION

### Decision 1/CP. 7

#### The Marrakesh Ministerial Declaration

**The Ministers and other heads of delegation present at the seventh session of the Conference of the Parties to the United Nations Framework Convention on Climate Change,**

*Mindful* of the objective of the Convention, as set out in its Article 2,

*Reaffirming* that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties,

*Believing* that addressing the many challenges of climate change will make a contribution to achieving sustainable development,

*Recognizing* that the World Summit on Sustainable Development provides an important opportunity for addressing the linkages between climate change and sustainable development,

1. *Note* the decisions adopted by the seventh session of the Conference of the Parties in Marrakesh, constituting the Marrakesh Accords, that pave the way for the timely entry into force of the Kyoto Protocol;

2. *Remain* deeply concerned that all countries, particularly developing countries, including the least developed countries and small island States, face increased risk of negative impacts of climate change;

3. *Recognize* that, in this context, the problems of poverty, land degradation, access to water and food and human health remain at the centre of global attention; therefore, the synergies between the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity, and the United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, should continue to be explored through various channels, in order to achieve sustainable development;

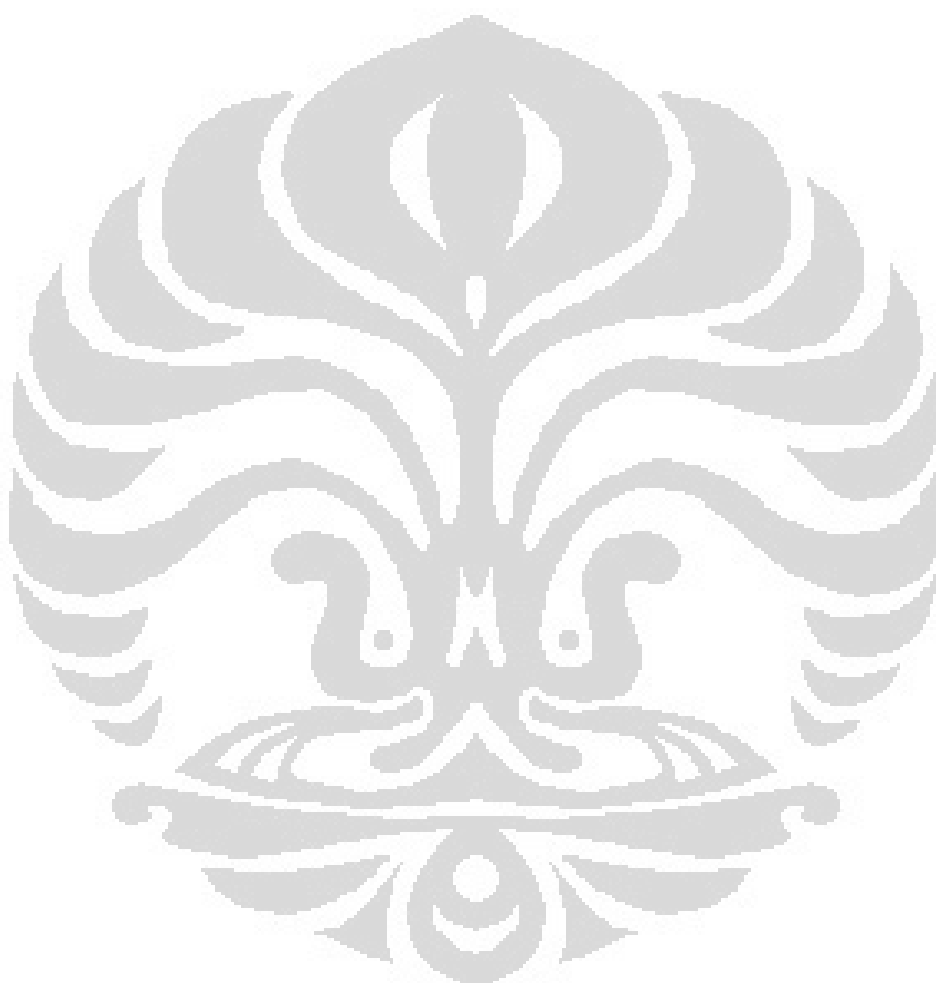
4. *Stress* the importance of capacity-building, as well as of developing and disseminating innovative technologies in respect of key sectors of development, particularly energy, and of investment in this regard, including through private sector involvement, market-oriented approaches, as well as supportive public policies and international cooperation;

5. *Emphasize* that climate change and its adverse impacts have to be addressed through cooperation at all levels, and welcome the efforts of all Parties to implement the Convention;



6. *Request* the President of the Conference of the Parties at its seventh session and the Executive Secretary of the United Nations Framework Convention on Climate Change to continue to participate actively in the preparatory process for the World Summit, and in the Summit itself, and to report thereon to the Conference of the Parties at its eighth session.

*8<sup>th</sup> plenary meeting  
10 November 2001*



## II. THE MARRAKESH ACCORDS

### Decision 2/CP.7

#### Capacity building in developing countries (non-Annex I Parties)

*The Conference of the Parties,*

*Being guided* by Articles 4.1, 4.3, 4.4, 4.5 and 4.7, in the context of Article 3, and Articles 5 and 6 of the Convention,

*Recalling* the provisions related to capacity building for developing countries contained in its decisions 11/CP.1, 10/CP.2, 11/CP.2, 9/CP.3, 2/CP.4, 4/CP.4, 5/CP.4, 6/CP.4, 7/CP.4, 12/CP.4 and 14/CP.4,

*Noting* Article 10, paragraphs (c), (d) and (e), and Article 11 of the Kyoto Protocol,

*Recalling also* the paragraphs on capacity building of Agenda 21 and the Programme for the Further Implementation of Agenda 21,

*Reaffirming* its decision 10/CP.5,

*Reaffirming also* that capacity building for developing countries is essential to enable them to participate fully in, and to implement effectively their commitments under, the Convention,

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

1. *Adopts* the framework for capacity building in developing countries annexed to this decision;
2. *Decides* that this framework should guide capacity-building activities related to the implementation of the Convention and effective participation in the Kyoto Protocol process;
3. *Decides* to give immediate effect to this framework in order to assist developing countries to implement the Convention and to effectively participate in the Kyoto Protocol process;
4. *Notes* that areas for capacity building identified under the Convention are relevant to the preparation of developing country Parties for their effective participation in the Kyoto Protocol process;
5. *Requests* the Global Environment Facility, as an operating entity of the financial mechanism, to report on its progress in support of the implementation of this framework in its reports to the Conference of the Parties;

6. *Urges* the operating entity of the financial mechanism to adopt a streamlined and expedited approach in financing activities within this framework;

7. *Invites* bilateral and multilateral agencies, and other intergovernmental organizations and institutions, to inform the Conference of the Parties, through the secretariat, of capacity-building activities conducted to assist developing country Parties with their implementation of the framework;

8. *Encourages* bilateral and multilateral agencies, and other intergovernmental organizations and institutions, to consult with developing countries in formulating programmes and action plans to support capacity-building activities in accordance with the annexed framework;

9. *Requests* the secretariat, in accordance with this framework for capacity building, and consistent with Article 8 of the Convention, to undertake the following tasks:

(a) To cooperate with the operating entity of the financial mechanism, its implementing agencies and other entities for capacity building, to facilitate the implementation of this framework;

(b) To collect, process, compile and disseminate, in both printed and electronic formats, the information needed by the Conference of the Parties or its subsidiary bodies to review the progress in the implementation of this framework for capacity building, drawing in particular on information contained in:

(i) National communications of developing country Parties relating to capacity-building activities;

(ii) National communications of Parties included in Annex II to the Convention on activities and programmes undertaken to facilitate capacity building in developing countries related to the implementation of this framework;

(iii) Reports from the Global Environment Facility and other agencies;

(c) To provide reports to the Conference of the Parties at each of its sessions on activities to implement this framework;

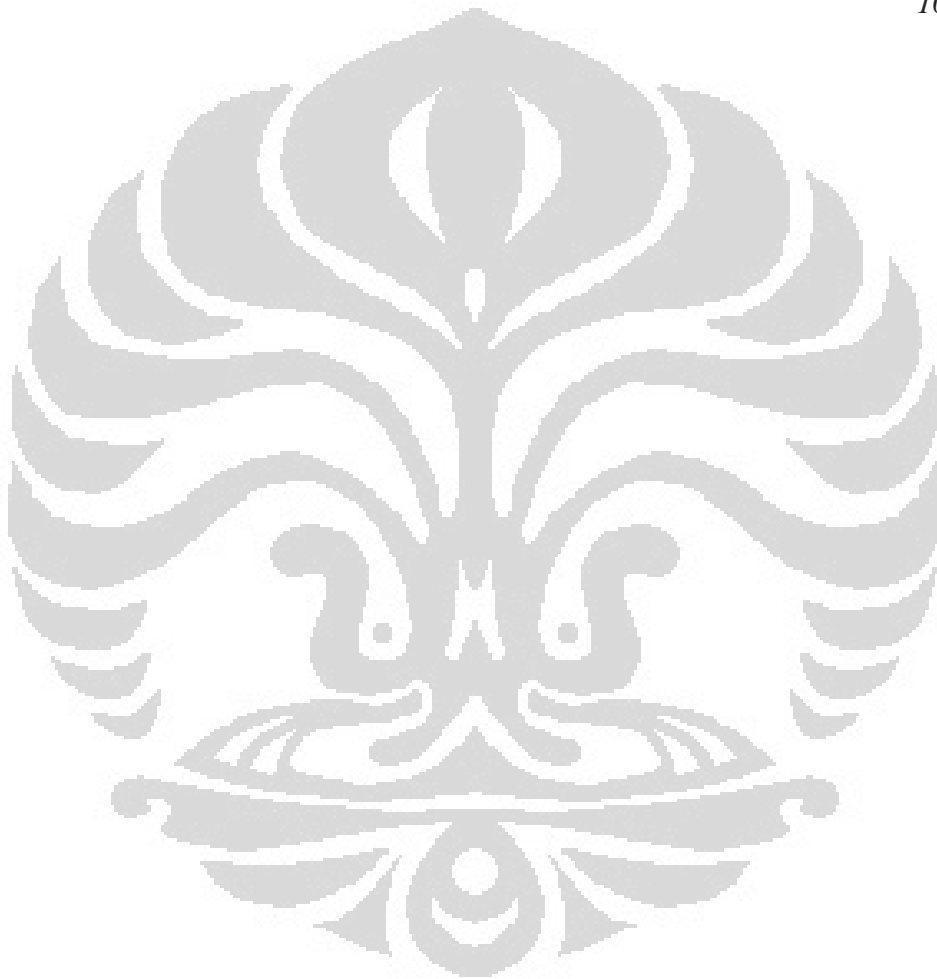
10. *Decides* that the Subsidiary Body for Implementation will regularly monitor the progress of the implementation of this framework, taking into account the information provided under paragraphs 9(b) and 9(c) above, and reporting to the Conference of the Parties at each of its sessions;

11. *Decides* to conduct a comprehensive review of the implementation of this framework at the ninth session of the Conference of the Parties, and every five years thereafter;

12. *Invites* Parties to provide information through national communications and other reports to enable the Subsidiary Body for Implementation to monitor progress in the implementation of this framework;

13. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session, adopt a decision containing a framework on capacity building that reaffirms the framework annexed to the present decision with additional reference to priority areas for capacity building relating to the implementation of the Kyoto Protocol.

*8<sup>th</sup> plenary meeting  
10 November 2001*



## ANNEX

### **Framework for capacity building in developing countries**

#### **A. Purposes**

1. The present framework for capacity building in developing countries sets out the scope of, and provides the basis for action on, capacity building related to the implementation of the Convention and preparation for the effective participation of developing countries in the Kyoto Protocol process that will, in a coordinated manner, assist them in promoting sustainable development while meeting the objective of the Convention. It should serve as a guide for the Global Environment Facility as an operating entity of the financial mechanism, and be considered by multilateral and bilateral organizations in their capacity-building activities related to the implementation of the Convention and preparation for their effective participation in the Kyoto Protocol process.

#### **B. Guiding principles and approaches**

2. This framework for capacity-building in developing countries is guided and informed by, *inter alia*, Articles 4.1, 4.3, 4.4, 4.5 and 4.7, in the context of Article 3, and Articles 5, 6 and 11.1 of the Convention, and relevant provisions contained in decisions 11/CP.1, 10/CP.2, 11/CP.2, 9/CP.3, 2/CP.4, 4/CP.4, 5/CP.4, 6/CP.4, 7/CP.4, 12/CP.4, 14/CP.4, and 10/CP.5,<sup>1</sup> and takes into account Article 10, paragraphs (c), (d), and (e), and Article 11 of the Kyoto Protocol.

3. Capacity-building activities related to the implementation of the Convention by developing countries and to the preparation for their effective participation in the Kyoto Protocol process should build on work already undertaken by developing countries, as well as on the work undertaken with support from multilateral and bilateral organizations.

4. The capacity-building needs already identified in the various decisions of the Conference of the Parties should continue to be comprehensively and promptly addressed to promote sustainable development in developing countries through the effective implementation of the Convention and preparation for their effective participation in the Kyoto Protocol process.

5. There is no “one size fits all” formula for capacity building. Capacity building must be country-driven, addressing the specific needs and conditions of developing countries and reflecting their national sustainable development strategies, priorities and initiatives. It is primarily to be undertaken by and in developing countries in accordance with the provisions of the Convention.

6. Capacity building is a continuous, progressive and iterative process, the implementation of which should be based on the priorities of developing countries.

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<sup>1</sup> For the full texts of decisions adopted by the Conference of the Parties at its first, second, third, fourth and fifth sessions, see documents FCCC/CP/1995/7/Add.1, FCCC/CP/1996/15/Add.1, FCCC/CP/1997/7/Add.1, FCCC/CP/1998/16/Add.1 and FCCC/CP/1999/6/Add.1, respectively.

7. Capacity-building activities should be undertaken in an effective, efficient, integrated and programmatic manner, taking into consideration the specific national circumstances of developing countries.
8. Capacity-building activities undertaken within this framework should maximize synergies between the Convention and other global environmental agreements, as appropriate.
9. Capacity building is crucial to developing countries, especially those that are particularly vulnerable to the adverse effects of climate change. The special circumstances of least developed countries and small island developing States need to be taken into account in the implementation of this framework. They include:
  - (a) Fragile ecosystems;
  - (b) High population pressure and isolated geographic locations;
  - (c) Weak economies, low incomes, high levels of poverty and a lack of foreign investment;
  - (d) Land degradation, desertification;
  - (e) Undeveloped services, *inter alia*, meteorologic and hydrological services and water resources management;
  - (f) Lack of early warning systems for natural disaster management;
  - (g) Inadequate food security.
10. Capacity building involves “learning by doing”. Demonstration projects may be used in identifying and learning about the specific capacities that need to be further developed in developing countries.
11. Existing national institutions have an important role to play in supporting capacity-building activities in developing countries. Such centres can incorporate traditional skills, knowledge and practices, to provide appropriate services in developing countries and facilitate information sharing. Whenever possible and effective, therefore, capacity building should mobilize these existing national, subregional and regional institutions and the private sector in developing countries, and build on existing processes and endogenous capacities.
12. National coordinating mechanisms and focal points and national coordinating entities have an important role to play in ensuring coordination at the country and regional levels and may serve as the focal point for coordinating capacity-building activities.
13. Multilateral and bilateral bodies are encouraged to take account of this framework in their consultations with developing countries when supporting capacity-building activities related to the implementation of the Convention and the preparation for the effective participation by developing countries in the Kyoto Protocol process.

### **C. Objective and scope of capacity building**

#### *Objective*

14. Capacity building should assist developing countries to build, develop, strengthen, enhance, and improve their capabilities to achieve the objective of the Convention through the implementation of the provisions of the Convention and the preparation for their effective participation in the Kyoto Protocol process.

#### *Scope*

15. The following is the initial scope of needs and areas for capacity building in developing countries as broadly identified in the annex to decision 10/CP.5, in the compilation and synthesis document prepared by the secretariat,<sup>2</sup> and in submissions by Parties:<sup>3</sup>

- (a) Institutional capacity building, including the strengthening or establishment, as appropriate, of national climate change secretariats or national focal points;
- (b) Enhancement and/or creation of an enabling environment;
- (c) National communications;
- (d) National climate change programmes;
- (e) Greenhouse gas inventories, emission database management, and systems for collecting, managing and utilizing activity data and emission factors;
- (f) Vulnerability and adaptation assessment;
- (g) Capacity building for implementation of adaptation measures;
- (h) Assessment for implementation of mitigation options;
- (i) Research and systematic observation, including meteorological, hydrological and climatological services;
- (j) Development and transfer of technology;
- (k) Improved decision-making, including assistance for participation in international negotiations;
- (l) Clean development mechanism;
- (m) Needs arising out of the implementation of Article 4, paragraphs 8 and 9, of the Convention;
- (n) Education, training and public awareness;

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<sup>2</sup> FCCC/SB/2000/INF.1.

<sup>3</sup> FCCC/SB/2000/INF.5.

- (o) Information and networking, including the establishment of databases.

16. Other capacity-building needs and possible responses are being identified by the Parties in their discussions of other issues. The decisions resulting from these discussions, as well as other activities related to the implementation of the Convention and preparation for the effective participation by developing countries in the Kyoto Protocol process, should continue to inform the scope and implementation of this framework.

*Specific scope for capacity building in least developed countries*

17. The least developed countries, and small island developing States amongst them, are among the most vulnerable to extreme weather events and the adverse effects of climate change. They also have the least capacity to cope with and adapt to the adverse effects of climate change. The following is the initial assessment of needs and priority areas for capacity building in these countries:

- (a) Strengthening existing and, where needed, establishing national climate change secretariats or focal points to enable the effective implementation of the Convention and effective participation in the Kyoto Protocol process, including preparation of national communications;
- (b) Developing an integrated implementation programme which takes into account the role of research and training in capacity building;
- (c) Developing and enhancing technical capacities and skills to carry out and effectively integrate vulnerability and adaptation assessments into sustainable development programmes and develop national adaptation programmes of action;
- (d) Strengthening existing and, where needed, establishing national research and training institutions in order to ensure the sustainability of the capacity-building programmes;
- (e) Strengthening the capacity of meteorological and hydrological services to collect, analyse, interpret and disseminate weather and climate information to support implementation of national adaptation programmes of action;
- (f) Enhancing public awareness (level of understanding and human capacity development).

**D. Implementation**

*Actions to enhance the implementation of this framework, taking into account the initial scope outlined in paragraphs 15 to 17 above*

18. All Parties should improve the coordination and effectiveness of capacity-building efforts through dialogue between and among Annex II Parties, developing country Parties, and bilateral and multilateral institutions. All Parties should support the operation of this framework and promote conditions conducive to the sustainability and effectiveness of capacity-building activities.



19. In implementing this framework, developing country Parties should:

(a) Continue to identify their specific needs, options and priorities for capacity building on a country-driven basis, taking into account existing capacities and past and current activities;

(b) Promote South-South cooperation by utilizing the services of institutions in developing countries that can support capacity-building activities at the national, subregional and regional levels, wherever possible and effective;

(c) Promote the participation of a wide range of stakeholders, including governments at all levels, national and international organizations, civil society and the private sector, as appropriate;

(d) Promote the coordination and sustainability of activities undertaken within this framework, including the efforts of national coordinating mechanisms, focal points, and national coordinating entities;

(e) Facilitate the dissemination and sharing of information on capacity-building activities conducted by developing countries for better coordination and South-South cooperation.

20. In implementing this framework, Annex II Parties should:

(a) Provide additional financial and technical resources to assist developing countries, in particular the least developed countries and small island developing States among them, in the implementation of this framework, including promptly available financial and technical resources to enable them to undertake country-level needs assessments and to develop specific capacity-building activities consistent with this framework;

(b) Respond to the capacity-building needs and priorities of developing countries, in particular the least developed countries and small island developing States among them, in a coordinated and timely manner, and support activities implemented at the national and, as appropriate, subregional and regional levels;

(c) Give particular attention to the needs of least developed countries and small island developing States among them.

#### *Financing and operation*

21. Financial and technical resources should be made available, through an operating entity of the financial mechanism and, as appropriate, through multilateral and bilateral agencies and the private sector, to assist developing countries, in particular the least developed countries and small island developing States among them, in the implementation of this framework.

22. In response to this framework, the operating entity of the financial mechanism should elaborate a country-driven strategy for its capacity-building activities.

23. Multilateral and bilateral agencies are encouraged to take constructive action to support capacity-building activities in this framework through streamlined and coordinated approaches and in a timely manner.

24. Financial and other assistance is to be made available to developing countries, in particular to the least developed countries and small island developing States among them, to enable them to continue to determine, assess and prioritize their needs for capacity building in a simple, timely manner and to assist them in strengthening existing institutions and, when needed, to establish the institutional arrangements to implement effective capacity-building activities.

25. The capacity-building activities undertaken within this framework are to be country-driven and implemented primarily at the country level.

26. In order to facilitate the exchange of information and cooperation, developing countries, in collaboration with relevant institutions, should identify regional, subregional and sectoral activities that can effectively and efficiently address common capacity-building needs.

27. The results of activities conducted by the Global Environment Facility as a multilateral financial institution, including the Capacity Development Initiative, as well as activities undertaken by multilateral, bilateral and private sector entities, may be considered in further developing capacity-building activities within this framework at the regional and subregional levels.

#### *Time frame*

28. This framework for capacity building should be implemented promptly, taking into account the immediate, medium- and long-term priority needs identified by developing countries.

29. Developing countries which have already identified their capacity-building priorities through ongoing work aimed at the implementation of the Convention should be able to promptly implement capacity-building activities under this framework.

30. The immediate priority needs of developing countries, in particular the least developed countries and small island developing States among them, should be addressed urgently in the implementation of this framework.

#### *Review of progress*

31. The Conference of the Parties, through the Subsidiary Body for Implementation, shall regularly monitor and review the progress in the implementation of this framework.

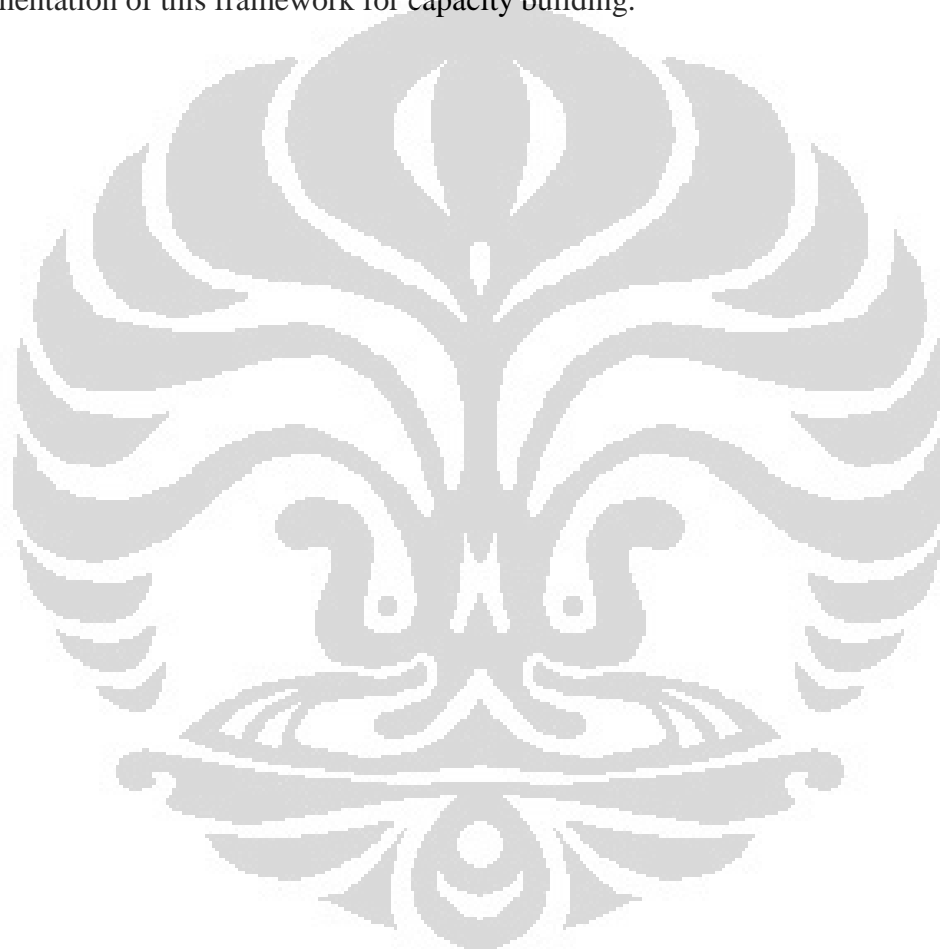
32. The Global Environment Facility, as an operating entity of the financial mechanism, is requested to report on its progress in support of the implementation of this framework in its reports to the Conference of the Parties.

*Role of the secretariat*

33. In accordance with this framework for capacity building, the secretariat is requested, consistent with Article 8 of the Convention, to undertake the following tasks:

(a) To cooperate with the operating entity of the financial mechanism, its implementing agencies and other entities for capacity building to facilitate the implementation of this framework;

(b) To collect, process, compile and disseminate the information needed by the Conference of the Parties or its subsidiary bodies to review the progress made in the implementation of this framework for capacity building.



### **Decision 3/CP.7**

#### **Capacity building in countries with economies in transition**

*The Conference of the Parties,*

*Recalling* its decision 11/CP.5,

*Recalling* Articles 4.1, 4.2, 4.5 and 4.6, 5, 6 and 12 of the Convention,

*Noting* Articles 2, 3, 5, 6, 7, 10 and 17 of the Kyoto Protocol,

*Further recalling* its decisions 9/CP.2, 6/CP.4 and 7/CP.4,

*Having considered* the relevant recommendations of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation,<sup>1</sup>

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

1. *Adopts* the framework for capacity-building activities in countries with economies in transition contained in the annex below;
2. *Decides* to give immediate effect to this framework, in order to assist Parties with economies in transition to implement the Convention;
3. *Notes* that many areas for capacity building identified under the Convention are also relevant to the preparation of Parties with economies in transition for participation in the Kyoto Protocol when it enters into force;
4. *Decides* to review the effectiveness of the implementation of the framework at regular intervals;
5. *Invites* Parties included in Annex II to the Convention (Annex II Parties) and Parties with economies in transition to provide information to enable the Conference of the Parties and the subsidiary bodies to monitor progress in the implementation of this framework, consistent with guidelines for the preparation of national communications;
6. *Urges* Annex II Parties, through multilateral agencies, including through the Global Environment Facility within its mandate, and bilateral agencies and the private sector, as appropriate, to make available financial and technical support for the implementation of this framework for capacity building, including assistance for the development of national action plans of Parties with economies in transition consistent with their priorities;
7. *Further urges* multilateral and bilateral agencies to coordinate their activities in support of the implementation of this framework for capacity building;

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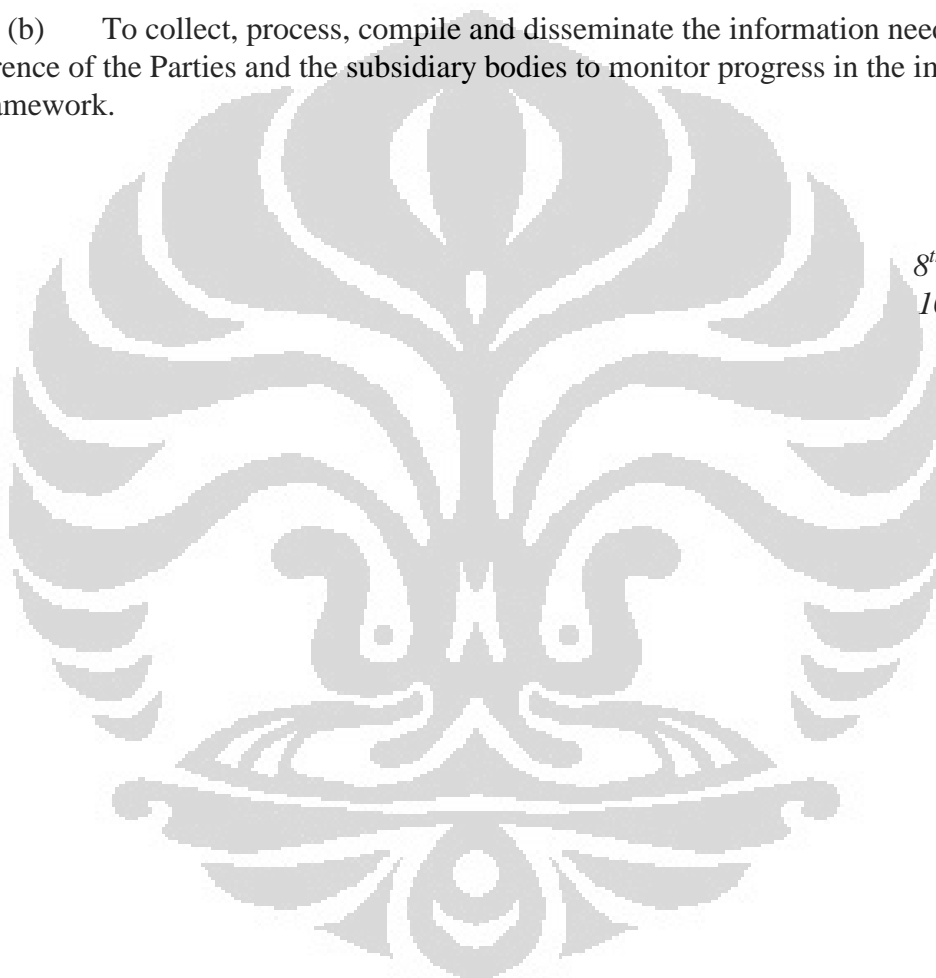
<sup>1</sup> FCCC/SBSTA/2000/10 and FCCC/SBI/2000/10.

8. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session, adopt a decision endorsing a framework for capacity building under the Convention that parallels the framework contained in the annex below, with additional reference to priority areas for capacity building relating to implementation of the Kyoto Protocol;

9. *Requests* the secretariat, consistent with Article 8 of the Convention:

(a) To cooperate with multilateral and bilateral institutions to facilitate the implementation of this framework;

(b) To collect, process, compile and disseminate the information needed by the Conference of the Parties and the subsidiary bodies to monitor progress in the implementation of this framework.



*8<sup>th</sup> plenary meeting  
10 November 2001*

## ANNEX

### **Framework for capacity building in countries with economies in transition**

#### **A. Purpose**

1. The purpose of this framework for capacity building is to set out the scope and basis for action for capacity-building activities in countries with economies in transition (EIT Parties) under the Convention and for the preparation of EIT Parties for their participation in the Kyoto Protocol when it enters into force.

#### **B. Guiding principles and approaches**

2. This framework for capacity-building in EIT Parties is guided and informed by, *inter alia*, Articles 4.1, 4.2, 4.5 and 4.6, 5, 6 and 12 of the Convention and relevant provisions contained in decisions 9/CP.2, 6/CP.4, 7/CP.4 and 11/CP.5,<sup>2</sup> and takes account of Articles 2, 3, 5, 6, 7 and 17 of the Kyoto Protocol.

3. As Parties included in Annex I, EIT Parties have quantified emission limitation and reduction commitments that impose challenges to their existing capacities to implement the Convention. As Parties undergoing the process of transition to a market economy, they need to enhance their ability to address climate change issues. Capacity building is therefore critical to the effective implementation by EIT Parties of their commitments under the Convention and the preparation of EIT Parties for their participation in the Kyoto Protocol when it enters into force.

4. Capacity building for EIT Parties must be country-driven, be consistent with their national sustainable development strategies, reflect their national initiatives and priorities, respond to needs determined and prioritized by EIT Parties themselves, and be primarily undertaken by and in EIT Parties in partnership with other Parties and relevant organizations, as appropriate, in accordance with the provisions of the Convention.

5. Capacity building should contribute to the effective implementation of the Convention by EIT Parties and the preparation of EIT Parties for their participation in the Kyoto Protocol when it enters into force.

6. Capacity-building efforts are more effective when they take place within an enabling environment conducive to the development of human, institutional and technical capacity.

7. Capacity building should be results-oriented and implemented in an integrated and programmatic manner to facilitate its monitoring and evaluation, cost-effectiveness and efficiency.

8. Capacity building is a continuous process aimed at strengthening or establishing, as appropriate, relevant institutions, organizational structures, and human resources in order to strengthen expertise relevant to paragraph 3 of this framework.

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<sup>2</sup> For the full texts of decisions adopted by the Conference of the Parties at its second, fourth and fifth sessions, see FCCC/CP/1996/15/Add.1, FCCC/CP/1998/16/Add.1 and FCCC/CP/1999/6/Add.1 respectively.

9. Capacities should be developed and strengthened in a manner and under conditions that will work towards sustainability and support the short- and long-term objectives and priorities of EIT Parties under the Convention.
10. Capacity building involves “learning by doing”. Capacity-building activities should be designed and implemented in a flexible manner.
11. Capacity building should improve the coordination and effectiveness of existing efforts and promote the participation of, and dialogue between, a wide range of actors and constituencies, including governments at all levels, international organizations, civil society and the private sector.
12. Wherever possible, capacity-building should utilize existing institutions and bodies and build on existing processes and endogenous capacities.
13. National focal points and other institutions, such as research centres and universities and other relevant organizations, should play an important role in providing capacity-building services and facilitating the flow of knowledge, best practices and information.
14. Capacity-building should be designed so that it results in the development, strengthening and enhancement of institutional capacities, human resources, knowledge and information, methodologies and practices, and the participation and networking of EIT Parties to promote sustainable development, and for the purpose set out in paragraph 1 of this framework.
15. Capacity building in support of achieving the objectives of the Convention should maximize synergies between the Convention and other global environmental agreements, as appropriate.
16. Capacity building is more effective when it is coordinated at all levels (national, regional and international) through dialogue between and among Annex I Parties, and when past and existing efforts are taken into account.

### **C. Objective and scope of capacity building**

#### *Objective*

17. To build the capacity of EIT Parties to enable them to effectively implement the objective of the Convention and to prepare for their participation in the Kyoto Protocol when it enters into force.

#### *Scope*

18. To ensure that capacity-building efforts are country-driven, each EIT Party should, within the scope of capacity building, determine its specific objectives, needs, priorities, and options to implement the Convention and to prepare for its participation in the Kyoto Protocol when it enters into force, consistent with its national sustainable development strategy, taking into account existing capacities and past and current activities undertaken by the country itself, and in partnership with bilateral and multilateral institutions and the private sector.

19. The needs for capacity building in EIT Parties were first identified in the compilation and synthesis document prepared by the secretariat<sup>3</sup> based on the submissions of EIT Parties.<sup>4</sup> The general areas and needs for capacity building are listed below. This scope for capacity-building may be revised as further information is made available and as needs and priorities are further identified.

20. General priority areas for capacity-building identified by EIT Parties related to the implementation of the Convention, which may also be relevant to their preparation for participation in the Kyoto Protocol, are to be identified in their national action plan for capacity building, and include:

- (a) National greenhouse gas (GHG) inventories;
- (b) Projections of GHG emissions;
- (c) Policies and measures, and the estimation of their effects;
- (d) Impact assessment and adaptation;
- (e) Research and systematic observation;
- (f) Education, training and public awareness;
- (g) Transfer of environmentally sound technologies;
- (h) National communications and national climate action plans;
- (i) National systems for estimation of GHG emissions;
- (j) Modalities for accounting relating to targets, timetables and national registries;
- (k) Reporting obligations;
- (l) Joint implementation projects and emissions trading.

21. In order to maximize available resources for capacity building and to facilitate exchange and cooperation among EIT Parties, multilateral and bilateral agencies in consultation with EIT Parties should assist, as appropriate, the efforts of EIT Parties themselves to identify, develop and implement national, regional, subregional and sectoral activities that meet the capacity-building needs of EIT Parties. The results of the current and next phase of the Capacity Development Initiative of the Global Environment Facility (GEF) could provide valuable inputs for these activities.

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<sup>3</sup> FCCC/SB/2000/INF.2.

<sup>4</sup> FCCC/SB/2000/INF.7.



## **D. Implementation**

### *Responsibilities for implementation*

22. In implementing the activities undertaken within this framework for capacity-building, EIT and Annex II Parties have the following mutual responsibilities:

- (a) To improve the coordination and effectiveness of existing efforts;
- (b) To provide information to enable the Conference of the Parties to monitor progress in the implementation of this framework for capacity building.

23. In the implementation of this framework for capacity building, EIT Parties have the following responsibilities:

- (a) To provide an enabling environment to promote the sustainability and effectiveness of capacity-building activities relating to the implementation of the ultimate objective of the Convention;
- (b) To identify their specific needs, priorities and options for capacity building on a country-driven basis, taking into account existing capacities and past and current activities;
- (c) To identify and provide information on their own capacity-building activities;
- (d) To promote cooperation among EIT Parties as well as to report to the Conference of the Parties on these activities in their national communications;
- (e) To ensure the mobilization and sustainability of national capacities, including the institutional leadership necessary for national coordination and the effectiveness of capacity-building activities;
- (f) To promote the participation in and access to capacity-building activities of all stakeholders, including governments, civil society and the private sector, as appropriate.

24. In cooperating with EIT Parties to support the implementation of this framework for capacity building, Annex II Parties have the following responsibilities:

- (a) To assist EIT Parties, including by making available financial and other resources, to undertake country-level needs assessments to enable them to effectively implement the Convention and, as appropriate, to prepare them for participation in the Kyoto Protocol when it enters into force;
- (b) To assist EIT Parties, including through the provision of financial and other resources, to implement options for capacity building consistent with their specific priorities and this framework.

### *Financing*

25. The Annex II Parties, through multilateral agencies, including through the Global Environment Facility within its mandate, and bilateral agencies and the private sector as

appropriate, are requested to make available financial and technical support to assist EIT Parties in the implementation of this framework for capacity building.

*Time frame*

26. The implementation of activities undertaken within this framework for capacity building should commence as soon as possible.

*Monitoring of progress*

27. The Conference of the Parties, through the subsidiary bodies, shall monitor the effectiveness of the implementation of this framework for capacity building.

28. Information to enable the Conference of the Parties to monitor the effectiveness of the implementation of this framework should be reported by Parties. Other institutions involved in capacity building in EIT Parties are invited to provide information for this purpose.

*Role of the secretariat*

29. In accordance with this framework for capacity building, the secretariat is requested, consistent with Article 8 of the Convention, to undertake the following tasks:

- (a) To cooperate with multilateral and bilateral institutions to facilitate the implementation of this framework;
- (b) To collect, process, compile and disseminate the information needed by the Conference of the Parties or its subsidiary bodies to monitor progress in the implementation of this framework for capacity building.

## Decision 4/CP.7

### Development and transfer of technologies (decisions 4/CP.4 and 9/CP.5)

*The Conference of the Parties,*

*Recalling* chapter 34 of Agenda 21 and the relevant provisions of the programme for the further implementation of Agenda 21 on the transfer of environmentally sound technologies adopted by the United Nations General Assembly at its nineteenth special session,<sup>1</sup>

*Pursuant* to the relevant provisions of the Convention, in particular, its Articles 4.1, 4.3, 4.5, 4.7, 4.8 and 4.9, Article 9.2(c), Articles 11.1, 11.5, and Articles 12.3 and 12.4,

*Recalling* its decisions 11/CP.1, 13/CP.1, 7/CP.2, 9/CP.3, 4/CP.4, 9/CP.5 and the relevant provisions of its decision 1/CP.4 on the Buenos Aires Plan of Action,

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

1. *Decides* to adopt the framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention contained in the annex to this decision as part of the outcome of the technology transfer consultative process (decision 4/CP.4) and the Buenos Aires Plan of Action (decision 1/CP.4);
2. *Decides* to establish an expert group on technology transfer to be nominated by Parties, with the objective of enhancing the implementation of Article 4, paragraph 5, of the Convention, including, *inter alia*, by analysing and identifying ways to facilitate and advance technology transfer activities and making recommendations to the Subsidiary Body for Scientific and Technological Advice. The Conference of the Parties will review at its twelfth session the progress of the work and terms of reference, including, if appropriate, the status and continuation of the expert group;
3. *Requests* the Global Environment Facility, as an operating entity of the financial mechanism of the Convention, to provide financial support for the implementation of the annexed framework through its climate change focal area and the special climate change fund established under decision 7/CP.7;
4. *Urges* developed country Parties to provide technical and financial assistance, as appropriate, through existing bilateral and multilateral cooperative programmes to support the efforts of the Parties in implementing the programmes and measures identified in the annexed framework and to enhance the implementation of Article 4, paragraph 5, of the Convention;

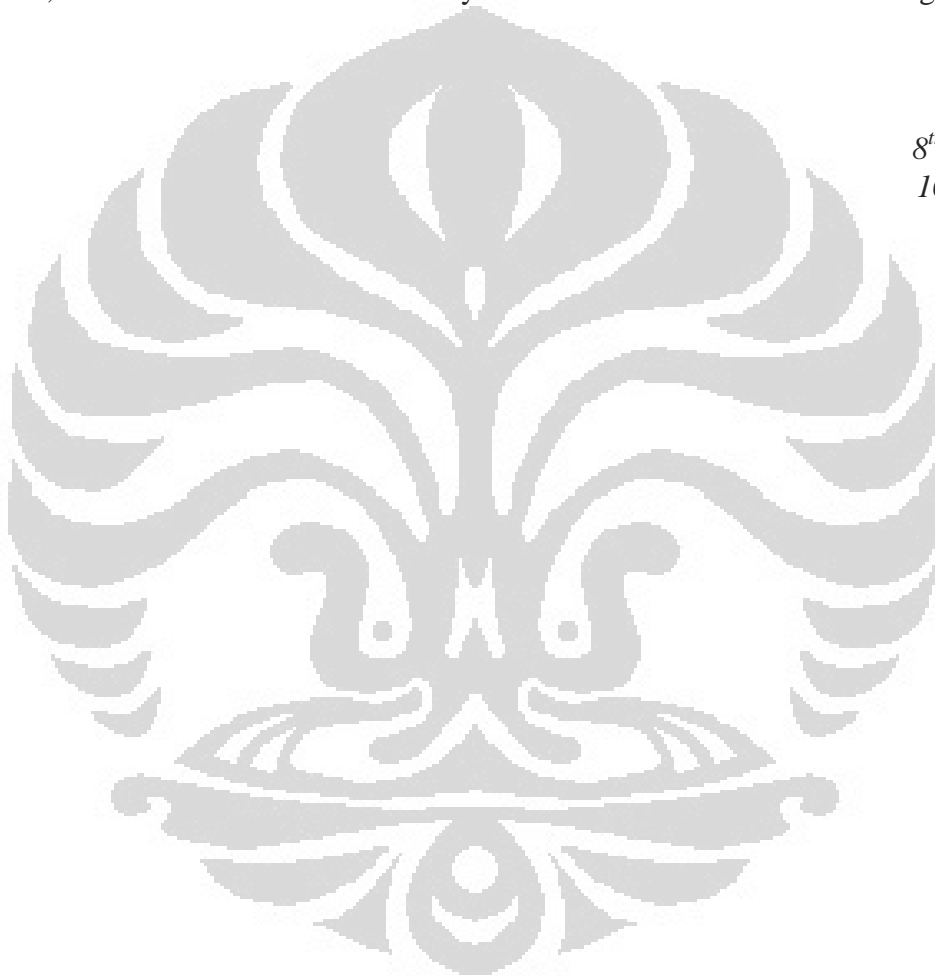
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<sup>1</sup> A/RES/S-19/2.

5. *Requests* the Convention secretariat:

(a) To consult with relevant international organizations, and solicit information on their capabilities and abilities to support certain activities identified in the framework for meaningful and effective actions contained in the annex to this decision, and to report on its findings to the Subsidiary Body for Scientific and Technological Advice at its seventeenth session;

(b) To facilitate the implementation of the annexed framework in cooperation with the Parties, the Global Environment Facility and other relevant international organizations.



*8<sup>th</sup> plenary meeting  
10 November 2001*

## ANNEX

### **Framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention**

#### **A. Purpose**

1. The purpose of this framework is to develop meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention by increasing and improving the transfer of and access to environmentally sound technologies (ESTs) and know-how.

#### **B. Overall approach**

2. The successful development and transfer of ESTs and know-how requires a country-driven, integrated approach, at a national and sectoral level. This should involve cooperation among various stakeholders (the private sector, governments, the donor community, bilateral and multilateral institutions, non-governmental organizations and academic and research institutions), including activities on technology needs assessments, technology information, enabling environments, capacity building and mechanisms for technology transfer.

#### **C. Key themes and areas for meaningful and effective actions**

##### **1. Technology needs and needs assessments**

###### *Definition*

3. Technology needs and needs assessments are a set of country-driven activities that identify and determine the mitigation and adaptation technology priorities of Parties other than developed country Parties, and other developed Parties not included in Annex II, particularly developing country Parties. They involve different stakeholders in a consultative process to identify the barriers to technology transfer and measures to address these barriers through sectoral analyses. These activities may address soft and hard technologies, such as mitigation and adaptation technologies, identify regulatory options and develop fiscal and financial incentives and capacity building.

###### *Purpose*

4. The purpose of technology needs assessments is to assist in identifying and analysing priority technology needs, which can form the basis for a portfolio of EST projects and programmes which can facilitate the transfer of, and access to, the ESTs and know-how in the implementation of Article 4, paragraph 5, of the Convention.

###### *Implementation*

5. Parties other than developed country Parties, and other developed Parties not included in Annex II, particularly developing country Parties, are encouraged to undertake assessments of country-specific technology needs, subject to the provision of resources, as appropriate to country-specific circumstances, from developed country Parties and other developed Parties included in Annex II. Other organizations in a position to do so may also assist in facilitating the

technology needs assessment process. Parties are encouraged to make available information on the results of their needs assessments in their national communications, other related national reports and channels (for example, technology information clearing houses) for consideration by the Subsidiary Body for Scientific and Technological Advice (SBSTA) on a regular basis.

6. Developed country Parties and other developed Parties included in Annex II to the Convention are urged to facilitate and support the needs assessments process, recognizing the special circumstances of least developed countries.

7. The Chairman of the SBSTA, with the assistance of the secretariat, in consultation with the expert group on technology transfer, is requested to organize a meeting with representatives from governments, experts drawn from the UNFCCC roster of experts, and representatives from relevant international organizations, to identify methodologies needed to undertake technology needs assessments and to report its findings to the SBSTA at its sixteenth session.

## 2. Technology information

### *Definition*

8. The technology information component of the framework defines the means, including hardware, software and networking, to facilitate the flow of information between the different stakeholders to enhance the development and transfer of environmentally sound technologies. This technology information component of the framework could provide information on technical parameters, economic and environmental aspects of environmentally sound technologies and the identified technology needs of Parties not included in Annex II, particularly developing country Parties, as well as information on the availability of environmentally sound technologies from developed countries and opportunities for technology transfer.

### *Purpose*

9. The technology information component serves to establish an efficient information system in support of technology transfer and to improve the generation and flow of, access to, and quality of technical, economic, environmental and regulatory information relating to the development and transfer of ESTs under the Convention.

### *Implementation*

10. The Convention secretariat is requested:

(a) To build on the success of the current work, including that undertaken by the secretariat, in cooperation with the Climate Technology Initiative and other relevant organizations, *inter alia*, to develop a new search engine on the Internet that will allow for quick access to existing inventories of environmentally sound and economically viable technologies and know-how, including those conducive to mitigating and adapting to climate change;

(b) To identify, in collaboration with regional centres and other institutions, gaps in existing EST inventories, and update and develop inventories, as needed;

(c) To organize an expert workshop on technology information, including options for the establishment of an information clearing house and enhancement of information centres and networks, and to further define user needs, criteria for quality control, technical specifications and the role and contribution of the Parties;

(d) To accelerate its work on the development of a technology transfer information clearing house by coordinating with Parties and relevant United Nations agencies and other international organizations and institutions, and developing options for implementation, in particular, networking of an international technology information clearing house under the Convention, and enhancement of technology information centres and networks. A report on the options and recommendations should be provided to the SBSTA at its sixteenth session.

11. An information clearing house, including a network of technology information centres, should be established under the auspices of the secretariat, by the time of the eighth session of the Conference of the Parties, taking into consideration the conclusions of the SBSTA, at its sixteenth session, on the above-mentioned report.

### 3. Enabling environments

#### *Definition*

12. The enabling environments component of the framework focuses on government actions, such as fair trade policies, removal of technical, legal and administrative barriers to technology transfer, sound economic policy, regulatory frameworks and transparency, all of which create an environment conducive to private and public sector technology transfer.

#### *Purpose*

13. The purpose of the enabling environments component of the framework is to improve the effectiveness of the transfer of environmentally sound technologies by identifying and analysing ways of facilitating the transfer of environmentally sound technologies, including the identification and removal of barriers at each stage of the process.

#### *Implementation*

14. The following are means of creating enabling environments for technology transfer:

(a) All Parties, particularly developed country Parties, are urged to improve, as appropriate, the enabling environment for the transfer of environmentally sound technologies through the identification and removal of barriers, including, *inter alia*, strengthening environmental regulatory frameworks, enhancing legal systems, ensuring fair trade policies, utilizing tax preferences, protecting intellectual property rights and improving access to publicly funded technologies and other programmes, in order to expand commercial and public technology transfer to developing countries;

(b) All Parties are urged to explore, as appropriate, opportunities for providing positive incentives, such as preferential government procurement and transparent and efficient approval procedures for technology transfer projects, which support the development and diffusion of environmentally sound technologies;

- (c) All Parties are urged to promote joint research and development programmes, as appropriate, both bilaterally and multilaterally;
- (d) Developed country Parties are encouraged to promote further and to implement facilitative measures, for example export credit programmes and tax preferences, and regulations, as appropriate, to promote the transfer of environmentally sound technologies;
- (e) All Parties, particularly developed country Parties, are encouraged to integrate, as appropriate, the objective of technology transfer to developing countries into their national policies, including environmental and research and development policies and programmes;
- (f) Developed countries are encouraged to promote, as appropriate, the transfer of publicly owned technologies.

#### 4. Capacity building

##### *Definition*

15. Within the context of enhancing the implementation of Article 4, paragraph 5, of the Convention, capacity building is a process which seeks to build, develop, strengthen, enhance and improve existing scientific and technical skills, capabilities and institutions in Parties other than developed country Parties, and other developed Parties not included in Annex II, particularly developing country Parties, to enable them to assess, adapt, manage and develop environmentally sound technologies.

16. Capacity building must be country-driven, addressing specific needs and conditions of developing countries and reflecting their national sustainable development strategies, priorities and initiatives. It is primarily to be undertaken by and in developing countries in accordance with the provisions of the Convention.

##### *Purpose*

17. The purpose of capacity building under this framework is to strengthen the capacities of Parties other than developed country Parties and other developed Parties not included in Annex II, particularly developing country Parties, to promote the widespread dissemination, application and development of environmentally sound technologies and know-how, to enable them to implement the provisions of the Convention. Capacity building under this framework should be guided by the principles established in the decisions related to capacity building (decisions 2/CP.7 and 3/CP.7).

##### *Scope*

18. The following sets out the initial scope of the needs and areas for capacity building of Parties, other than developed country Parties and other developed Parties not included in Annex II, particularly developing country Parties, for the transfer of, and access to, environmentally sound technologies and know-how:

- (a) Implementation of regional, subregional and/or national capacity-building activities related to the transfer and development of technologies;



- (b) Enhancement of the awareness of financial institutions, public, private and international, of the need to evaluate environmentally sound technologies on an equal footing with other technology options;
  - (c) Provision of opportunities for training in the use of environmentally sound technologies through demonstration projects;
  - (d) Enhancement of skills in the adoption, adaptation, installation, operation and maintenance of specific environmentally sound technologies and a broadening of understanding of methodologies for evaluating alternative technological options;
  - (e) Strengthening of the capacities of existing national and regional institutions relevant to technology transfer, taking into account country- and sector-specific circumstances, including South-South cooperation and collaboration;
  - (f) Training in project development and the management and operation of climate technologies;
  - (g) Development and implementation of standards and regulations promoting the use, transfer of, and access to ESTs, taking cognizance of country-specific policies, programmes and circumstances;
  - (h) Development of skills and know-how in conducting technology needs assessments;
  - (i) Improvement of knowledge on energy efficiency and the utilization of renewable energy technologies.
19. The following sets out the initial scope of the needs and areas for capacity building for the development and enhancement of endogenous capacities and technologies in developing countries. These shall be country-driven processes supported by developed country Parties:
- (a) To establish and/or strengthen, as appropriate, relevant organizations and institutions in developing countries;
  - (b) To establish and/or strengthen, to the extent possible, training, expert exchange, scholarship and cooperative research programmes in relevant national and regional institutions in developing countries for the transfer, operation, maintenance, adaptation, diffusion and development of environmentally sound technologies;
  - (c) To build capacity for adapting to the adverse effects of climate change;
  - (d) To strengthen the endogenous capacities and capabilities in research, development, technological innovation, adoption and adaptation, and technology for systematic observation relevant to climate change and its associated adverse effects;
  - (e) To improve knowledge in the areas of energy efficiency and the utilization of renewable energy technologies.

*Implementation*

20. Developed country Parties and other Parties included in Annex II shall take all practicable steps:

(a) To make available resources to assist developing countries in the implementation of capacity building to enhance the implementation of Article 4, paragraph 5, taking into account the provisions of paragraphs 18 and 19 above. These resources should include adequate financial and technical resources to enable developing countries to undertake country-level needs assessments and to develop specific capacity-building activities consistent with enhancing the implementation of Article 4, paragraph 5;

(b) To respond to the capacity-building needs and priorities of developing countries in a coordinated and timely manner, and support activities implemented at the national and, as appropriate, subregional and regional levels;

(c) To give particular attention to the needs of least developed countries and small island developing States.

21. All Parties should improve the coordination and effectiveness of capacity-building activities relating to the development and transfer of technologies. All Parties should promote conditions conducive to the sustainability and effectiveness of these capacity-building activities.

#### 5. Mechanisms for technology transfer

*Definition*

22. The mechanisms for technology transfer, as identified in this section, are to facilitate the support of financial, institutional and methodological activities: (a) to enhance the coordination of the full range of stakeholders in different countries and regions; (b) to engage them in cooperative efforts to accelerate the development and diffusion, including transfer, of environmentally sound technologies, know-how and practices to and between Parties other than developed country Parties and other developed Parties not included in Annex II, particularly developing country Parties, through technology cooperation and partnerships (public/public, private/public and private/private); and (c) to facilitate the development of projects and programmes to support such ends.

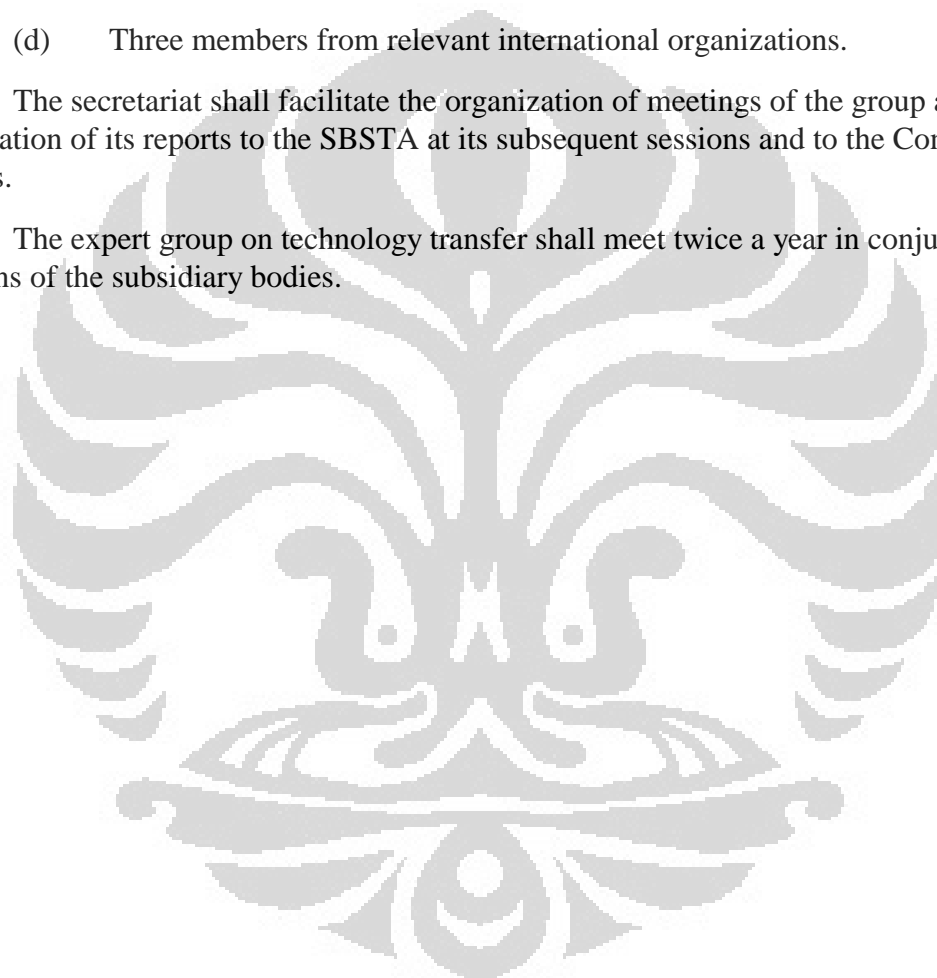
*Purpose*

23. The purpose of the proposed mechanisms is to develop meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention by increasing the transfer of and access to environmentally sound technologies and know-how.

*Implementation - Institutional arrangement for technology transfer*

24. Functions: To provide scientific and technical advice on the advancement of the development and transfer of environmentally sound technologies and know-how under the Convention, including the preparation of an action plan to enhance the implementation of Article 4, paragraph 5, of the Convention.

25. The terms of reference of the expert group on technology transfer appear in the appendix below.
26. The expert group on technology transfer shall comprise 20 experts, as follows:
- (a) Three members from each of the regions of the Parties not included in Annex I, namely Africa, Asia and the Pacific, and Latin America and the Caribbean;
  - (b) One member from the small island developing States;
  - (c) Seven members from Parties included in Annex I; and
  - (d) Three members from relevant international organizations.
27. The secretariat shall facilitate the organization of meetings of the group and the preparation of its reports to the SBSTA at its subsequent sessions and to the Conference of the Parties.
28. The expert group on technology transfer shall meet twice a year in conjunction with the sessions of the subsidiary bodies.



## APPENDIX

**Terms of reference of the expert group on technology transfer**

1. The expert group on technology transfer shall have the objectives of enhancing the implementation of Article 4, paragraph 5, of the Convention and advancing the technology transfer activities under the Convention.
2. The expert group on technology transfer shall analyse and identify ways to facilitate and advance technology transfer activities, including those identified in the annex to decision 3/CP.7, and make recommendations to the Subsidiary Body for Scientific and Technological Advice (SBSTA).
3. The expert group on technology transfer shall report on its work each year and propose a programme of work for the following year for decision by the SBSTA.
4. The members of the expert group on technology transfer shall be nominated by Parties for a period of two years and be eligible to serve two consecutive terms. The SBSTA shall ensure that half of the members of the expert group nominated initially shall serve for a period of three years, taking into account the need to maintain the overall balance of the group. Every year thereafter, half of the members shall be nominated for a period of two years. Appointment pursuant to paragraph 5 shall count as one term. The members shall remain in office until their successors are nominated. The members from three relevant international organizations shall serve on an issue-oriented basis.
5. If a member of the expert group on technology transfer resigns or is otherwise unable to complete the assigned term of office or to perform the functions of that office, the expert group may decide, bearing in mind the proximity of the next session of the Conference of the Parties, to request the group that had nominated the member to nominate another member to replace the said member for the remainder of that member's mandate. In such a case, the expert group shall take into account any views expressed by the group that had nominated the member.
6. The expert group on technology transfer shall annually elect a chairperson and a vice-chairperson from among its members, with one being a member from a Party included in Annex I and the other being a member from a Party not included in Annex I. The positions of chairperson and vice-chairperson shall alternate annually between a member from a Party included in Annex I and a member from a Party not included in Annex I.
7. The members of the expert group on technology transfer shall serve in their personal capacity and shall have expertise in any of the following areas, *inter alia*, greenhouse gas mitigation and adaptation technologies, technology assessments, information technology, resource economics, or social development.

### Decision 5/CP.7

#### **Implementation of Article 4, paragraphs 8 and 9, of the Convention (decision 3/CP.3 and Article 2, paragraph 3, and Article 3, paragraph 14, of the Kyoto Protocol)<sup>1</sup>**

*The Conference of the Parties,*

*Determined* to protect the climate system for present and future generations,

*Recalling* its decisions 11/CP.1, 3/CP.3, 1/CP.4, 5/CP.4 and 12/CP.5,

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Recognizing* the specific needs and concerns of developing country Parties referred to in Article 4, paragraph 8, of the Convention, and the specific needs and special situations of the least developed countries referred to in Article 4, paragraph 9,

*Recognizing* that low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change,

*Recognizing* the special difficulties of those countries, especially developing countries, whose economies are particularly dependent on fossil fuel production, use and exportation, as a consequence of action taken to limit greenhouse gas emissions,

*Reaffirming* that Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities, and that, accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof,

*Reaffirming* that the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, which would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration,

*Affirming* that responses to climate change should be coordinated with social and economic development in an integrated manner with a view to avoiding adverse impacts on the latter, taking into full account the legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty,

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<sup>1</sup> Paragraphs 13, 17, and 18 of the draft decision contained in document FCCC/CP/2001/5/Add.1 have been omitted from the final text of this decision, since their content is subsumed in decisions 6/CP.7, 28/CP.7 and 29/CP.7 and by the conclusions contained in section V.D. of document FCCC/CP/2001/13/Add.4.

*Acknowledging* the efforts already made by Parties to meet the specific needs and concerns of developing country Parties, in particular the least developed countries, with regard to adaptation,

*Acknowledging* the need to sensitize policy makers and the general public in Parties not included in Annex I to the Convention to climate change and its effects, in accordance with Article 6(a) of the Convention,

*Having considered* the report,<sup>2</sup> in two parts, on the two workshops referred to in decision 12/CP.5,

*Noting* the many persistent uncertainties highlighted by those workshops, particularly with regard to the impact of response measures,

*Insisting* that the extent to which developing country Parties will effectively implement their commitments will depend on the effective implementation by the developed country Parties of their commitments relating to financial resources and transfer of technology and will also take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties,

*Acknowledging* that the impact of the implementation of response measures will differ significantly from country to country, depending on each country's unique national circumstances, including the structure of its economy, trade and investment, natural resource endowment, social system, legal regime and population growth rate,

*Recognizing* that the least developed country Parties are among the most vulnerable to the adverse effects of climate change, and in particular that widespread poverty limits their adaptive capacity,

*Acknowledging* that the human, infrastructural and economic conditions of the least developed countries severely limit their capacities to participate effectively in the climate change process,

*Noting* that many of the least developed country Parties do not have the capacity to prepare and submit national communications in the foreseeable future,

## **I. ADVERSE EFFECTS OF CLIMATE CHANGE**

1. *Asserts* the importance of a country-driven approach that allows developing country Parties to pursue the specific activities most appropriate to their unique national circumstances;
2. *Insists* that action related to adaptation follow an assessment and evaluation process, based on national communications and/or other relevant information, so as to prevent maladaptation and to ensure that adaptation actions are environmentally sound and will produce real benefits in support of sustainable development;

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<sup>2</sup> FCCC/SB/2000/2.

3. *Encourages* Parties not included in Annex I to the Convention (non-Annex I Parties) to provide information, including in their national communications, and/or any other relevant information sources, on their specific needs and concerns arising from the adverse effects of climate change;
4. *Stresses* the need for Parties included in Annex II to the Convention (Annex II Parties) to provide detailed information, including in their national communications, on support programmes to meet the specific needs and circumstances of developing country Parties arising from the adverse effects of climate change;
5. *Encourages* Parties to exchange information on their experience regarding the adverse effects of climate change and on measures to meet their needs arising from these adverse effects;
6. *Underlines* the importance of the ongoing work of the secretariat in compiling and disseminating information on methods and tools for evaluating impacts and adaptation strategies;
7. *Decides* that the implementation of the following activities shall be supported through the Global Environment Facility (in accordance with decision 6/CP.7) and other bilateral and multilateral sources:
  - (a) Information and methodologies:
    - (i) Improving data collection and information gathering, as well as their analysis, interpretation and dissemination to end-users;
    - (ii) Integrating climate change considerations into sustainable development planning;
    - (iii) Providing training in specialized fields relevant to adaptation such as climate and hydroclimate studies, geographical information systems, environmental impact assessment, modelling, integrated coastal zone management, soil and water conservation and soil restoration;
    - (iv) Strengthening existing and, where needed, establishing national and regional systematic observation and monitoring networks (sea-level rise, climate and hydrological monitoring stations, fire hazards, land degradation, floods, cyclones and droughts);
    - (v) Strengthening existing and, where needed, establishing national and regional centres and institutions for the provision of research, training, education and scientific and technical support in specialized fields relevant to climate change, utilizing information technology as much as possible;
    - (vi) Strengthening existing and, where needed, establishing national and regional research programmes on climate variability and climate change, oriented towards improving knowledge of the climate system at the regional level, and creating national and regional scientific capability;

- (vii) Supporting education and training in, and public awareness of, climate change related issues, for example through workshops and information dissemination;
- (b) Vulnerability and adaptation:
  - (i) Supporting enabling activities for vulnerability and adaptation assessment;
  - (ii) Enhancing technical training for integrated climate change impact and vulnerability and adaptation assessments across all relevant sectors, and environmental management related to climate change;
  - (iii) Enhancing capacity, including institutional capacity, to integrate adaptation into sustainable development programmes;
  - (iv) Promoting the transfer of adaptation technologies;
  - (v) Establishing pilot or demonstration projects to show how adaptation planning and assessment can be practically translated into projects that will provide real benefits, and may be integrated into national policy and sustainable development planning, on the basis of information provided in the national communications from non-Annex I Parties and/or other relevant sources, and of the staged approach endorsed by the Conference of the Parties in its decision 11/CP.1;
  - (vi) Supporting capacity building, including institutional capacity, for preventive measures, planning, preparedness of disasters relating to climate change, including contingency planning, in particular, for droughts and floods in areas prone to extreme weather events;
  - (vii) Strengthening existing and, where needed, establishing early warning systems for extreme weather events in an integrated and interdisciplinary manner to assist developing country Parties, in particular those most vulnerable to climate change;

8. *Decides* that the implementation of the following activities shall be supported through the special climate change fund (in accordance with decision 7/CP.7) and/or the adaptation fund (in accordance with decision 10/CP.7), and other bilateral and multilateral sources:

(a) Starting to implement adaptation activities promptly where sufficient information is available to warrant such activities, *inter alia*, in the areas of water resources management, land management, agriculture, health, infrastructure development, fragile ecosystems, including mountainous ecosystems, and integrated coastal zone management;

(b) Improving the monitoring of diseases and vectors affected by climate change, and related forecasting and early-warning systems, and in this context improving disease control and prevention;



(c) Supporting capacity building, including institutional capacity, for preventive measures, planning, preparedness and management of disasters relating to climate change, including contingency planning, in particular, for droughts and floods in areas prone to extreme weather events;

(d) Strengthening existing and, where needed, establishing national and regional centres and information networks for rapid response to extreme weather events, utilizing information technology as much as possible;

9. *Decides* to consider, at its eighth session, the implementation of insurance-related actions to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change, based on the outcome of the workshops referred to in paragraphs 37 and 38 below;

10. *Requests* the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation to review, at their subsequent sessions, the progress of the above-mentioned activities and make recommendations thereon to the Conference of the Parties at its eighth session;

## **II. IMPLEMENTATION OF ARTICLE 4, PARAGRAPH 9, OF THE CONVENTION**

11. *Decides* to establish a work programme for the implementation of Article 4, paragraph 9, of the Convention, which would include activities covered under paragraphs 15 to 19 below, as well as the following:

(a) Strengthening existing and, where needed, establishing, national climate change secretariats and/or focal points to enable the effective implementation of the Convention and the Kyoto Protocol, in the least developed country Parties;

(b) Providing training, on an ongoing basis, in negotiating skills and language, where needed, to develop the capacity of negotiators from the least developed countries to participate effectively in the climate change process;

(c) Supporting the preparation of national adaptation programmes of action;

12. *Decides* that a least developed countries fund shall be established (in accordance with decision 7/CP.7), to be operated by an entity entrusted with the operation of the financial mechanism, under the guidance of the Conference of the Parties, to support the work programme for the least developed countries. This work programme shall include, *inter alia*, the preparation and implementation of national adaptation programmes of action;

13. *Invites* Annex II Parties to contribute financially to the programme mentioned in paragraph 11 above;

14. *Invites* Annex II Parties to support least developed country Parties for the following activities:

- (a) Promotion of public awareness programmes to ensure the dissemination of information on climate change issues;
- (b) Development and transfer of technology, particularly adaptation technology (in accordance with decision 4/CP.7);
- (c) Strengthening of the capacity of meteorological and hydrological services to collect, analyse, interpret and disseminate weather and climate information to support implementation of national adaptation programmes of action;

15. *Decides* that support be provided for the development, by the least developed countries, of national adaptation programmes of action which will serve as a simplified and direct channel of communication of information relating to the vulnerabilities and adaptation needs of the least developed countries; the information contained in national adaptation programmes of action may constitute the first step in the preparation of initial national communications;

16. *Decides* to consider, at its current session, the establishment of a least developed country group of experts, including its terms of reference, taking into account geographical balance, as well as the above-mentioned consideration of the terms of reference of the Consultative Group of Experts;

17. *Decides* to assess, at its current session, the status of implementation of Article 4, paragraph 9, of the Convention and to consider further action thereon;

### **III. IMPACT OF THE IMPLEMENTATION OF RESPONSE MEASURES**

18. *Stresses* that Parties should take action consistent with the provisions of the Convention;

19. *Decides* that the implementation of the activities included in paragraphs 25 to 32 below shall be supported through the Global Environment Facility (in accordance with decision 6/CP.7), the special climate change fund (in accordance with decision 7/CP.7), and other bilateral and multilateral sources:

20. *Encourages* non-Annex I Parties to provide information, in their national communications and/or other relevant reports, on their specific needs and concerns arising from the impact of the implementation of response measures;

21. *Requests* Annex II Parties to provide detailed information, in their national communications and/or any other relevant reports, on their existing and planned support programmes to meet the specific needs and concerns of developing country Parties arising from the impact of the implementation of response measures;

22. *Encourages* Annex I and non-Annex I Parties to cooperate in creating favourable conditions for investment in sectors where such investment can contribute to economic diversification;

23. *Requests* Annex II Parties to assist developing countries, in particular those most vulnerable to the impact of the implementation of response measures, in meeting their capacity-building needs for the implementation of programmes which address these impacts;
24. *Urges* Parties to consider appropriate technological options in addressing the impact of response measures, consistent with national priorities and indigenous resources;
25. *Encourages* Parties to cooperate in the technological development of non-energy uses of fossil fuels, and requests Annex II Parties to support developing country Parties to this end;
26. *Encourages* Parties to cooperate in the development, diffusion and transfer of less greenhouse gas-emitting advanced fossil-fuel technologies, and/or technologies relating to fossil fuels, that capture and store greenhouse gases, and requests Annex II Parties to facilitate the participation of the least developed countries and other non-Annex I Parties in this effort;
27. *Urges* Annex II Parties to provide financial and technological support for strengthening the capacity of developing country Parties identified in Article 4, paragraphs 8 and 9, of the Convention for improving efficiency in upstream and downstream activities relating to fossil fuels, taking into consideration the need to improve the environmental efficiency of these activities;
28. *Encourages* Annex II Parties to promote investment in, and to support and cooperate with, developing country Parties in the development, production, distribution and transport of indigenous, less greenhouse gas-emitting, environmentally sound,<sup>3</sup> energy sources, including natural gas, according to the national circumstances of each of these Parties;
29. *Urges* Annex II Parties to provide support for research into, and the development and use of, renewable energy, including solar and wind energy, in developing country Parties;
30. *Decides* to consider, at its eighth session, the implementation of insurance-related actions to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change, based on the outcome of the workshops referred to in paragraphs 37 and 38 below;
31. *Requests* the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation to consider, at their subsequent sessions, the response by Parties to the actions listed in paragraphs 25 to 32 above;

#### **IV. FURTHER MULTILATERAL WORK RELATING TO ISSUES UNDER ARTICLE 4, PARAGRAPHS 8 AND 9 OF THE CONVENTION**

32. *Requests* the secretariat to organize regional workshops in order to facilitate information exchange and integrated assessments, including for adaptation;

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<sup>3</sup> Throughout this decision, the term “environmentally sound” means “environmentally safe and sound” (Source: Agenda 21, chapter 1).

33. *Requests* the secretariat to organize a workshop, before the eighth session of the Conference of the Parties, on the status of modelling activities to assess the adverse effects of climate change and the impact of response measures already implemented on individual developing country Parties, including on how to enhance the participation of developing country experts in such efforts, and to report the results of this workshop to the Conference of the Parties at its eighth session. The terms of reference of this workshop will include assessments on approaches to minimize the adverse effects of response measures on developing countries;
34. *Requests* the secretariat to organize a workshop, to be held immediately before the workshop referred to in paragraph 38 below, and before the eighth session of the Conference of the Parties, on insurance and risk assessment in the context of climate change and extreme weather events, and to report the results of this workshop to the Conference of the Parties at its eighth session;
35. *Requests* the secretariat to organize a workshop, to be held immediately after the workshop referred to in paragraph 37 above, and before the eighth session of the Conference of the Parties, on insurance-related actions to address the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and from the impact of the implementation of response measures, and to report the results of this workshop to the Conference of the Parties at its eighth session;
36. *Requests* the secretariat to organize a workshop, before the ninth session of the Conference of the Parties, on possible synergies and joint action with the other multilateral environmental conventions and agreements, such as the United Nations Convention to Combat Desertification, and to report the results of this workshop to the Conference of the Parties at its ninth session;
37. *Requests* the secretariat to organize a workshop, before the ninth session of the Conference of the Parties, on the needs and options of non-Annex I Parties for economic diversification, and on support programmes by Annex II Parties to address these needs, and to report the results of this workshop to the Conference of the Parties at its ninth session;

*8<sup>th</sup> plenary meeting  
10 November 2001*

## **Decision 6/CP.7**

### **Additional guidance to an operating entity of the financial mechanism**

*The Conference of the Parties,*

*Recalling* its decisions 11/CP.1, 10/CP.2, 11/CP.2, 12/CP.2, 2/CP.4, 8/CP.5 and 10/CP.5,

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Noting* the extension of funding through the expedited procedures of the Global Environment Facility (GEF) for countries to address capacity-building needs identified in decision 2/CP.4 enabling Parties to maintain and enhance relevant national capacities, and for the preparation of second national communications,

*Noting also* the launching of the GEF Country Dialogue Workshops, which have been designed to strengthen national coordination and capacity building and to promote awareness-raising, and the results of the first phase of the GEF Capacity Development Initiative, a strategic partnership between the GEF secretariat and the United Nations Development Programme, which were forwarded to Parties in accordance with decision 10/CP.5,

1. *Decides* that, in accordance with Articles 4.3, 4.5 and 11.1 of the Convention, the GEF, as an operating entity of the financial mechanism, should provide financial resources to developing country Parties, in particular the least developed and the small island developing States among them, for the following activities, including those identified in paragraph 7 of decision 5/CP.7:

(a) Strengthening, in particularly vulnerable countries and regions identified in stage I activities and especially countries vulnerable to climate-related natural disasters, the implementation of country-driven stage II adaptation activities, pursuant to decision 2/CP.4, paragraph 1 (a), that build upon work done at the national level, either in the context of national communications or of in-depth national studies, including national adaptation programmes of action (NAPAs);

(b) Establishing pilot or demonstration projects to show how adaptation planning and assessment can be practically translated into projects that will provide real benefits, and may be integrated into national policy and sustainable development planning, on the basis of information provided in the national communications, or of in-depth national studies, including NAPAs, and of the staged approach endorsed by the Conference of the Parties in its decision 11/CP.1;

(c) Supporting the continuation of the “country-team” approach, which enhances the collection, management, archiving, analysis, interpretation and dissemination of data on climate change issues and increases national commitment to the implementation of the objective of the Convention;

- (d) Enhancing the capacity of their subregional and/or regional information networks to enable such networks to serve as repositories of climate change related information on vulnerability and adaptation assessments and geographic information systems;
- (e) Improving climate change related data collection (for example, local emission and regional factors) and information-gathering, as well as the analysis, interpretation and dissemination of these data to national policy makers and other end-users;
- (f) Strengthening and, where necessary, establishing:
  - (i) National, subregional or regional databases on climate change;
  - (ii) Subregional and/or regional climate change related institutions and “centres of excellence”, to enable these institutions and centres to provide a supportive framework, which would include information retrieval and technical support;
- (g) Developing and implementing, as appropriate, prioritized projects identified in their national communications;
- (h) Undertaking more in-depth public awareness and education activities and community involvement and participation in climate change issues;
- (i) Building the capacity, including, where appropriate, institutional capacity, for preventive measures, planning, preparedness for disasters related to climate change, including in particular, contingency planning for droughts and floods in areas prone to extreme weather events;
- (j) Strengthening existing and, where needed, establishing early warning systems for extreme weather events in an integrated and interdisciplinary manner to assist developing country Parties, in particular those most vulnerable to climate change;
- (k) Supporting the continuation of GEF-related programmes which assist Parties that are at various stages of preparing and/or completing their initial national communications;

2. *Invites* the GEF:

- (a) To continue its efforts to minimize the time between the approval of project concepts, the development and approval of the related projects, and the disbursement of funds by its implementing/executing agencies to the recipient countries of those projects;
- (b) Further to streamline its project cycle with a view to making project preparations simpler, more transparent and country-driven. In this regard, the project cycles of its implementing/executing agencies should be coordinated with the GEF project cycle;
- (c) To urge its implementing/executing agencies to be more responsive to requests for GEF assistance from developing country Parties for climate change related project activities aimed at implementing the guidance of the Conference of the Parties;

(d) Further to encourage the use of national and regional experts and/or consultants to enhance project development and implementation; in this regard, it should make its list of national and regional experts and/or consultants publicly available;

(e) To give consideration to measures to increase opportunities available to developing country Parties for accessing GEF funds for climate change activities aimed at implementing the guidance of the Conference of the Parties, including a review of the adequacy of the number of implementing/executing agencies available to deliver GEF programmes and projects;

3. *Urges* the GEF to adopt a streamlined and expedited approach to financing activities within the framework for capacity-building in developing countries (non-Annex I Parties) contained in decision 2/CP.7;

4. *Requests* the GEF to include in its report to the Conference of the Parties at its eighth session the specific steps it has taken to implement the provisions of this decision and to include information on its implementation of the framework for capacity-building in developing countries (non-Annex I Parties) contained in decision 2/CP.7;

5. *Requests* the GEF, as an operating entity of the financial mechanism, to provide financial support to implement the capacity-building framework annexed to decision 2/CP.7 and further to support, enhance and implement its capacity-building activities in accordance with this framework.

*8<sup>th</sup> plenary meeting  
10 November 2001*

**Decision 7/CP.7****Funding under the Convention**

*The Conference of the Parties,*

*Recalling* the relevant provisions of the United Nations Framework Convention on Climate Change, and in particular its Articles 4.1, 4.3, 4.4, 4.5, 4.7, 4.8, 4.9, 4.10 and Article 11,

*Recalling also* its decisions 11/CP.1 and 15/CP.1,

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Noting* that, by its decisions 2/CP.7, and 6/CP.7, provisions have been made for funding the implementation of capacity-building activities in Parties not included in Annex I, and that additional guidance has been given to the Global Environment Facility to that effect,

*Welcoming* the statements made at the second part of the sixth session by most Parties included in Annex II<sup>1</sup> on their willingness to commit themselves to provide funding,

*Welcoming also* the joint political declaration made by the European Community and its member States, together with Canada, Iceland, New Zealand, Norway and Switzerland, on their preparedness to contribute collectively €450 million / US\$ 410 million annually by 2005, with this level to be reviewed in 2008,

1. *Decides* that:

- (a) There is a need for funding, including funding that is new and additional to contributions which are allocated to the climate change focal area of the Global Environment Facility and to multilateral and bilateral funding, for the implementation of the Convention;
- (b) Predictable and adequate levels of funding shall be made available to Parties not included in Annex I;
- (c) In order to meet the commitments under Articles 4.1, 4.3, 4.4, 4.5, 4.8 and 4.9, Parties included in Annex II, and other Parties included in Annex I that are in a position to do so, should provide funding for developing country Parties, through the following channels:
  - (i) Increased Global Environment Facility replenishment;
  - (ii) The special climate change fund to be established under this decision;
  - (iii) The least developed countries fund to be established under this decision;
  - (iv) Bilateral and multilateral sources;

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<sup>1</sup> Joint political declaration by the European Community and its member States, together with Canada, Iceland, New Zealand, Norway and Switzerland, and a statement by Japan. For the text of the political declaration and the statement by Japan, see document FCCC/CP/2001/MISC.4.



(d) Appropriate modalities for burden sharing among the Parties included in Annex II need to be developed;

(e) Parties included in Annex II shall report on their financial contributions on an annual basis;

(f) The Conference of the Parties shall review the reports referred to in subparagraph (e) above on an annual basis;

2. *Decides also* that a special climate change fund shall be established to finance activities, programmes and measures, relating to climate change, that are complementary to those funded by the resources allocated to the climate change focal area of Global Environment Facility and by bilateral and multilateral funding, in the following areas:

(a) Adaptation, in accordance with paragraph 8 of decision 5/CP.7;

(b) Transfer of technologies, in accordance with decision 4/CP.7;

(c) Energy, transport, industry, agriculture, forestry and waste management;

(d) Activities to assist developing country Parties referred to under Article 4, paragraph 8(h), in diversifying their economies, in accordance with decision 5/CP.7;

3. *Decides further* that Parties included in Annex II, and other Parties included in Annex I that are in a position to do so, shall be invited to contribute to the fund, which shall be operated by an entity entrusted with the operation of the financial mechanism, under the guidance of the Conference of the Parties;

4. *Invites* the entity referred to in paragraph 3 above to make the necessary arrangements for this purpose and report thereon to the Conference of the Parties at its eighth session for appropriate action;

5. *Decides* to provide guidance to the entity referred to in paragraph 3 above on the modalities for operating this fund, including expedited access;

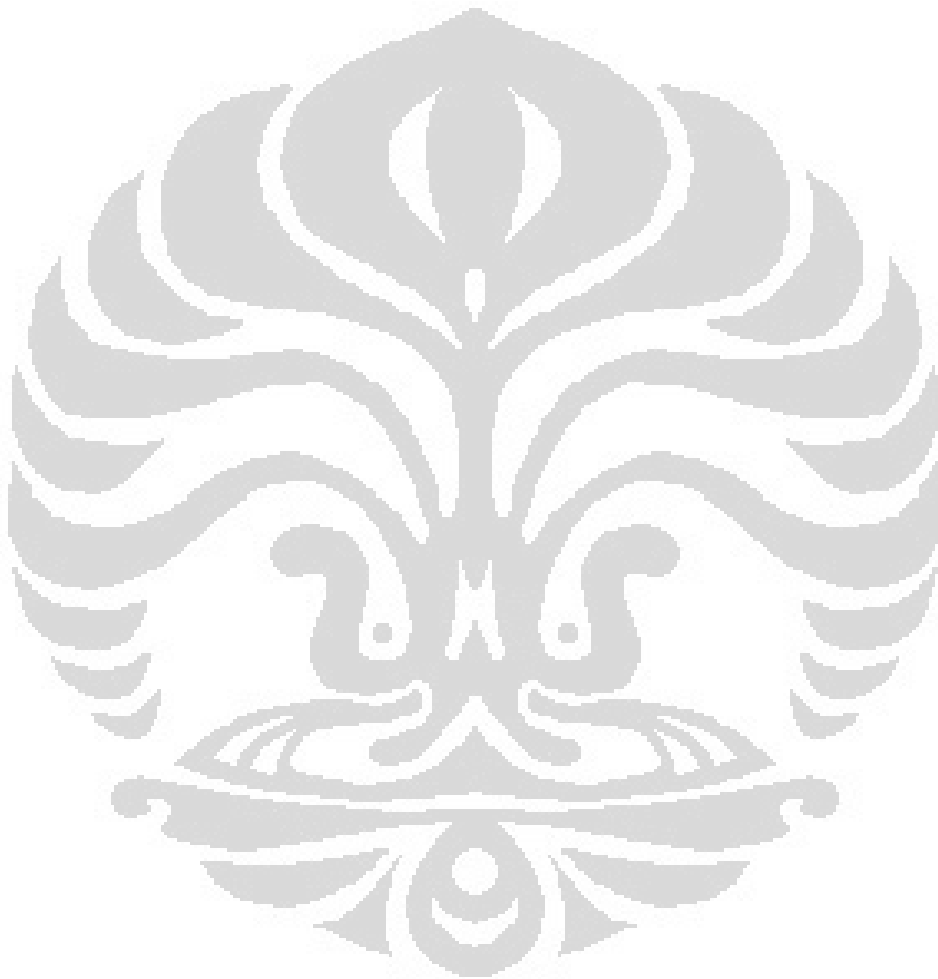
6. *Decides also* that a least developed countries fund shall be established, which shall be operated by an entity entrusted with the operation of the financial mechanism, under the guidance of the Conference of the Parties, to support a work programme for the least developed countries. This work programme shall include, *inter alia*, national adaptation programmes of action in accordance with Section II, "Implementation of Article 4, paragraph 9, of the Convention", of decision 5/CP.7;

7. *Invites* the entity referred to in paragraph 6 above to make the necessary arrangements for this purpose and report thereon to the Conference of the Parties at its eighth session for appropriate action;

8. *Decides* to provide guidance to the entity referred to in paragraph 6 above on the modalities for operating this fund, including expedited access;

9. Welcomes the intention expressed by Canada to contribute C\$10 million, to enable the prompt start of this fund.

*8<sup>th</sup> plenary meeting  
10 November 2001*



## Decision 8/CP.7

### Activities implemented jointly under the pilot phase

*The Conference of the Parties,*

*Recalling* its decisions 5/CP.1 and 13/CP.5,

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Taking note* of the fourth synthesis report on activities implemented jointly under the pilot phase<sup>1</sup> and the draft revised uniform reporting format,<sup>2</sup>

*Having considered* the conclusions of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation at the first part of their thirteenth sessions,<sup>3</sup>

*Acknowledging* that participating in activities implemented jointly under the pilot phase provides an important opportunity for learning by doing,

*Further acknowledging* the importance of offering opportunities to participate in activities implemented jointly under the pilot phase to those Parties that have not yet experienced such activities,

*Noting* that the geographical distribution of activities implemented jointly under the pilot phase remains unbalanced despite recent improvements,

1. *Decides* to continue the pilot phase for activities implemented jointly;
2. *Requests* the secretariat to organize before the sixteenth sessions of the subsidiary bodies a workshop on the draft revised uniform reporting format providing an opportunity to Parties to exchange views on and understand further the methodological issues related to the format;

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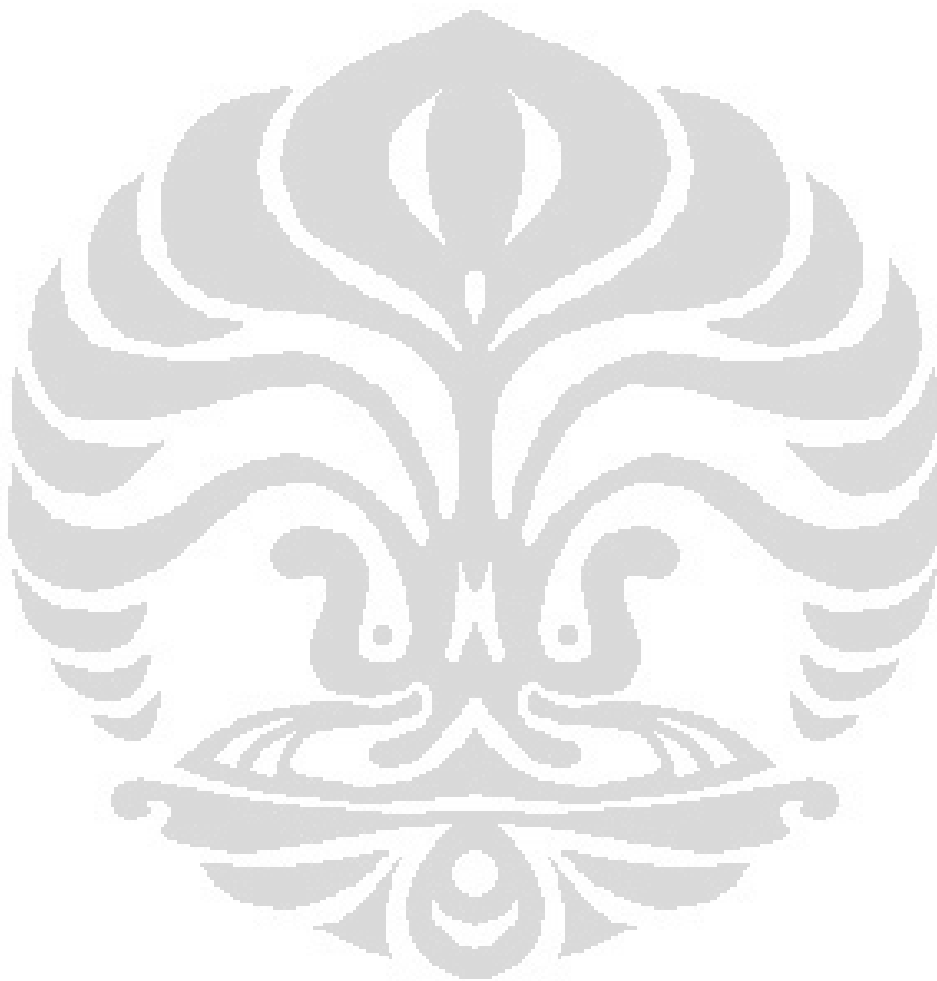
<sup>1</sup> FCCC/SB/2000/6.

<sup>2</sup> FCCC/SB/2000/6/Add.1.

<sup>3</sup> FCCC/SBSTA/2000/10 and FCCC/SBI/2000/10.

3. *Urges* Parties reporting on activities implemented jointly under the pilot phase to submit joint reports through the designated national authority of one Party, which should provide proof that the designated national authorities of all the other Parties involved concur with the reports.

*8<sup>th</sup> plenary meeting  
10 November 2001*



**Decision 9/CP.7**

**Matters relating to Article 3, paragraph 14, of the Kyoto Protocol**

*The Conference of the Parties,*

*Having considered* matters relating to Article 3, paragraph 14, of the Kyoto Protocol,

*Recalling* its decision 8/CP.4, particularly as it refers to decision 5/CP.4,

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session, adopt draft decision -/CMP.1 (*Matters relating to Article 3, paragraph 14, of the Kyoto Protocol*) below.

*8<sup>th</sup> plenary meeting  
10 November 2001*

**Draft decision -/CMP.1 (*Matters relating to Article 3, paragraph 14, of the Kyoto Protocol*)**

**Matters relating to Article 3, paragraph 14, of the Kyoto Protocol**

*The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,*

*Determined* to protect the climate system for present and future generations,

*Having considered* matters relating to Article 3, paragraph 14, of the Kyoto Protocol,

*Recalling* decisions 8/CP.4 and 5/CP.4,

*Recalling also* decisions 5/CP.4 and 12/CP.5,

*Reiterating* that the extent to which developing country Parties will effectively implement their commitments will depend on the effective implementation by the developed country Parties of their commitments related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties,

*Reiterating* that Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities and, accordingly, that the developed country Parties should take the lead in combating climate change and the adverse effects thereof,

*Recognizing* that developing country Parties that would have to bear a disproportionate or abnormal burden under the Convention should be given full consideration,

*Recognizing* that low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems, are particularly vulnerable to the adverse effects of climate change,

*Recognizing* the special difficulties of those countries, especially developing countries, whose economies are particularly dependent on fossil fuel production, use and exportation, as a consequence of action taken to limit greenhouse gas emissions,

1. *Decides* to establish a process for the implementation of Article 3, paragraph 14, of the Kyoto Protocol, including exchange of information and the development of methodologies on the assessment of adverse social, environmental and economic impacts on developing country Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention, and of their minimization; among the issues to be considered shall be the establishment of funding, insurance and transfer of technology;
2. *Recognizes* that minimizing the impact of the implementation of Article 3, paragraph 1, of the Kyoto Protocol is a development concern affecting both the industrialized and developing countries. Each Party included in Annex I commits itself to take fully into account the consequences of these actions on developing countries, and to prevent or minimize their adverse effects on developing countries; these Parties consider such action as a cost-effectiveness measure;
3. *Requests* each Party included in Annex I to provide information, as part of the necessary supplementary information to its annual inventory report, in accordance with the guidelines under Article 7, paragraph 1, of the Kyoto Protocol, relating to how it is striving, under Article 3, paragraph 14, of the Kyoto Protocol, to implement the commitments mentioned in Article 3, paragraph 1, of the Kyoto Protocol in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention; and further requests those Parties to incorporate, in this respect, information on action identified in paragraph 8 below, based on methodologies identified at the workshop referred to in paragraph 11 below;
4. *Decides* that the information referred to in paragraph 3 above shall be considered by the facilitative branch of the compliance committee;
5. *Invites* Parties not included in Annex I to provide information on their specific needs and concerns related to the adverse social, environmental and economic impacts arising from the implementation of commitments under Article 3, paragraph 1, of the Kyoto Protocol, and requests Parties included in Annex II to the Convention to provide support for that purpose;

6. *Decides* to develop guidelines before the second session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to help determine if Parties included in Annex I are striving to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties, and in particular those identified in Article 4, paragraphs 8 and 9, of the Convention, based on methodologies identified at the workshop referred to in paragraph 11 below;

7. *Invites* the Intergovernmental Panel on Climate Change, in cooperation with other relevant organizations, to prepare a technical paper on geological carbon storage technologies, covering current information, and report on it for the consideration of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its second session;

8. *Agrees that* Parties included in Annex II to the Convention, and other Parties included in Annex I in a position to do so, should give priority, in implementing their commitments under Article 3, paragraph 14, of the Kyoto Protocol, to the following actions:

(a) The progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors, taking into account the need for energy price reforms to reflect market prices and externalities, in pursuit of the objective of the Convention;

(b) Removing subsidies associated with the use of environmentally unsound and unsafe technologies;

(c) Cooperating in the technological development of non-energy uses of fossil fuels, and supporting developing country Parties to this end;

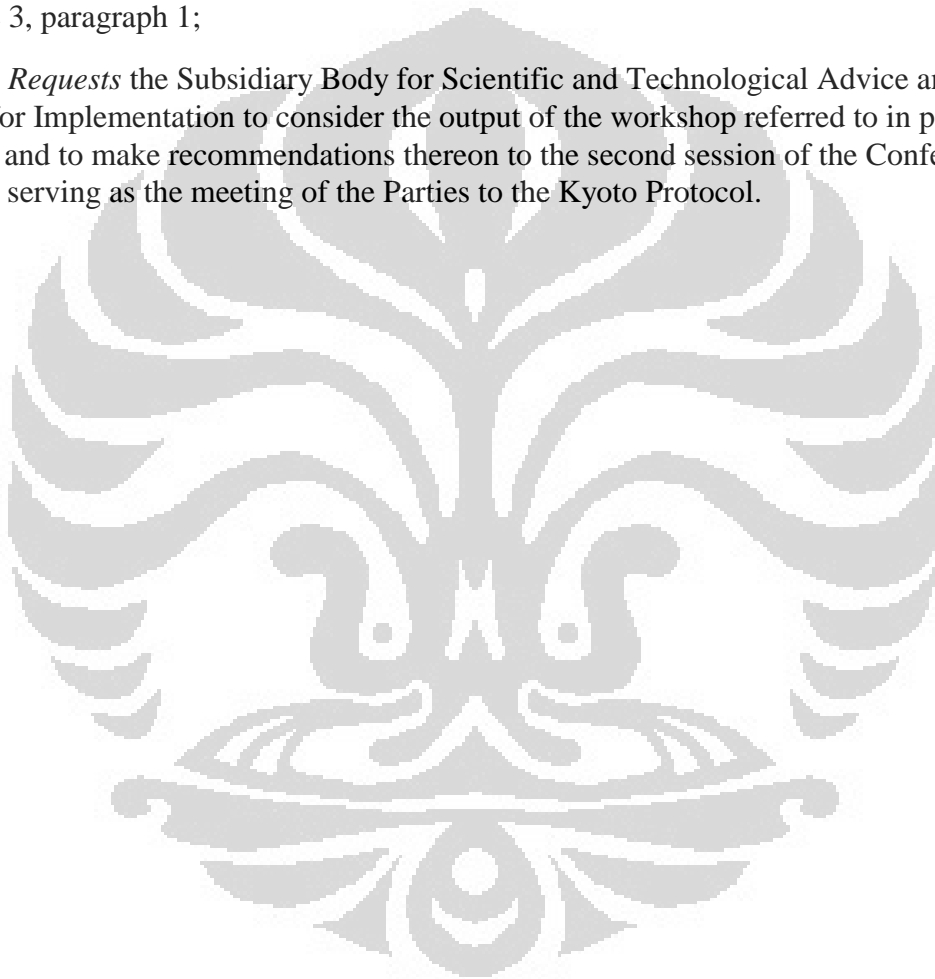
(d) Cooperating in the development, diffusion and transfer of less greenhouse gas-emitting advanced fossil-fuel technologies, and/or technologies relating to fossil fuels that capture and store greenhouse gases, and encouraging their wider use; and facilitating the participation of the least developed countries and other Parties not included in Annex I in this effort;

(e) Strengthening the capacity of developing country Parties identified in Article 4, paragraphs 8 and 9, of the Convention for improving efficiency in upstream and downstream activities relating to fossil fuels, taking into consideration the need to improve the environmental efficiency of these activities;

(f) Assisting developing country Parties which are highly dependent on the export and consumption of fossil fuels in diversifying their economies;

9. *Encourages* Parties included in Annex I to adopt policies and measures that will result in reductions in emissions of greenhouse gases, as an effective contribution to minimizing the adverse effects of climate change, and to provide information on these policies and measures in their national communications;

10. *Decides* to review the actions taken by Parties included in Annex I, in accordance with this decision, and to consider, at its third session, what further actions are necessary; among the issues to be considered shall be the establishment of funding, insurance and transfer of technology, pursuant to Article 3, paragraph 14;
11. *Requests* the secretariat to organize, before the second session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, a workshop on reporting methodologies on ways to minimize adverse social, environmental and economic impacts on developing country Parties of the implementation of policies and measures by Parties included in Annex I in achieving their quantified emission limitation and reduction commitments under Article 3, paragraph 1;
12. *Requests* the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation to consider the output of the workshop referred to in paragraph 11 above, and to make recommendations thereon to the second session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.





## Decision 10/CP.7

### Funding under the Kyoto Protocol

*The Conference of the Parties,*

*Recalling* Articles 10, 11 and 12, paragraph 8, of the Kyoto Protocol,

*Recalling also* its decisions 11/CP.1 and 15/CP.1,

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Recognizing* that funding should be made available to Parties not included in Annex I which is new and additional to contributions under the Convention,

*Recognizing also* that appropriate modalities for burden sharing need to be developed,

*Welcoming* the statements made at the second part of the sixth session of the Conference of the Parties by most Parties included in Annex II<sup>1</sup> on their willingness to commit themselves to provide funding,

*Welcoming also* the joint political declaration made by the European Community and its member States, together with Canada, Iceland, New Zealand, Norway and Switzerland, on their preparedness to collectively contribute €450 million/US\$ 410 million annually by 2005, with this level to be reviewed in 2008,

1. *Decides* that an adaptation fund shall be established to finance concrete adaptation projects and programmes in developing country Parties that are Parties to the Protocol, as well as activities identified in paragraph 8 of decision 5/CP.7;
2. *Decides also* that the adaptation fund shall be financed from the share of proceeds on the clean development mechanism project activities and other sources of funding;
3. *Decides further* that Parties included in Annex I that intend to ratify the Kyoto Protocol are invited to provide funding, which will be additional to the share of proceeds on clean development mechanism project activities;
4. *Decides also* that the adaptation fund shall be operated and managed by an entity entrusted with the operation of the financial mechanism of the Convention, under the guidance of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, with guidance to be provided by the Conference of the Parties in the period prior to entry into force of the Kyoto Protocol;

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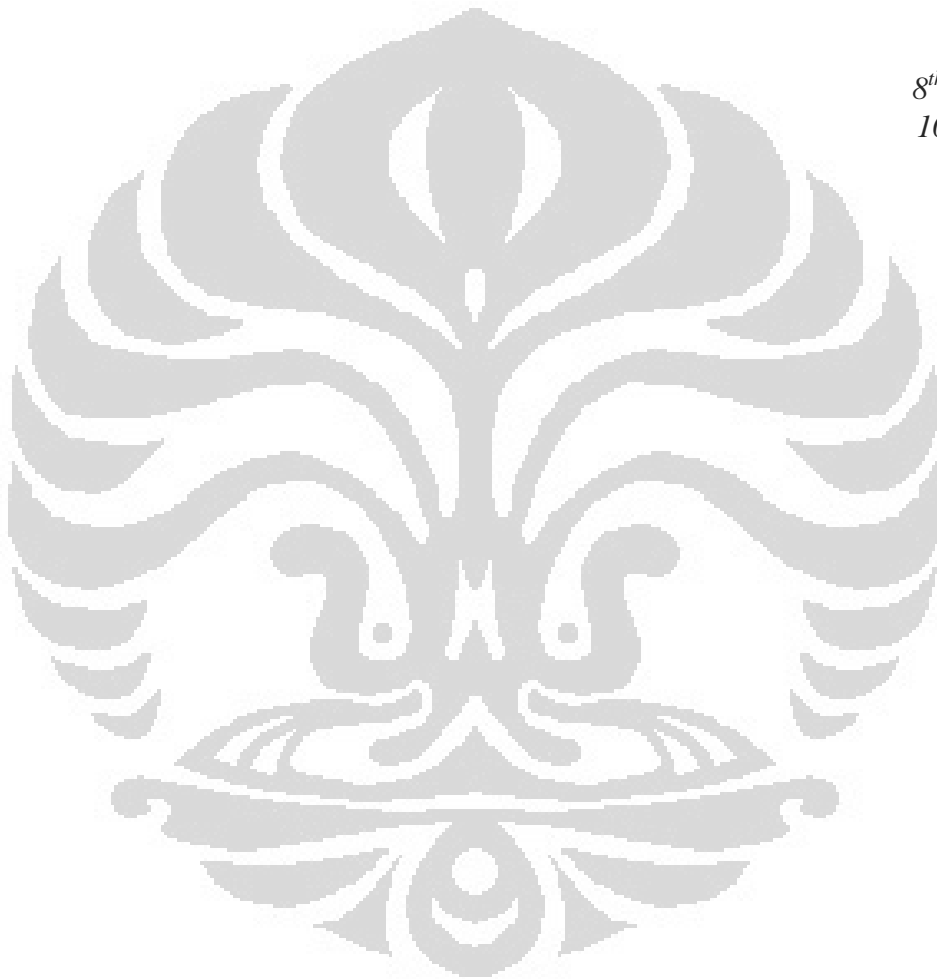
<sup>1</sup> Joint political declaration by the European Community and its member States, together with Canada, Iceland, New Zealand, Norway and Switzerland, and a statement by Japan. For the text of the political declaration and the statement by Japan see document FCCC/CP/2001/MISC.4.

5. *Invites* the entity referred to in paragraph 4 above to make the necessary arrangements for this purpose;

6. *Decides* that Parties included in Annex I that intend to ratify the Kyoto Protocol shall report on their financial contributions to the fund on an annual basis;

7. *Decides also* to review the reports referred to in paragraph 6 above on an annual basis, and that, upon entry into force of the Kyoto Protocol, such reports are to be reviewed by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.

*8<sup>th</sup> plenary meeting  
10 November 2001*



## Decision 11/CP.7

### Land use, land-use change and forestry

*The Conference of the Parties,*

*Recalling* its decisions 1/CP.4, 8/CP.4, 9/CP.4 and 16/CP.5,

*Recalling also* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Acknowledging with appreciation* the scientific advice provided in the *Special Report on Land use, Land-use Change and Forestry* prepared by the Intergovernmental Panel on Climate Change,

1. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session, adopt draft decision -/CMP.1 (*Land use, land-use change and forestry*) below;
2. *Requests* the Subsidiary Body for Scientific and Technological Advice (SBSTA):
  - (a) To consider, following the completion of the methodological work by the Intergovernmental Panel on Climate Change (IPCC) as outlined in paragraph 3 (c) below, and adopt methodologies to account for anthropogenic greenhouse gas emissions resulting from direct human-induced degradation and devegetation activities, with a view to the Conference of the Parties at its tenth session recommending a decision for adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session regarding whether such activities should be included in the first commitment period;
  - (b) To investigate the possible application of biome-specific forest definitions for the second and subsequent commitment periods with a view to the Conference of the Parties at its tenth session recommending a decision for adoption on the use of such biome-specific forest definitions for future commitment periods to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session;
  - (c) To incorporate the work of the IPCC as outlined in paragraph 3 (d) below into any revisions of modalities, rules and guidelines prior to the second commitment period, for the accounting of activities under Article 3.4 of the Kyoto Protocol;
  - (d) To develop at its sixteenth session terms of reference for the work to be conducted under paragraph 2 (e) below;
  - (e) To develop definitions and modalities for including afforestation and reforestation project activities under Article 12 in the first commitment period, taking into account the issues of non-permanence, additionality, leakage, uncertainties and socio-economic and environmental impacts, including impacts on biodiversity and natural ecosystems, and being guided by the principles in the preamble to draft decision -/CMP.1 (*Land use, land-use change and forestry*)

attached hereto and the terms of reference referred to in paragraph 2 (d) above, with the aim of adopting a decision on these definitions and modalities at the ninth session of the Conference of the Parties, to be forwarded to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session;

3. *Invites* the Intergovernmental Panel on Climate Change (IPCC):

(a) To elaborate methods to estimate, measure, monitor, and report changes in carbon stocks and anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, and Articles 6 and 12 of the Kyoto Protocol, on the basis of the *Revised 1996 Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories*, taking into account the present decision (11/CP.7) and draft decision -/CMP.1 (*Land use, land-use change and forestry*) attached hereto, to be submitted for consideration and possible adoption to the Conference of the Parties at its ninth session;

(b) To prepare a report on good practice guidance and uncertainty management relating to the measurement, estimation, assessment of uncertainties, monitoring and reporting of net carbon stock changes and anthropogenic greenhouse gas emissions by sources and removals by sinks in the land use, land-use change and forestry sector, taking into consideration the present decision (11/CP.7) and draft decision -/CMP.1 (*Land use, land-use change and forestry*) attached hereto, to be submitted for consideration and possible adoption to the Conference of the Parties at its ninth session;

(c) To develop definitions for direct human-induced 'degradation' of forests and 'devegetation' of other vegetation types and methodological options to inventory and report on emissions resulting from these activities, to be submitted for consideration and possible adoption to the Conference of the Parties at its ninth session; and,

(d) To develop practicable methodologies to factor out direct human-induced changes in carbon stocks and greenhouse gas emissions by sources and removals by sinks from changes in carbon stocks and greenhouse gas emissions by sources and removals by sinks due to indirect human-induced and natural effects (such as those from carbon dioxide fertilization and nitrogen deposition), and effects due to past practices in forests (pre-reference year), to be submitted to the Conference of the Parties at its tenth session;

4. *Decides* that any changes to the treatment of harvested wood products shall be in accordance with future decisions of the Conference of the Parties.

*8<sup>th</sup> plenary meeting  
10 November 2001*

**Draft decision -/CMP.1 (*Land use, land-use change and forestry*)**

**Land use, land-use change and forestry**

*The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,*

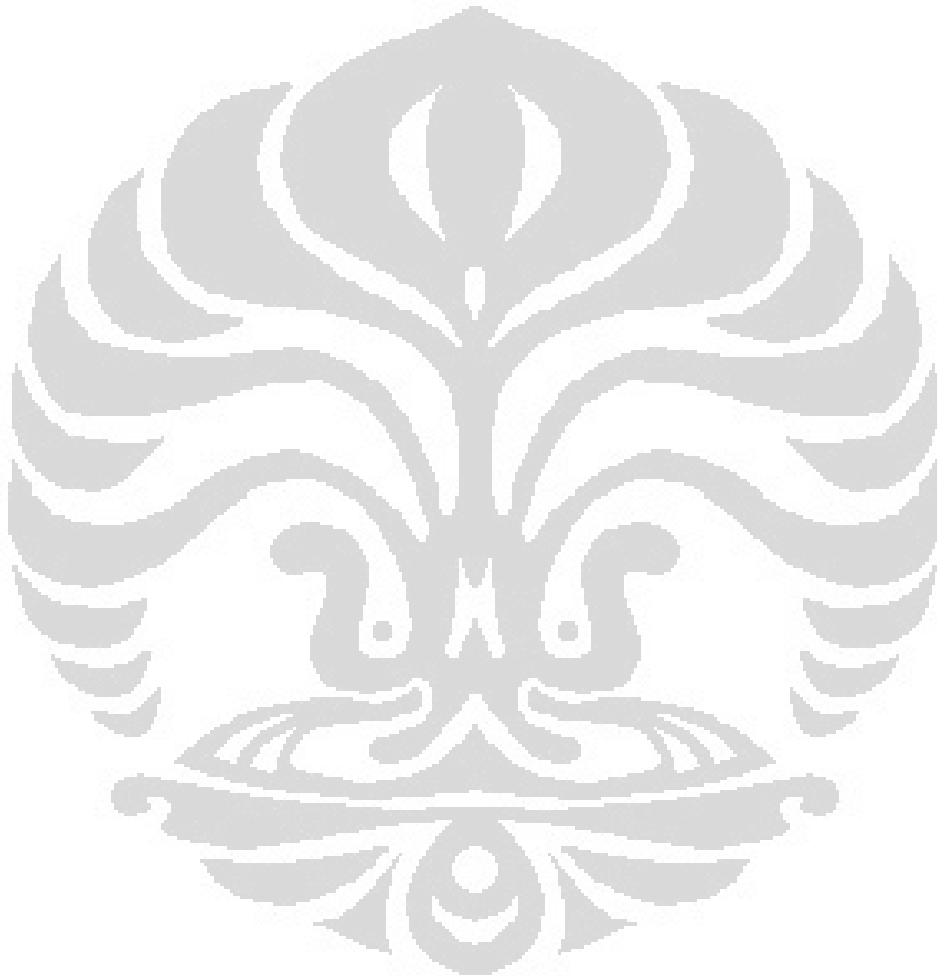
*Affirming* that the implementation of land use, land-use change and forestry activities included under the provisions of the Kyoto Protocol shall be consistent with the objectives and principles of, and any decisions taken under, the United Nations Framework Convention on Climate Change and its Kyoto Protocol,

*Having considered* decision 11/CP.7 adopted by the Conference of the Parties at its seventh session,

1. *Affirms* that the following principles govern the treatment of land use, land-use change and forestry activities:
  - (a) That the treatment of these activities be based on sound science;
  - (b) That consistent methodologies be used over time for the estimation and reporting of these activities;
  - (c) That the aim stated in Article 3, paragraph 1 of the Kyoto Protocol not be changed by accounting for land use, land-use change and forestry activities;
  - (d) That the mere presence of carbon stocks be excluded from accounting;
  - (e) That the implementation of land use, land-use change and forestry activities contributes to the conservation of biodiversity and sustainable use of natural resources;
  - (f) That accounting for land use, land-use change and forestry does not imply a transfer of commitments to a future commitment period;
  - (g) That reversal of any removal due to land use, land-use change and forestry activities be accounted for at the appropriate point in time;
  - (h) That accounting excludes removals resulting from: (i) elevated carbon dioxide concentrations above their pre-industrial level; (ii) indirect nitrogen deposition; and (iii) the dynamic effects of age structure resulting from activities and practices before the reference year;
2. *Decides* that good practice guidance, and methods to estimate, measure, monitor and report changes in carbon stocks and anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from land use, land-use change and forestry activities, as developed by the Intergovernmental Panel on Climate Change, shall be applied by Parties, if decided in accordance with relevant decisions of the Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;
3. *Decides* that anthropogenic greenhouse gas emissions by sources and removals by sinks shall be accounted for in accordance with the annex to the present decision and reported in

annual inventories and reviewed in accordance with relevant decisions relating to Articles 5, 7 and 8 of the Kyoto Protocol, and in accordance with the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*, any future elaboration of these guidelines, or parts of them, and any good practice guidance on land-use change and forestry in accordance with relevant decisions of the Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

4. *Adopts* the definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under Articles 3, 6 and 12 of the Kyoto Protocol contained in the attached annex for application in the first commitment period.



## ANNEX

### **Definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under the Kyoto Protocol**

#### **A. Definitions**

1. For land use, land-use change and forestry activities under Article<sup>1</sup> 3, paragraphs 3 and 4, the following definitions shall apply:

(a) “Forest” is a minimum area of land of 0.05-1.0 hectares with tree crown cover (or equivalent stocking level) of more than 10-30 per cent with trees with the potential to reach a minimum height of 2-5 metres at maturity *in situ*. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10-30 per cent or tree height of 2-5 metres are included under forest, as are areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest;

(b) “Afforestation” is the direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources;

(c) “Reforestation” is the direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land. For the first commitment period, reforestation activities will be limited to reforestation occurring on those lands that did not contain forest on 31 December 1989;

(d) “Deforestation” is the direct human-induced conversion of forested land to non-forested land;

(e) “Revegetation” is a direct human-induced activity to increase carbon stocks on sites through the establishment of vegetation that covers a minimum area of 0.05 hectares and does not meet the definitions of afforestation and reforestation contained here;

(f) “Forest management” is a system of practices for stewardship and use of forest land aimed at fulfilling relevant ecological (including biological diversity), economic and social functions of the forest in a sustainable manner;

(g) “Cropland management” is the system of practices on land on which agricultural crops are grown and on land that is set aside or temporarily not being used for crop production;

(h) “Grazing land management” is the system of practices on land used for livestock production aimed at manipulating the amount and type of vegetation and livestock produced.

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<sup>1</sup> “Article” in this annex refers to an Article of the Kyoto Protocol, unless otherwise specified.

**B. Article 3, paragraph 3**

2. For the purposes of Article 3, paragraph 3, eligible activities are those direct human-induced afforestation, reforestation and/or deforestation activities that meet the requirements set forth in this annex and that started on or after 1 January 1990 and before 31 December of the last year of the commitment period.

3. For the purposes of determining the area of deforestation to come into the accounting system under Article 3, paragraph 3, each Party shall determine the forest area using the same spatial assessment unit as is used for the determination of afforestation and reforestation, but not larger than 1 hectare.

4. For the first commitment period, debits<sup>2</sup> resulting from harvesting during the first commitment period following afforestation and reforestation since 1990 shall not be greater than credits<sup>3</sup> accounted for on that unit of land.

5. Each Party included in Annex I shall report, in accordance with Article 7, on how harvesting or forest disturbance that is followed by the re-establishment of a forest is distinguished from deforestation. This information will be subject to review in accordance with Article 8.

**C. Article 3, paragraph 4**

6. A Party included in Annex I may choose to account for anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from any or all of the following human-induced activities, other than afforestation, reforestation and deforestation, under Article 3, paragraph 4, in the first commitment period: revegetation, forest management, cropland management, and grazing land management.

7. A Party included in Annex I wishing to account for activities under Article 3, paragraph 4, shall identify, in its report to enable the establishment of its assigned amount pursuant to Article 3.7 and Article 3.8, the activities under Article 3, paragraph 4, which it elects to include in its accounting for the first commitment period. Upon election, a decision by a Party will be fixed for the first commitment period.

8. During the first commitment period, a Party included in Annex I that selects any or all of the activities mentioned in paragraph 6 above shall demonstrate that such activities have occurred since 1990 and are human-induced. A Party included in Annex I shall not account for emissions by sources and removals by sinks resulting from activities under Article 3, paragraph 4, if these are already accounted for under Article 3, paragraph 3.

9. For the first commitment period, accountable anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from cropland management, grazing land management and revegetation under Article 3, paragraph 4, shall be equal to anthropogenic greenhouse gas

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<sup>2</sup> 'Debits': where emissions are larger than removals on a unit of land.

<sup>3</sup> 'Credits': where removals are larger than emissions on a unit of land.



emissions by sources and removals by sinks in the commitment period, less five times the anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from these eligible activities in the base year of that Party, while avoiding double accounting.

10. For the first commitment period, a Party included in Annex I that incurs a net source of emissions under the provisions of Article 3, paragraph 3, may account for anthropogenic greenhouse gas emissions by sources and removals by sinks in areas under forest management under Article 3, paragraph 4, up to a level that is equal to the net source of emissions under the provisions of Article 3.3, but not greater than 9.0 megatons of carbon times five, if the total anthropogenic greenhouse gas emissions by sources and removals by sinks in the managed forest since 1990 is equal to, or larger than, the net source of emissions incurred under Article 3, paragraph 3.

11. For the first commitment period only, additions to and subtractions from the assigned amount of a Party<sup>4</sup> resulting from forest management under Article 3, paragraph 4, after the application of paragraph 10 above and resulting from forest management project activities undertaken under Article 6, shall not exceed the value inscribed in the appendix<sup>5</sup> below, times five.

12. A Party may request the Conference of the Parties to reconsider its numerical values as contained in paragraph 10 and in the appendix to paragraph 11, with a view to the Conference of the Parties recommending a decision for adoption to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, no later than 2 years prior to the beginning of the first commitment period. Such a reconsideration shall be based upon country-specific data and the elements of guidance and consideration in footnote 5 to paragraph 11. These shall be submitted and reviewed in accordance with relevant decisions related to Articles 5, 7 and 8 of the Kyoto Protocol, and in accordance with the *Revised 1996 Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories*, any future elaboration of these guidelines, or parts of them, and any good practice guidance on land use, land-use change and forestry in accordance with the relevant decisions of the Conference of the Parties.

#### **D. Article 12**

13. The eligibility of land use, land-use change and forestry project activities under Article 12 is limited to afforestation and reforestation.

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<sup>4</sup> In accordance with decision -/CMP.1 (*Modalities for the accounting of assigned amounts*).

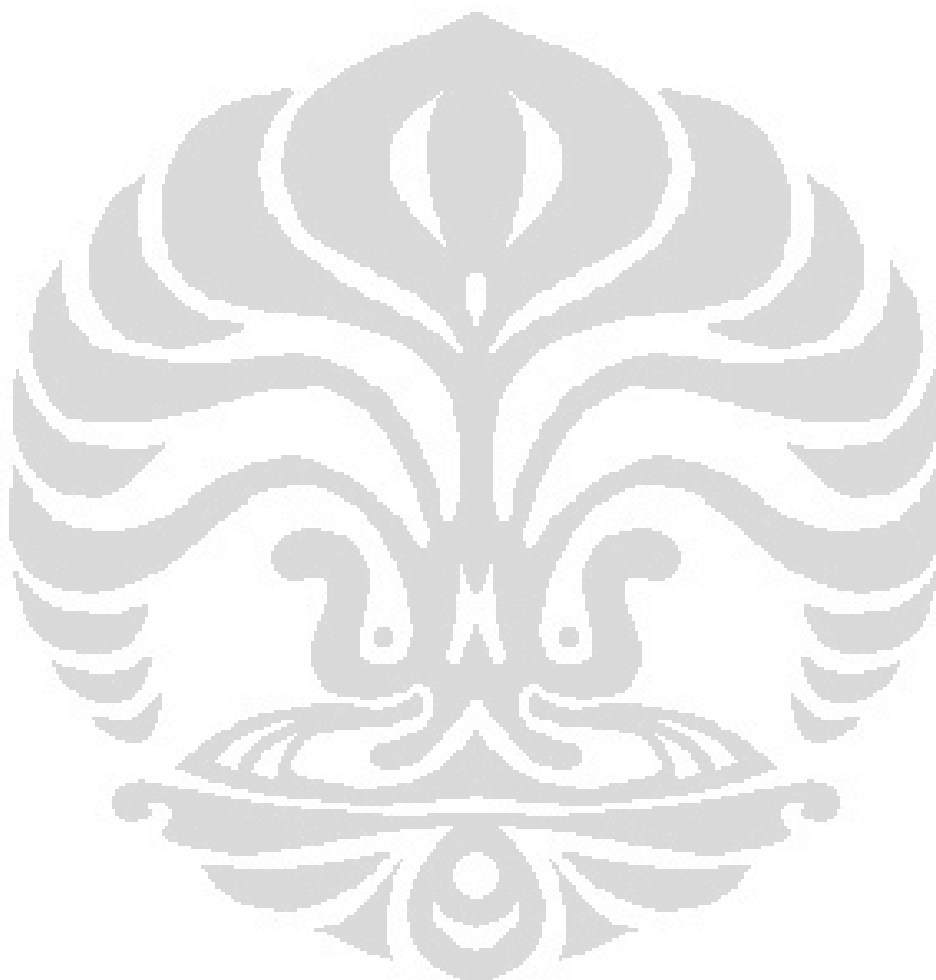
<sup>5</sup> In arriving at the values in the appendix below, the Conference of the Parties was guided by the application of an 85 per cent discount factor to account for the removals identified in paragraph 1(h) of decision -/CMP.1 (*Land use, land-use change and forestry*) and a 3 per cent cap on forest management, using a combination of data provided by Parties and by the Food and Agriculture Organization (FAO). Consideration was also given to national circumstances (including the degree of effort needed to meet Kyoto commitments and the forest management measures implemented). The accounting framework established in this paragraph shall not be construed as establishing any precedent for the second and subsequent commitment periods.

14. For the first commitment period, the total of additions to a Party's assigned amount resulting from eligible land use, land-use change and forestry project activities under Article 12 shall not exceed one per cent of base year emissions of that Party, times five.
15. The treatment of land use, land-use change and forestry project activities under Article 12 in future commitment periods shall be decided as part of the negotiations on the second commitment period.

#### **E. General**

16. Each Party included in Annex I shall, for the purposes of applying the definition of "forest" as contained in paragraph 1(a) above, select a single minimum tree crown cover value between 10 and 30 per cent, a single minimum land area value between 0.05 and 1 hectare and a single minimum tree height value between 2 and 5 metres. The selection of a Party shall be fixed for the duration of the first commitment period. The selection shall be included as an integral part of its report to enable the calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8 in accordance with decision 19/CP.7, and shall include the values for tree crown cover, tree height and the minimum land area. Each Party shall justify in its reporting that such values are consistent with the information that has historically been reported to the Food and Agriculture Organization of the United Nations or other international bodies, and if they differ, explain why and how such values were chosen.
17. For the first commitment period, and subject to other provisions in this annex, the additions to and subtractions from the assigned amount of a Party pursuant to Article 3, paragraphs 7 and 8 shall be equal to anthropogenic greenhouse gas emissions by sources and removals by sinks measured as verifiable changes in carbon stocks, and non-carbon dioxide greenhouse gas emissions during the period 1 January 2008 to 31 December 2012 resulting from afforestation, reforestation and deforestation under Article 3.3 and forest management under Article 3, paragraph 4, that have taken place since 1 January 1990. Where the result of this calculation is a net sink of greenhouse gases, this value shall be added to the assigned amount of that Party. Where the result of this calculation is a net source of greenhouse gas emissions, this value shall be subtracted from the assigned amount of that Party.
18. Accounting of anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, shall begin with the onset of the activity or the beginning of the commitment period, whichever comes later.
19. Once land is accounted for under Article 3, paragraphs 3 and 4, all anthropogenic greenhouse gas emissions by sources from and removals by sinks on this land must be accounted for throughout subsequent and contiguous commitment periods.
20. National inventory systems under Article 5.1 shall ensure that areas of land subject to land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4 are identifiable, and information about these areas should be provided by each Party included in Annex I in their national inventories in accordance with Article 7. Such information will be reviewed in accordance with Article 8.

21. Each Party included in Annex I shall account for all changes in the following carbon pools: above-ground biomass, below-ground biomass, litter, dead wood, and soil organic carbon. A Party may choose not to account for a given pool in a commitment period, if transparent and verifiable information is provided that the pool is not a source.



APPENDIX<sup>6</sup>

| Party              | Mt C/yr            |
|--------------------|--------------------|
| Australia          | 0.00               |
| Austria            | 0.63               |
| Belarus            |                    |
| Belgium            | 0.03               |
| Bulgaria           | 0.37               |
| Canada             | 12.00              |
| Croatia            |                    |
| Czech Republic     | 0.32               |
| Denmark            | 0.05               |
| Estonia            | 0.10               |
| Finland            | 0.16               |
| France             | 0.88               |
| Germany            | 1.24               |
| Greece             | 0.09               |
| Hungary            | 0.29               |
| Iceland            | 0.00               |
| Ireland            | 0.05               |
| Italy              | 0.18               |
| Japan              | 13.00              |
| Latvia             | 0.34               |
| Liechtenstein      | 0.01               |
| Lithuania          | 0.28               |
| Luxembourg         | 0.01               |
| Monaco             | 0.00               |
| Netherlands        | 0.01               |
| New Zealand        | 0.20               |
| Norway             | 0.40               |
| Poland             | 0.82               |
| Portugal           | 0.22               |
| Romania            | 1.10               |
| Russian Federation | 17.63 <sup>7</sup> |
| Slovakia           | 0.50               |
| Slovenia           | 0.36               |
| Spain              | 0.67               |
| Sweden             | 0.58               |
| Switzerland        | 0.50               |
| Ukraine            | 1.11               |
| United Kingdom     | 0.37               |

<sup>6</sup> The list of countries in this table differs from that found in decision 5/CP.6 as a result of consultations undertaken during the session.

<sup>7</sup> This figure is changed to 33.00 Mt/C/yr by decision 12/CP.7 (Forest management activities under Article 3, paragraph 4, of the Kyoto Protocol: the Russian Federation).

**Decision 12/CP.7**

**Forest management activities under Article 3, paragraph 4, of the  
Kyoto Protocol: the Russian Federation**

*The Conference of the Parties,*

*Recalling* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Recalling also* the relevant provisions of decision 11/CP.7 and in particular, paragraphs 10 and 11 of the annex to decision -/CMP.1 (*Land use, land-use change and forestry*), attached thereto,

*Having considered* a submission by the Russian Federation<sup>1</sup> with regard to the value stated for this Party in the appendix to the above-mentioned annex,

*Decides* that, for the first commitment period, additions to and subtractions from the assigned amount of the Russian Federation, resulting from forest management under Article 3.4 after the application of paragraph 10 of the above-mentioned annex, and resulting from forest management projects under Article 6, shall not exceed 33 megatons of carbon per year, times five.<sup>2</sup>

*8<sup>th</sup> plenary meeting  
10 November 2001*

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<sup>1</sup> See FCCC/CP/2001/MISC.6.

<sup>2</sup> This corrects an error in the appendix to the draft decision on land use, land-use change and forestry in document FCCC/CP/2001/5/Add.2.

## Decision 13/CP.7

### **“Good practices” in policies and measures among Parties included in Annex I to the Convention<sup>1</sup>**

*The Conference of the Parties,*

*Recalling* the relevant provisions of the United Nations Framework Convention on Climate Change, in particular in Articles 4 and 7, paragraph 2(b), and of the Kyoto Protocol, in particular in Articles 2, 3 and 7,

*Recalling also* its decision 8/CP.4 whereby it requested the Subsidiary Body for Scientific and Technological Advice to undertake preparatory work to enable the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session after the entry into force of the Kyoto Protocol, to consider ways to facilitate cooperation to enhance the individual and combined effectiveness of policies and measures under Article 2, paragraph 1(b), of the Kyoto Protocol,

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Noting* the Chairman’s reports on the workshops held in Copenhagen from 11 to 13 April 2000,<sup>2</sup> pursuant to decision 8/CP.4, and from 8 to 10 October 2001,<sup>3</sup> pursuant to the request by the Conference of the Parties at the first part of its sixth session,<sup>4</sup>

*Appreciative* of the contribution of the Governments of Denmark and France and Norway in sponsoring these workshops,

*Recognizing* that the implementation of policies and measures contributes to achieving the objectives of the Convention and the Kyoto Protocol,

*Recognizing also* the value of information exchanges on “good practices” in policies and measures which are based on national circumstances, in furthering the objectives of the Convention and the Kyoto Protocol,

1. *Decides*, in making preparations during the lead-up to the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, in relation to Article 2, paragraph 1(b), of the Kyoto Protocol, to continue to facilitate cooperation among

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<sup>1</sup> In the context of this decision, the term “good practice” replaces the term “best practice”.

<sup>2</sup> FCCC/SBSTA/2000/2.

<sup>3</sup> FCCC/CP/SBSTA/2001/INF.5

<sup>4</sup> FCCC/CP/200/5/Add.2, section III. F.

Parties included in Annex I to the Convention (Annex I Parties) in order to enhance the individual and combined effectiveness of policies and measures such as those in Article 2, paragraph 1(a), of the Kyoto Protocol, in particular by sharing experience and exchanging information at a technical level, and taking into account national circumstances;

2. *Decides further* that the work referred to in paragraph 1 above should take place under the guidance of the Subsidiary Body for Scientific and Technological Advice (SBSTA), *inter alia* through initiatives involving all Parties and, as appropriate, environmental and business non-governmental organizations, and should include the exchange of information on policies and measures undertaken by Annex I Parties in all relevant sectors and on cross-cutting and methodological issues;

3. *Decides* that this work should contribute to the improvement of transparency, effectiveness and comparability of policies and measures. To that end this work should:

(a) Enhance transparency in reporting on policies and measures in the national communications of Annex I Parties through, as appropriate, criteria and quantitative parameters, and consider issues of methodology, attribution, and national circumstances;

(b) Facilitate information sharing on ways Annex I Parties have striven to implement policies and measures in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on developing country Parties, taking into account information related to these issues provided by Parties not included in Annex I to the Convention (non-Annex I Parties);

(c) Assist Parties and the Conference of the Parties in identifying further options for cooperation between Annex I Parties and other interested Parties to enhance the individual and combined effectiveness of their policies and measures;

4. *Decides also* that this work should contribute to the elaboration of elements for reporting information on demonstrable progress pursuant to decision 22/CP.7;

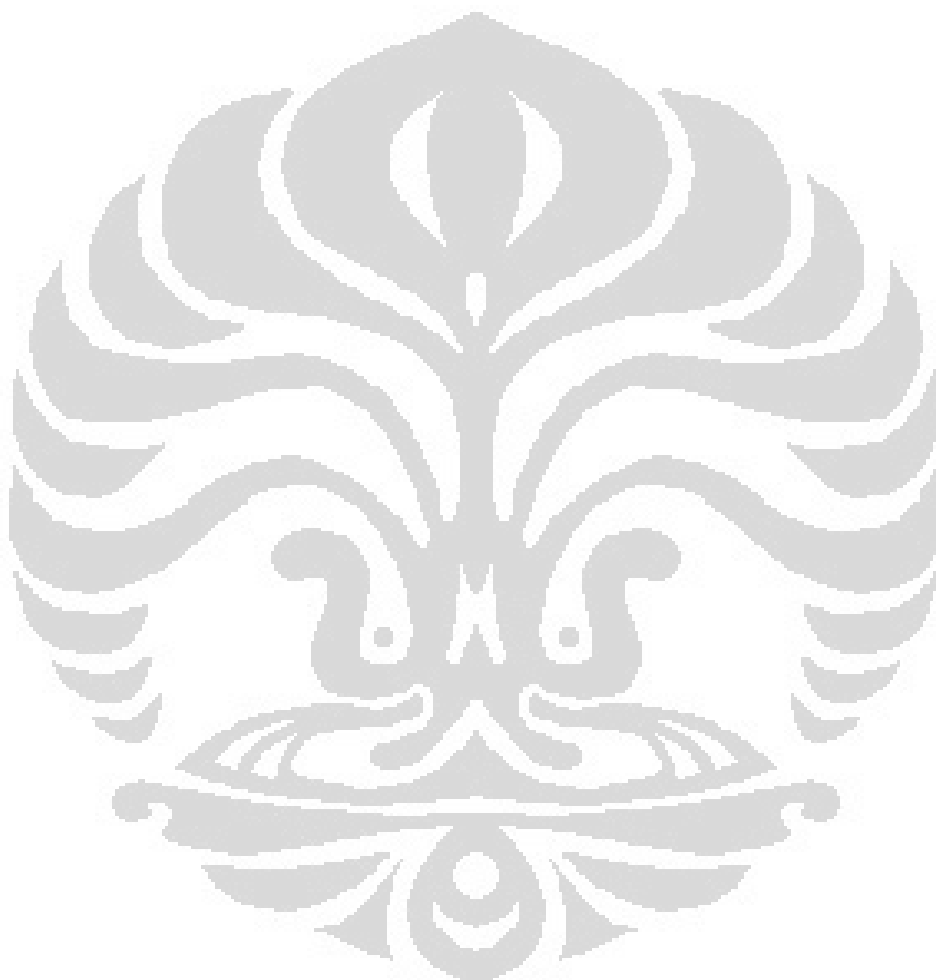
5. *Requests* the secretariat, under the guidance of the SBSTA in collaboration with relevant international and intergovernmental organizations of Annex I and non-Annex I Parties active in the area of policies and measures, to support this work by organizing, *inter alia*, workshops and side events and invites such organizations to provide input as appropriate and to present a status report on their activities related to policies and measures to the SBSTA at its seventeenth session;

6. *Requests* the secretariat to make available the information on policies and measures implemented and planned related to this work as well as to provide information on policies and measures reported in the third national communications by Annex I Parties when available;

7. *Requests* the SBSTA to consider at its seventeenth session the initial results obtained from the actions taken pursuant to this decision and to report them to the Conference of the Parties at its eighth session with a view to considering any further action;

8. *Invites* Annex I Parties and interested international organizations to provide the necessary financial support for the workshops and other activities identified in this decision.

*8<sup>th</sup> plenary meeting  
10 November 2001*





## Decision 14/CP.7

### Impact of single projects on emissions in the commitment period

*The Conference of the Parties,*

*Recalling* its decision 1/CP.3, paragraph 5 (d),

*Recalling further* its decision 5/CP.6, containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Having considered* the conclusions of the Subsidiary Body for Scientific and Technological Advice at its resumed thirteenth session,<sup>1</sup>

*Recognizing* the importance of renewable energy in meeting the objective of the Convention,

1. *Decides* that, for the purpose of this decision, a single project is defined as an industrial process facility at a single site that has come into operation since 1990 or an expansion of an industrial process facility at a single site in operation in 1990;

2. *Decides* that, for the first commitment period, industrial process carbon dioxide emissions from a single project which adds in any one year of that period more than 5 per cent to the total carbon dioxide emissions in 1990 of a Party listed in Annex B to the Protocol shall be reported separately and shall not be included in national totals to the extent that it would cause the Party to exceed its assigned amount, provided that:

(a) The total carbon dioxide emissions of the Party were less than 0.05 per cent of the total carbon dioxide emissions of Annex I Parties in 1990 calculated in accordance with the table contained in the annex to document FCCC/CP/1997/7/Add.1;

(b) Renewable energy is used, resulting in a reduction in greenhouse gas emissions per unit of production;

(c) Best environmental practice is followed and best available technology is used to minimize process emissions;

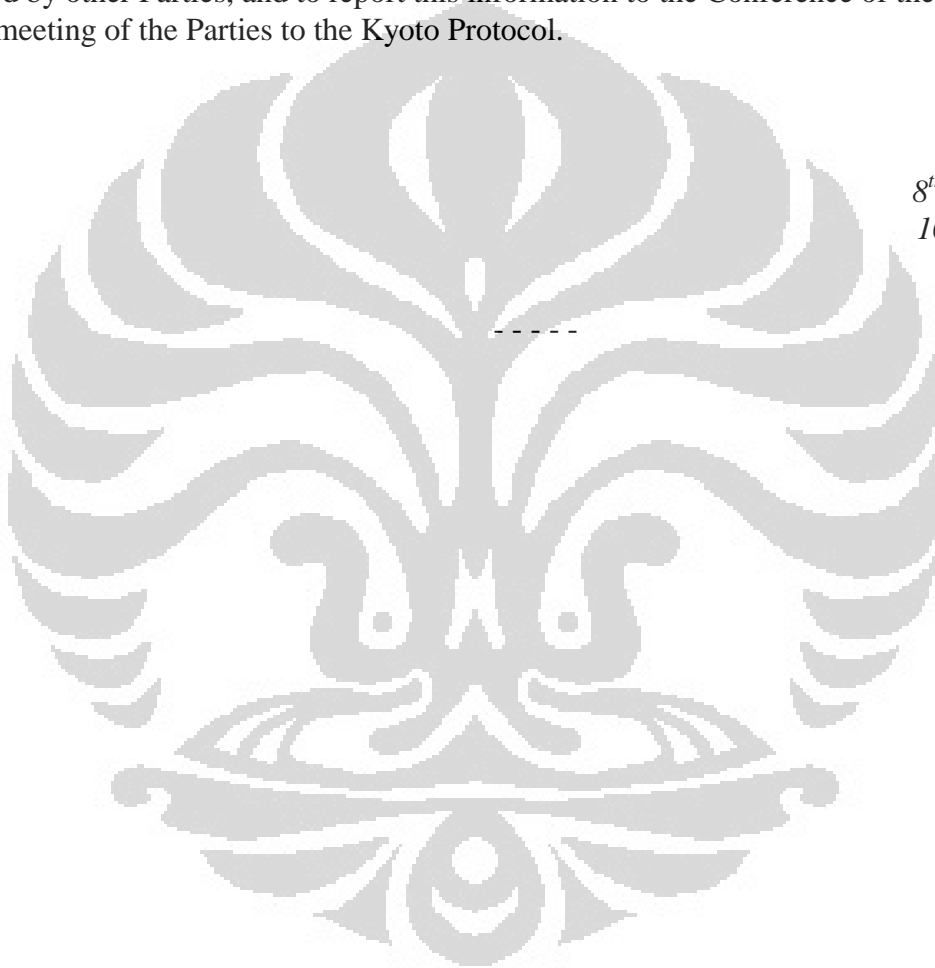
3. *Decides* that the total industrial process carbon dioxide emissions reported separately by a Party in accordance with paragraph 2 above shall not exceed 1.6 million tonnes of carbon dioxide annually on the average during the first commitment period and cannot be transferred by that Party or acquired by another Party under Articles 6 and 17 of the Kyoto Protocol;

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<sup>1</sup> FCCC/SBSTA/2000/14.

4. *Requests* any Party that intends to avail itself of the provisions of this decision to notify the Conference of the Parties, prior to its eighth session, of its intention;
5. *Requests* any Party with projects which meet the requirements specified above, to report emission factors, total process emissions from these projects, and an estimate of the emission savings resulting from the use of renewable energy in these projects in their annual inventory submissions;
6. *Requests* the secretariat to compile the information submitted by Parties in accordance with paragraph 5 above, to provide comparisons with relevant emission factors reported by other Parties, and to report this information to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.

*8<sup>th</sup> plenary meeting  
10 November 2001*





CONFERENCE OF THE PARTIES

REPORT OF THE CONFERENCE OF THE PARTIES ON  
ITS SEVENTH SESSION, HELD AT MARRAKESH  
FROM 29 OCTOBER TO 10 NOVEMBER 2001

Addendum

**PART TWO: ACTION TAKEN BY THE CONFERENCE OF THE PARTIES**

Volume II

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## Decision 15/CP.7

### **Principles, nature and scope of the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol**

*The Conference of the Parties,*

*Recalling* its decision 1/CP.3, in particular paragraphs 5(b), (c) and (e),

*Further recalling* its decisions 7/CP.4, 8/CP.4, 9/CP.4, 14/CP.5, and 5/CP.6 containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action, as appropriate,

*Recalling also* the preamble to the Convention,

*Recognizing* that, in using the mechanisms, Parties shall be guided by the objective and principles contained in Articles 2 and 3 and by Article 4, paragraph 7, of the Convention,

*Further recognizing* that the Kyoto Protocol has not created or bestowed any right, title or entitlement to emissions of any kind on Parties included in Annex I,

*Emphasizing* that the Parties included in Annex I shall implement domestic action in accordance with national circumstances and with a view to reducing emissions in a manner conducive to narrowing per capita differences between developed and developing country Parties while working towards achievement of the ultimate objective of the Convention,

*Affirming* that the use of the mechanisms shall be supplemental to domestic action and that domestic action shall thus constitute a significant element of the effort made by each Party included in Annex I to meet its quantified emission limitation and reduction commitments under Article 3, paragraph 1,

*Further emphasizing* that environmental integrity is to be achieved through sound modalities, rules and guidelines for the mechanisms, sound and strong principles and rules governing land use, land-use change and forestry activities and a strong compliance regime,

*Aware* of its decisions 11/CP.7, 16/CP.7, 17/CP.7, 18/CP.7, 19/CP.7, 20/CP.7, 21/CP.7, 22/CP.7, 23/CP.7 and 24/CP.7,

*Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session, adopt the draft decision below.

*8<sup>th</sup> plenary meeting  
10 November 2001*

**Draft decision -/CMP.1 (Mechanisms)****Principles, nature and scope of the mechanisms pursuant to  
Articles 6, 12 and 17 of the Kyoto Protocol**

*The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,*

*Recalling* decision 1/CP.3, in particular paragraphs 5(b), (c) and (e),

*Further recalling* decisions 7/CP.4, 8/CP.4, 9/CP.4, 14/CP.5, 5/CP.6 containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action, 11/CP.7, 16/CP.7, 17/CP.7, 18/CP.7, 19/CP.7, 20/CP.7, 21/CP.7, 22/CP.7, 23/CP.7 and 24/CP.7, as appropriate,

*Recalling also* the preamble to the Convention,

*Recognizing* that, in using the mechanisms, Parties shall be guided by the objective and principles contained in Articles 2 and 3 and by Article 4, paragraph 7, of the Convention,

*Further recognizing* that the Kyoto Protocol has not created or bestowed any right, title or entitlement to emissions of any kind on Parties included in Annex I,

*Emphasizing* that the Parties included in Annex I shall implement domestic action in accordance with national circumstances and with a view to reducing emissions in a manner conducive to narrowing per capita differences between developed and developing country Parties while working towards achievement of the ultimate objective of the Convention,

*Further emphasizing* that environmental integrity is to be achieved through sound modalities, rules and guidelines for the mechanisms, sound and strong principles and rules governing land use, land-use change and forestry activities, and a strong compliance regime,

*Aware* of its decisions -/CMP.1 (Article 6), -/CMP.1 (Article 12), -/CMP.1 (Article 17), -/CMP.1 (Land use, land-use change and forestry), -/CMP.1 (Modalities for the accounting of assigned amounts), -/CMP.1 (Article 5.1), -/CMP.1 (Article 5.2), -/CMP.1 (Article 7) and -/CMP.1 (Article 8) and decision 24/CP.7,

1. *Decides* that the use of the mechanisms shall be supplemental to domestic action and that domestic action shall thus constitute a significant element of the effort made by each Party included in Annex I to meet its quantified emission limitation and reduction commitments under Article 3, paragraph 1;

2. *Requests* the Parties included in Annex I to provide relevant information in relation to paragraph 1 above, in accordance with Article 7 of the Kyoto Protocol, for review under its Article 8;

3. *Decides* that the provision of such information shall take into account reporting on demonstrable progress as contained in decision -/CMP.1 (Article 7);

4. *Requests* the facilitative branch of the compliance committee to address questions of implementation with respect to paragraphs 2 and 3 above;

5. *Decides* that the eligibility to participate in the mechanisms by a Party included in Annex I shall be dependent on its compliance with methodological and reporting requirements under Article 5, paragraphs 1 and 2, and Article 7, paragraphs 1 and 4, of the Kyoto Protocol. Oversight of this provision will be provided by the enforcement branch of the compliance committee, in accordance with the procedures and mechanisms relating to compliance as contained in decision 24/CP.7, assuming approval of such procedures and mechanisms by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol in decision form in addition to any amendment entailing legally binding consequences, noting that it is the prerogative of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to decide on the legal form of the procedures and mechanisms relating to compliance;

6. *Decides* that certified emission reductions, emission reduction units and assigned amount units under Articles 6, 12 and 17, as well as removal units resulting from activities under Article 3, paragraphs 3 and 4, may be used to meet commitments under Article 3, paragraph 1, of the Parties included in Annex I, and can be added as provided for in Article 3, paragraphs 10, 11 and 12 of the Kyoto Protocol and in conformity with the provisions contained in decision -/CMP.1 (*Modalities for the accounting of assigned amounts*), and that emission reduction units, assigned amount units and removal units can be subtracted as provided for in Article 3, paragraphs 10 and 11, and in conformity with the provisions contained in decision -/CMP.1 (*Modalities for the accounting of assigned amounts*), without altering the quantified emission limitation and reduction commitments inscribed in Annex B to the Kyoto Protocol.

## Decision 16/CP.7

### Guidelines for the implementation of Article 6 of the Kyoto Protocol

*The Conference of the Parties,*

*Recalling* its decision 5/CP.6 containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Aware* of its decisions 3/CP.7, 11/CP.7, 15/CP.7, 17/CP.7, 18/CP.7, 19/CP.7, 20/CP.7, 21/CP.7, 22/CP.7, 23/CP.7 and 24/CP.7,

*Affirming* that it is the host Party's prerogative to confirm whether an Article 6 project activity assists it in achieving sustainable development,

*Recognizing* that Parties included in Annex I to the Convention are to refrain from using emission reduction units generated from nuclear facilities to meet their commitments under Article 3, paragraph 1,

1. *Urges* the Parties included in Annex II to the Convention to facilitate the participation in projects under Article 6 of Parties included in Annex I with commitments inscribed in Annex B that are undergoing the process of transition to a market economy;
2. *Invites* Parties included in Annex I to finance the administrative expenses for operating joint implementation under Article 6 by making contributions to the UNFCCC Trust Fund for Supplementary Activities in order to facilitate preparatory work by the secretariat, if necessary;
3. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session, adopt the draft decision below.

*8<sup>th</sup> plenary meeting  
10 November 2001*

**Draft decision -/CMP.1 (Article 6)**

**Guidelines for the implementation of Article 6 of the Kyoto Protocol**

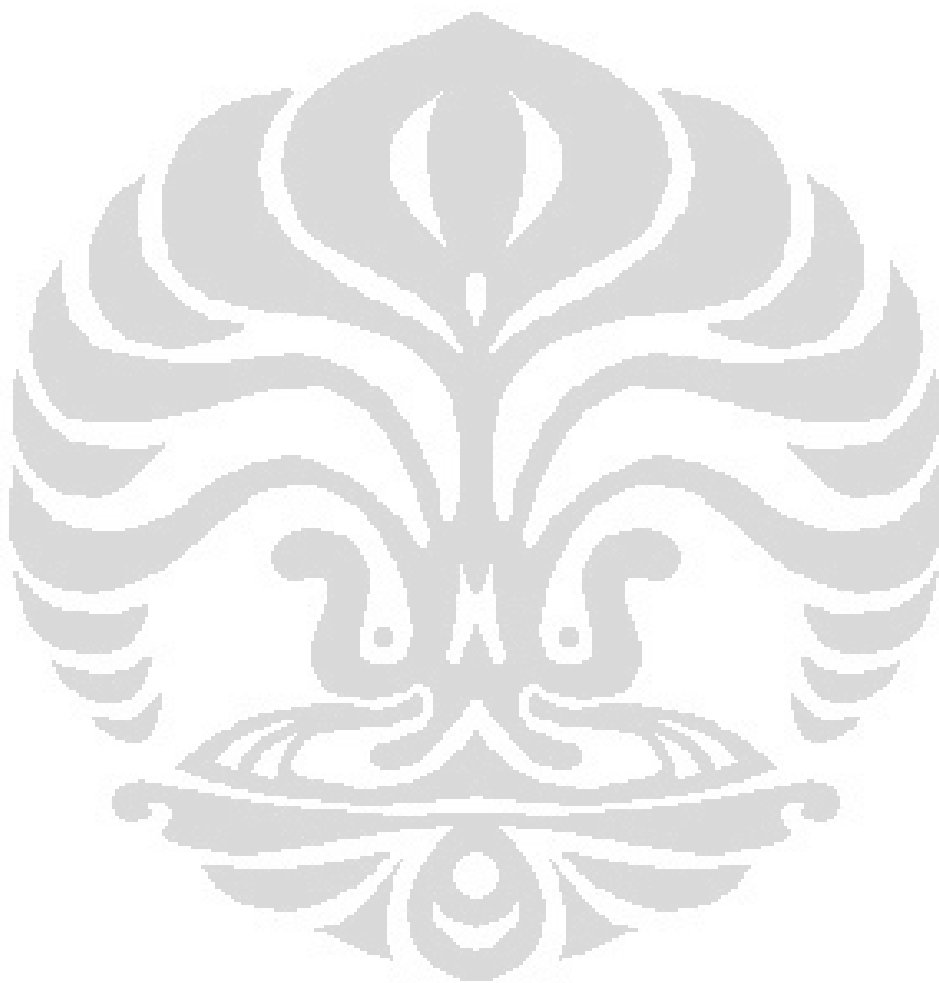
*The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,*

*Aware of its decisions -/CMP.1 (Mechanisms), -/CMP.1 (Article 12), -/CMP.1 (Article 17), -/CMP.1 (Land use, land-use change and forestry), -/CMP.1 (Modalities for the accounting of assigned amounts), -/CMP.1 (Article 5.1), -/CMP.1 (Article 5.2), -/CMP.1 (Article 7) and -/CMP.1 (Article 8), and decisions 3/CP.7 and 24/CP.7,*

1. *Decides* to confirm and give full effect to any actions taken pursuant to decision 16/CP.7 and to any other relevant decisions by the Conference of the Parties, as appropriate;
2. *Decides* to adopt the guidelines for the implementation of Article 6 of the Kyoto Protocol contained in the annex below;
3. *Decides* to establish the Article 6 supervisory committee, at its first session, to supervise, *inter alia*, the verification of ERUs generated by Article 6 projects;
4. *Decides* that projects under Article 6 aimed at enhancing anthropogenic removals by sinks shall conform to definitions, accounting rules, modalities and guidelines under Article 3, paragraphs 3 and 4, of the Kyoto Protocol;
5. *Decides* that projects starting as of the year 2000 may be eligible as Article 6 projects if they meet the requirements of the guidelines for the implementation of Article 6 of the Kyoto Protocol as set out in the annex below and that ERUs shall only be issued for a crediting period starting after the beginning of the year 2008;
6. *Urges* the Parties included in Annex II to facilitate the participation in Article 6 projects of Parties included in Annex I with commitments inscribed in Annex B that are undergoing the process of transition to a market economy;
7. *Decides* that any administrative costs arising from procedures contained in the annex below relating to the functions of the Article 6 supervisory committee shall be borne by both the Parties included in Annex I and the project participants according to specifications set out in a decision by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session;
8. *Decides further* that any future revision of the guidelines for the implementation of Article 6 shall be decided in accordance with the rules of procedure of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, as applied. The first review shall be carried out no later than one year after the end of the first commitment period, based on recommendations by the Article 6 supervisory committee and by the Subsidiary Body for Implementation drawing on technical advice of the Subsidiary Body for Scientific and



Technological Advice, as needed. Further reviews shall be carried out periodically thereafter. Any revision of the decision shall not affect ongoing Article 6 projects.



## ANNEX

### **Guidelines for the implementation of Article 6 of the Kyoto Protocol**

#### **A. Definitions**

1. For the purpose of the present annex the definitions contained in Article 1<sup>1</sup> and the provisions of Article 14 shall apply. Furthermore:

(a) An “emission reduction unit” or “ERU” is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (*Modalities for the accounting of assigned amounts*) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(b) A “certified emission reduction” or “CER” is a unit issued pursuant to Article 12 and requirements thereunder, as well as the relevant provisions in the annex to decision -/CMP.1 (*Article 12*), and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(c) An “assigned amount unit” or “AAU” is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (*Modalities for the accounting of assigned amounts*) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(d) A “removal unit” or “RMU” is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (*Modalities for the accounting of assigned amounts*) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(e) “Stakeholders” means the public, including individuals, groups or communities affected, or likely to be affected, by the project.

#### **B. Role of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol**

2. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP) shall provide guidance regarding the implementation of Article 6 and exercise authority over the Article 6 supervisory committee.

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<sup>1</sup> In the context of this annex, “Article” refers to an Article of the Kyoto Protocol, unless otherwise specified.

### **C. Article 6 supervisory committee**

3. The Article 6 supervisory committee shall supervise, *inter alia*, the verification of ERUs generated by Article 6 project activities, referred to in section E below, and be responsible for:

- (a) Reporting on its activities to each session of the COP/MOP;
- (b) The accreditation of independent entities in accordance with standards and procedures contained in Appendix A below;
- (c) The review of standards and procedures for the accreditation of independent entities in Appendix A below, giving consideration to relevant work of the executive board of the clean development mechanism (CDM) and, as appropriate, making recommendations to the COP/MOP on revisions to these standards and procedures;
- (d) The review and revision of reporting guidelines and criteria for baselines and monitoring in Appendix B below, for consideration by the COP/MOP, giving consideration to relevant work of the executive board of the CDM, as appropriate;
- (e) The elaboration of the Article 6 project design document, for consideration by the COP/MOP, taking into consideration Appendix B of the Annex on modalities and procedures for a clean development mechanism and giving consideration to relevant work of the executive board of the CDM, as appropriate;
- (f) The review procedures set out in paragraphs 35 and 39 below;
- (g) The elaboration of any rules of procedure additional to those contained in the present annex, for consideration by the COP/MOP.

4. The Article 6 supervisory committee shall comprise ten members from Parties to the Kyoto Protocol, as follows:

- (a) Three members from Parties<sup>2</sup> included in Annex I that are undergoing the process of transition to a market economy;
- (b) Three members from Parties included in Annex I not referred to in subparagraph (a) above;
- (c) Three members from Parties not included in Annex I;
- (d) One member from the small island developing States.

5. Members, including alternate members, of the Article 6 supervisory committee shall be nominated by the relevant constituencies referred to in paragraph 4 above and be elected by the COP/MOP. The COP/MOP shall elect to the Article 6 supervisory committee five members and five alternate members for a term of two years and five members and five alternate members for a term of three years. Thereafter, the COP/MOP shall elect, every year, five new members and five alternate members for a term of two years. Appointment pursuant to paragraph 12 below

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<sup>2</sup> In the context of this annex, "Party" refers to a Party to the Kyoto Protocol, unless otherwise specified.

shall count as one term. The members and alternate members shall remain in office until their successors are elected.

6. Members of the Article 6 supervisory committee may be eligible to serve a maximum of two consecutive terms. Terms as alternate members do not count.

7. The Article 6 supervisory committee shall elect annually a chairperson and vice-chairperson from among its members, with one being from a Party included in Annex I and the other being from a Party not included in Annex I. The positions of chairperson and vice-chairperson shall alternate annually between a member from a Party included in Annex I and a member from a Party not included in Annex I.

8. The COP/MOP shall elect an alternate member for each member of the Article 6 supervisory committee based on the criteria in paragraphs 4, 5 and 6 above. The nomination by a constituency of a candidate member shall be accompanied by a nomination of a candidate alternate member from the same constituency.

9. The Article 6 supervisory committee shall meet at least two times each year, whenever possible in conjunction with the meetings of the subsidiary bodies, unless decided otherwise. All documentation for the Article 6 supervisory committee meetings shall be made available to alternate members.

10. Members, including alternate members, of the Article 6 supervisory committee shall:

(a) Serve in their personal capacities and shall have recognized competence relating to climate change issues and in relevant technical and policy fields. The cost of participation of members and of alternate members from developing country Parties and other Parties eligible under UNFCCC practice shall be covered by the budget for the Article 6 supervisory committee;

(b) Have no pecuniary or financial interest in any aspect of an Article 6 project;

(c) Subject to their responsibility to the Article 6 supervisory committee, not disclose any confidential or proprietary information coming to their knowledge by reason of their duties for the Article 6 supervisory committee. The duty of a member, including an alternate member, not to disclose confidential information constitutes an obligation in respect to that member, including an alternate member, and shall remain an obligation after the expiration or termination of that member's, including an alternate member's, function for the Article 6 supervisory committee;

(d) Be bound by the rules of procedure of the Article 6 supervisory committee;

(e) Take a written oath of service witnessed by the Executive Secretary of the UNFCCC or his/her authorized representative before assuming his or her duties.

11. The Article 6 supervisory committee may suspend and recommend to the COP/MOP the termination of the membership of a particular member, including an alternate member, for cause including, *inter alia*, breach of the conflict of interest provisions, breach of the confidentiality provisions, or failure to attend two consecutive meetings of the Article 6 supervisory committee without proper justification.

12. If a member, or an alternate member, of the Article 6 supervisory committee resigns or is otherwise unable to complete the assigned term of office or to perform the functions of that office, the Article 6 supervisory committee may decide, bearing in mind the proximity of the next session of the COP/MOP, to appoint another member, or an alternate member, from the same constituency to replace the said member for the remainder of that member's mandate. In such a case, the Article 6 supervisory committee shall take into account any views expressed by the group that had nominated the member.
13. The Article 6 supervisory committee shall draw on the expertise necessary to perform its functions, in particular taking into account national accreditation procedures.
14. At least two thirds of the members of the Article 6 supervisory committee, representing a majority of members from Parties included in Annex I and a majority of members from Parties not included in Annex I, must be present to constitute a quorum.
15. Decisions by the Article 6 supervisory committee shall be taken by consensus, whenever possible. If all efforts at reaching a consensus have been exhausted and no agreement has been reached, decisions shall as a last resort be adopted by a three-fourths majority vote of the members present and voting at the meeting. Members abstaining from voting shall be considered as not voting.
16. The full text of all decisions of the Article 6 supervisory committee shall be made publicly available. Decisions shall be made available in all six official languages of the United Nations.
17. The working language of the Article 6 supervisory committee shall be English.
18. Meetings of the Article 6 supervisory committee shall be open to attendance, as observers, by all Parties and by all UNFCCC accredited observers and stakeholders, except where otherwise decided by the Article 6 supervisory committee.
19. The secretariat shall service the Article 6 supervisory committee.

#### **D. Participation requirements**

20. A Party involved in an Article 6 project shall inform the secretariat of:
- (a) Its designated focal point for approving projects pursuant to Article 6, paragraph 1(a);
  - (b) Its national guidelines and procedures for approving Article 6 projects, including the consideration of stakeholders' comments, as well as monitoring and verification.

21. Subject to the provisions of paragraph 22 below, a Party included in Annex I with a commitment inscribed in Annex B is eligible to transfer and/or acquire ERUs issued in accordance with the relevant provisions, if it is in compliance with the following eligibility requirements:

- (a) It is a Party to the Kyoto Protocol;
- (b) Its assigned amount pursuant to Article 3, paragraphs 7 and 8, has been calculated and recorded in accordance with decision -/CMP.1 (*Modalities for the accounting of assigned amounts*);
- (c) It has in place a national system for the estimation of anthropogenic emissions by sources and anthropogenic removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, in accordance with Article 5, paragraph 1, and the requirements in the guidelines decided thereunder;
- (d) It has in place a national registry in accordance with Article 7, paragraph 4, and the requirements in the guidelines decided thereunder;
- (e) It has submitted annually the most recent required inventory, in accordance with Article 5, paragraph 2, and Article 7, paragraph 1, and the requirements in the guidelines decided thereunder, including the national inventory report and the common reporting format. For the first commitment period, the quality assessment needed for the purpose of determining eligibility to use the mechanisms shall be limited to the parts of the inventory pertaining to emissions of greenhouse gases from sources/sector categories from Annex A to the Kyoto Protocol and the submission of the annual inventory on sinks;
- (f) It submits the supplementary information on assigned amount in accordance with Article 7, paragraph 1, and the requirements in the guidelines decided thereunder and makes any additions to, and subtractions from, assigned amount pursuant to Article 3, paragraphs 7 and 8, including for the activities under Article 3, paragraphs 3 and 4, in accordance with Article 7, paragraph 4, and the requirements in the guidelines decided thereunder.

22. A Party included in Annex I with a commitment inscribed in Annex B shall be considered:

- (a) To meet the eligibility requirements referred to in paragraph 21 above after 16 months have elapsed since the submission of its report to facilitate the calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8, and to demonstrate its capacity to account for its emissions and assigned amount, in accordance with the modalities adopted for the accounting of assigned amount under Article 7, paragraph 4, unless the enforcement branch of the compliance committee finds in accordance with decision 24/CP.7 that the Party does not meet these requirements, or, at an earlier date, if the enforcement branch of the compliance committee has decided that it is not proceeding with any questions of implementation relating to these requirements indicated in reports of the expert review teams under Article 8 of the Kyoto Protocol, and has transmitted this information to the secretariat;

(b) To continue to meet the eligibility requirements referred to in paragraph 21 above unless and until the enforcement branch of the compliance committee decides that the Party does not meet one or more of the eligibility requirements, has suspended the Party's eligibility, and has transmitted this information to the secretariat.

23. Where it is considered to meet the eligibility requirements set out in paragraph 21 above, a host Party may verify reductions in anthropogenic emissions by sources or enhancements of anthropogenic removals by sinks from an Article 6 project as being additional to any that would otherwise occur, in accordance with Article 6, paragraph 1 (b). Upon such verification, the host Party may issue the appropriate quantity of ERUs in accordance with the relevant provisions of decision -/CMP.1 (*Modalities for the accounting of assigned amounts*).

24. Where a host Party does not meet the eligibility requirements set out in paragraph 21 above, the verification of reductions in anthropogenic emissions by sources or enhancements of anthropogenic removals by sinks from an Article 6 project as being additional to any that would otherwise occur, in accordance with Article 6, paragraph 1(b), shall occur through the verification procedure under the Article 6 supervisory committee, as set out in section E below. The host Party may however only issue and transfer ERUs upon meeting the requirements in paragraphs 21 (a), (b) and (d) above.

25. A host Party which meets the requirements in paragraph 21 above may at any time elect to use the verification procedure under the Article 6 supervisory committee.

26. The provisions in Article 6, paragraph 4, shall pertain, *inter alia*, to the requirements of paragraph 21 above.

27. The secretariat shall maintain a publicly accessible list of Parties that meet the eligibility requirements and that have been suspended in accordance with relevant provisions contained in decision 24/CP.7.

28. A Party hosting an Article 6 project shall make publicly available, directly or through the secretariat, information on the project in accordance with the reporting guidelines set out in Appendix B below and the requirements contained in decision -/CMP.1 (*Modalities for the accounting of assigned amounts*).

29. A Party that authorizes legal entities to participate in Article 6 projects shall remain responsible for the fulfilment of its obligations under the Kyoto Protocol and shall ensure that such participation is consistent with the present annex. Legal entities may only transfer or acquire ERUs if the authorizing Party is eligible to do so at that time.

#### **E. Verification procedure under the Article 6 supervisory committee**

30. The verification procedure under the Article 6 supervisory committee is the determination by an independent entity, accredited pursuant to Appendix A below, of whether a project and the ensuing reductions of anthropogenic emissions by sources or enhancements of anthropogenic removals by sinks meet the relevant requirements of Article 6 and these guidelines.

31. Project participants shall submit to an accredited independent entity a project design document that contains all information needed for the determination of whether the project:

- (a) Has been approved by the Parties involved;
- (b) Would result in a reduction of anthropogenic emissions by sources or an enhancement of anthropogenic removals by sinks that is additional to any that would otherwise occur;
- (c) Has an appropriate baseline and monitoring plan in accordance with the criteria set out in Appendix B below.

32. The accredited independent entity shall make the project design document publicly available through the secretariat, subject to confidentiality provisions set out in paragraph 40 below, and receive comments from Parties, stakeholders and UNFCCC accredited observers on the project design document and any supporting information for 30 days from the date the project design document is made publicly available.

33. The accredited independent entity shall determine whether:

- (a) The project has been approved by the Parties involved;
- (b) The project would result in a reduction of anthropogenic emissions by sources or an enhancement of anthropogenic removals by sinks that is additional to any that would otherwise occur;
- (c) The project has an appropriate baseline and monitoring plan in accordance with the criteria set out in Appendix B below;
- (d) Project participants have submitted to the accredited independent entity documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts, in accordance with procedures as determined by the host Party, and, if those impacts are considered significant by the project participants or the host Party, have undertaken an environmental impact assessment in accordance with procedures as required by the host Party.

34. The accredited independent entity shall make its determination publicly available through the secretariat, together with an explanation of its reasons, including a summary of comments received and a report of how due account was taken of these.

35. The determination regarding a project design document shall be deemed final 45 days after the date on which the determination is made public, unless a Party involved in the project or three of the members of the Article 6 supervisory committee request a review by the Article 6 supervisory committee. If such a review is requested, the Article 6 supervisory committee shall finalize the review as soon as possible, but no later than six months or at the second meeting following the request for review. The Article 6 supervisory committee shall communicate its decision on the determination and the reasons for it to the project participants and the public. Its decision shall be final.



36. Project participants shall submit to an accredited independent entity a report in accordance with the monitoring plan on reductions in anthropogenic emissions by sources or enhancements of anthropogenic removals by sinks that have already occurred. The report shall be made publicly available.
37. The accredited independent entity shall, upon receipt of a report referred to under paragraph 36 above, make a determination of the reductions in anthropogenic emissions by sources or enhancements of anthropogenic removals by sinks reported by project participants in accordance with Appendix B below, provided that they were monitored and calculated in accordance with paragraph 33 above.
38. The accredited independent entity shall make its determination under paragraph 37 above publicly available through the secretariat, together with an explanation of its reasons.
39. The determination regarding reported reductions in anthropogenic emissions by sources or enhancements of anthropogenic removals by sinks shall be deemed final 15 days after the date on which it is made public, unless a Party involved in the project or three of the members of the Article 6 supervisory committee request a review by the Article 6 supervisory committee. If such a review is requested, the Article 6 supervisory committee shall:
- (a) At its next meeting or no later than 30 days after the formal request for the review decide on its course of action. If it decides that the request has merit, it shall perform a review;
  - (b) Complete its review within 30 days following its decision to perform the review;
  - (c) Inform the project participants of the outcome of the review, and make public its decision and the reasons for it.
40. Information obtained from project participants marked as proprietary or confidential shall not be disclosed without the written consent of the provider of the information, except as required by applicable national law of the host Party. Information used to determine whether reductions in anthropogenic emissions by sources or enhancements of anthropogenic removals by sinks are additional, to describe the baseline methodology and its application, and to support an environmental impact assessment referred to in paragraph 33(d) above, shall not be considered as proprietary or confidential.
41. Any provisions relating to the commitment period reserve or other limitations to transfers under Article 17 shall not apply to transfers by a Party of ERUs issued into its national registry that were verified in accordance with the verification procedure under the Article 6 supervisory committee.
42. The Article 6 supervisory committee shall suspend or withdraw the accreditation of an independent entity if it has carried out a review and found that the entity no longer meets the accreditation standards laid down in Appendix A. The Article 6 supervisory committee may suspend or withdraw accreditation only after the accredited independent entity has had the opportunity of a hearing and depending on the outcome of the hearing. The suspension or withdrawal is with immediate effect. The affected entity shall be notified, immediately and in

writing, once the Article 6 supervisory committee has decided upon its suspension or withdrawal. The decision by the Article 6 supervisory committee on such a case shall be made public.

43. Verified projects shall not be affected by the suspension or withdrawal of the accreditation of an accredited independent entity unless significant deficiencies are identified in the determination referred to in paragraphs 33 or 37 above for which the entity was responsible. In this case, the Article 6 supervisory committee shall decide whether a different accredited independent entity shall be appointed to assess and, where appropriate, correct such deficiencies. If such an assessment reveals that excess ERUs have been transferred as a result of the deficiencies identified in the determination referred to in paragraphs 33 or 37 above, the independent entity whose accreditation has been withdrawn or suspended shall acquire an equivalent amount of AAUs and ERUs and place them in the holding account of the Party hosting the project within 30 days from the assessment mentioned above.

44. Any suspension or withdrawal of an accredited independent entity that adversely affects verified projects shall be decided on by the Article 6 supervisory committee only after the affected project participants have had the opportunity of a hearing.

45. Any costs related to the assessment referred to in paragraph 44 above shall be borne by the accredited independent entity whose accreditation has been withdrawn or suspended.

#### APPENDIX A

##### Standards and procedures for the accreditation of independent entities

1. An independent entity shall:
  - (a) Be a legal entity (either a domestic legal entity or an international organization) and provide documentation of this status;
  - (b) Employ a sufficient number of persons having the necessary competence to perform all necessary functions relevant to the verification of ERUs generated by Article 6 projects relating to the type, range and volume of work performed, under a responsible senior executive;
  - (c) Have the financial stability, insurance coverage and resources required for its activities;
  - (d) Have sufficient arrangements to cover legal and financial liabilities arising from its activities;
  - (e) Have documented internal procedures for carrying out its functions including, *inter alia*, procedures for the allocation of responsibilities within the organization and for handling complaints. These procedures shall be made publicly available;
  - (f) Have the necessary expertise to carry out the functions specified in this and relevant decisions by the COP/MOP, and, in particular, have sufficient knowledge and understanding of:

- (i) The guidelines for the implementation of Article 6 of the Kyoto Protocol, relevant decisions of the COP/MOP and of the Article 6 supervisory committee;
  - (ii) Environmental issues relevant to the verification of Article 6 projects;
  - (iii) The technical aspects of Article 6 activities relevant to environmental issues, including expertise in the setting of baselines and monitoring of emissions and other environmental impacts;
  - (iv) Relevant environmental auditing requirements and methodologies;
  - (v) Methodologies for the accounting of anthropogenic emissions by sources and/or anthropogenic removals by sinks;
- (g) Have a management structure that has overall responsibility for performance and implementation of the entity's functions, including quality assurance procedures, and all relevant decisions relating to verification. The applicant independent entity shall make available:
- (i) The names, qualifications, experience and terms of reference of the senior executive, board members, senior officers and other relevant personnel;
  - (ii) An organizational chart showing lines of authority, responsibility and allocation of functions stemming from the senior executive;
  - (iii) Its quality assurance policy and procedures;
  - (iv) Administrative procedures, including document control;
  - (v) Its policy and procedures for the recruitment and training of independent entity personnel, for ensuring their competence for all necessary functions and for monitoring their performance;
  - (vi) Its procedures for handling complaints, appeals and disputes;
- (h) Not have pending any judicial process for malpractice, fraud and/or other activity incompatible with its functions as an accredited independent entity.

2. An applicant independent entity shall meet the following operational requirements:

- (a) Work in a credible, independent, non-discriminatory and transparent manner, complying with applicable national law and meeting, in particular, the following requirements:
- (i) An applicant independent entity shall have a documented structure, which safeguards impartiality, including provisions to ensure the impartiality of its operations;
  - (ii) If it is part of a larger organization, and where parts of that organization are, or may become, involved in the identification, development or financing of any Article 6 project, the applicant independent entity shall:

- Make a declaration of all the organization's actual and potential Article 6 activities;
  - Clearly define the links with other parts of the organization, demonstrating that no conflicts of interest exist;
  - Demonstrate that no actual or potential conflict of interest exists between its functions as an accredited independent entity and any other functions that it may have, and demonstrate how business is managed to minimize any identified risk to impartiality. The demonstration shall cover all potential sources of conflict of interest, whether they arise from within the applicant independent entity or from the activities of related bodies;
  - Demonstrate that it, together with its senior executive and staff, is not involved in any commercial, financial or other processes which might influence its judgement or endanger trust in its independence of judgement and integrity in relation to its activities, and that it complies with any rules applicable in this respect;
- (b) Have adequate arrangements to safeguard confidentiality of the information obtained from Article 6 project participants in accordance with provisions contained in the annex on guidelines for the implementation of Article 6.

## APPENDIX B

### Criteria for baseline setting and monitoring

#### Criteria for baseline setting

1. The baseline for an Article 6 project is the scenario that reasonably represents the anthropogenic emissions by sources or anthropogenic removals by sinks of greenhouse gases that would occur in the absence of the proposed project. A baseline shall cover emissions from all gases, sectors and source categories listed in Annex A, and anthropogenic removals by sinks, within the project boundary.
2. A baseline shall be established:
  - (a) On a project-specific basis and/or using a multi-project emission factor;
  - (b) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors;
  - (c) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector;
  - (d) In such a way that ERUs cannot be earned for decreases in activity levels outside the project activity or due to *force majeure*;

- (e) Taking account of uncertainties and using conservative assumptions.
3. Project participants shall justify their choice of baseline.

Monitoring

4. Project participants shall include, as part of the project design document, a monitoring plan that provides for:
- (a) The collection and archiving of all relevant data necessary for estimating or measuring anthropogenic emissions by sources and/or anthropogenic removals by sinks of greenhouse gases occurring within the project boundary during the crediting period;
  - (b) The collection and archiving of all relevant data necessary for determining the baseline of anthropogenic emissions by sources and/or anthropogenic removals by sinks of greenhouse gases within the project boundary during the crediting period;
  - (c) The identification of all potential sources of, and the collection and archiving of data on increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of greenhouse gases outside the project boundary that are significant and reasonably attributable to the project during the crediting period. The project boundary shall encompass all anthropogenic emissions by sources and/or removals by sinks of greenhouse gases under the control of the project participants that are significant and reasonably attributable to the Article 6 project;
  - (d) The collection and archiving of information on environmental impacts, in accordance with procedures as required by the host Party, where applicable;
  - (e) Quality assurance and control procedures for the monitoring process;
  - (f) Procedures for the periodic calculation of the reductions of anthropogenic emissions by sources and/or enhancements of anthropogenic removals by sinks by the proposed Article 6 project, and for leakage effects, if any. Leakage is defined as the net change of anthropogenic emissions by sources and/or removals by sinks of greenhouse gases which occurs outside the project boundary, and that is measurable and attributable to the Article 6 project;
  - (g) Documentation of all steps involved in the calculations referred to in subparagraphs (b) and (f) above.
5. Revisions, if any, to the monitoring plan to improve its accuracy and/or completeness of information shall be justified by project participants and shall be submitted for the determination referred to in paragraph 37 of the annex on guidelines for the implementation of Article 6 of the Kyoto Protocol by the accredited independent entity.
6. The implementation of the monitoring plan and its revisions, as applicable, shall be a condition for verification.

## Decision 17/CP.7

### **Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol**

*The Conference of the Parties,*

*Recalling* Article 12 of the Kyoto Protocol which provides that the purpose of the clean development mechanism shall be to assist Parties not included in Annex I to the Convention in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3 of the Kyoto Protocol,

*Recalling also* its decision 5/CP.6 containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Aware* of its decisions 2/CP.7, 11/CP.7, 15/CP.7, 16/CP.7, 18/CP.7, 19/CP.7, 20/CP.7, 21/CP.7, 22/CP.7, 23/CP.7, 24/CP.7 and 38/CP.7,

*Affirming* that it is the host Party's prerogative to confirm whether a clean development mechanism project activity assists it in achieving sustainable development,

*Recognizing* that Parties included in Annex I are to refrain from using certified emission reductions generated from nuclear facilities to meet their commitments under Article 3, paragraph 1,

*Bearing in mind* the need to promote equitable geographic distribution of clean development mechanism project activities at regional and subregional levels,

*Emphasizing* that public funding for clean development mechanism projects from Parties in Annex I is not to result in the diversion of official development assistance and is to be separate from and not counted towards the financial obligations of Parties included in Annex I,

*Further emphasizing* that clean development mechanism project activities should lead to the transfer of environmentally safe and sound technology and know-how in addition to that required under Article 4, paragraph 5, of the Convention and Article 10 of the Kyoto Protocol,

*Recognizing* the need for guidance for project participants and designated operational entities, in particular for establishing reliable, transparent and conservative baselines, to assess whether clean development mechanism project activities are in accordance with the additionality criterion in Article 12, paragraph 5(c), of the Kyoto Protocol,

1. *Decides* to facilitate a prompt start for a clean development mechanism by adopting the modalities and procedures contained in the annex below;

2. *Decides* that, for the purposes of the present decision, the Conference of the Parties shall assume the responsibilities of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol as set out in the annex below on modalities and procedures;

3. *Invites* nominations for membership in the executive board:

(a) For facilitating the prompt start of the clean development mechanism, from Parties to the Convention to be submitted to the President of the Conference of the Parties at its present session, with a view to the Conference of the Parties electing the members of the executive board at that session;

(b) Upon the entry into force of the Kyoto Protocol, to replace any member of the executive board of the clean development mechanism whose country has not ratified or acceded to the Kyoto Protocol. Such new members shall be nominated by the same constituencies and elected at the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

4. *Decides* that, prior to the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, the executive board and any designated operational entities shall operate in the same manner as the executive board and designated operational entities of the clean development mechanism as set out in the annex below;

5. *Decides* that the executive board shall convene its first meeting immediately upon the election of its members;

6. *Decides* that the executive board shall include in its work plan until the eighth session of the Conference of the Parties, *inter alia*, the following tasks:

(a) To develop and agree on its rules of procedure and recommend them to the Conference of the Parties for adoption, applying draft rules until then;

(b) To accredit operational entities and designate them, on a provisional basis, pending the designation by the Conference of the Parties at its eighth session;

(c) To develop and recommend to the Conference of the Parties, at its eighth session, simplified modalities and procedures for the following small-scale clean development mechanism project activities:

- (i) Renewable energy project activities with a maximum output capacity equivalent of up to 15 megawatts (or an appropriate equivalent);
- (ii) Energy efficiency improvement project activities which reduce energy consumption, on the supply and/or demand side, by up to the equivalent of 15 gigawatt/hours per year;
- (iii) Other project activities that both reduce anthropogenic emissions by sources and directly emit less than 15 kilotonnes of carbon dioxide equivalent annually;

(d) To prepare recommendations on any relevant matter, including on Appendix C to the annex below, for consideration by the Conference of the Parties at its eighth session;

(e) To identify modalities for seeking collaboration with the Subsidiary Body for Scientific and Technological Advice on methodological and scientific issues;

7. *Decides:*

(a) That the eligibility of land use, land-use change and forestry project activities under the clean development mechanism is limited to afforestation and reforestation;

(b) That for the first commitment period, the total of additions to a Party's assigned amount resulting from eligible land use, land-use change and forestry project activities under the clean development mechanism shall not exceed one per cent of base year emissions of that Party, times five;

(c) That the treatment of land use, land-use change and forestry project activities under the clean development mechanism in future commitment periods shall be decided as part of the negotiations on the second commitment period;

8. *Requests* the secretariat to organize a workshop before the sixteenth session of the Subsidiary Body for Scientific and Technological Advice with the aim of recommending terms of reference and an agenda for the work to be conducted under paragraph 10(b) below on the basis of, *inter alia*, submissions by Parties referred to in paragraph 9 below;

9. *Invites* Parties to provide submissions to the secretariat by 1 February 2002 on the organization of the workshop referred to in paragraph 8 above, and to express their views on the terms of reference and the agenda for the work to be conducted under paragraph 10(b) below;

10. *Requests* the Subsidiary Body for Scientific and Technological Advice:

(a) To develop at its sixteenth session terms of reference and an agenda for the work to be conducted under subparagraph (b) below, taking into consideration, *inter alia*, the outcome of the workshop mentioned in paragraph 8 above;

(b) To develop definitions and modalities for including afforestation and reforestation project activities under the clean development mechanism in the first commitment period, taking into account the issues of non-permanence, additionality, leakage, uncertainties and socio-economic and environmental impacts, including impacts on biodiversity and natural ecosystems, and being guided by the principles in the preamble to decision -/CMP.1 (*Land use, land-use change and forestry*) and the terms of reference referred to in subparagraph (a) above, with the aim of adopting a decision on these definitions and modalities at the ninth session of the Conference of the Parties, to be forwarded to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session;

11. *Decides* that the decision by the Conference of the Parties at its ninth session, on definitions and modalities for inclusion of afforestation and reforestation project activities under the clean development mechanism, for the first commitment period, referred to in paragraph 10 (b) above, shall be in the form of an annex on modalities and procedures for



afforestation and reforestation project activities for a clean development mechanism reflecting, *mutatis mutandis*, the annex to the present decision on modalities and procedures for a clean development mechanism;

12. *Decides* that certified emission reductions shall only be issued for a crediting period starting after the date of registration of a clean development mechanism project activity;

13. *Further decides* that a project activity starting as of the year 2000, and prior to the adoption of this decision, shall be eligible for validation and registration as a clean development mechanism project activity if submitted for registration before 31 December 2005. If registered, the crediting period for such project activities may start prior to the date of its registration but not earlier than 1 January 2000;

14. *Requests* Parties included in Annex I to start implementing measures to assist Parties not included in Annex I, in particular the least developed and small island developing States among them, with building capacity in order to facilitate their participation in the clean development mechanism, taking into account relevant decisions by the Conference of the Parties on capacity-building and on the financial mechanism of the Convention;

15. *Decides*:

(a) That the share of proceeds to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation, as referred to in Article 12, paragraph 8, of the Kyoto Protocol, shall be two per cent of the certified emission reductions issued for a clean development mechanism project activity;

(b) That clean development mechanism project activities in least developed country Parties shall be exempt from the share of proceeds to assist with the costs of adaptation;

16. *Decides* that the level of the share of proceeds to cover administrative expenses of the clean development mechanism shall be determined by the Conference of the Parties upon the recommendation of the executive board;

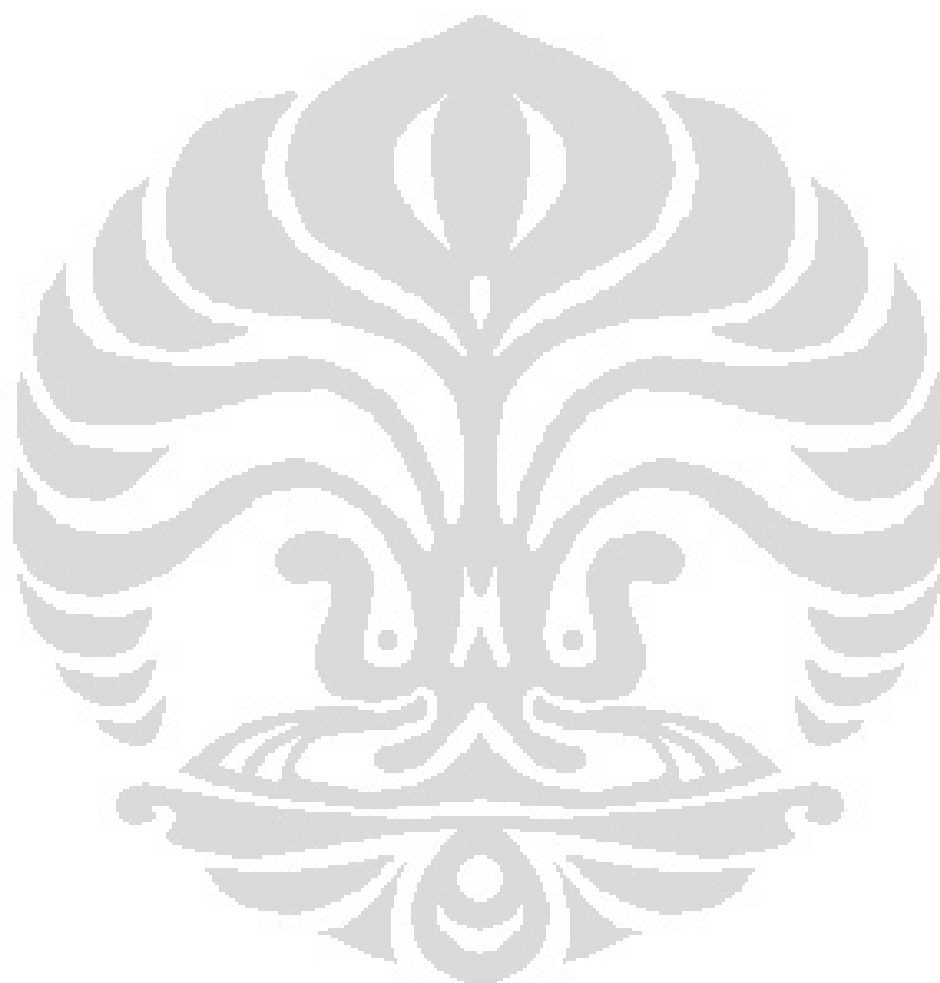
17. *Invites* Parties to finance the administrative expenses for operating the clean development mechanism by making contributions to the UNFCCC Trust Fund for Supplementary Activities. Such contributions shall be reimbursed, if requested, in accordance with procedures and a timetable to be determined by the Conference of the Parties upon the recommendation of the executive board. Until the Conference of the Parties determines a percentage for the share of proceeds for the administrative expenses, the executive board shall charge a fee to recover any project related expenses;

18. *Requests* the secretariat to perform any functions assigned to it in the present decision and in the annex below;

19. *Decides* to assess progress made regarding the clean development mechanism and to take appropriate action, as necessary. Any revision of the decision shall not affect clean development mechanism project activities already registered;

20. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session, adopt the draft decision below.

*8<sup>th</sup> plenary meeting  
10 November 2001*



**Draft decision -/CMP.1 (Article 12)**

**Modalities and procedures for a clean development mechanism  
as defined in Article 12 of the Kyoto Protocol**

*The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,*

*Recalling* the provisions of Articles 3 and 12 of the Kyoto Protocol,

*Bearing in mind* that, in accordance with Article 12, the purpose of the clean development mechanism is to assist Parties not included in Annex I to the Convention in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3 of the Kyoto Protocol,

*Aware* of its decisions -/CMP.1 (*Mechanisms*), -/CMP.1 (*Article 6*), -/CMP.1 (*Article 17*), -/CMP.1 (*Land use, land-use change and forestry*), -/CMP.1 (*Modalities for the accounting of assigned amounts*), -/CMP.1 (*Article 5.1*), -/CMP.1 (*Article 5.2*), -/CMP.1 (*Article 7*) and -/CMP.1 (*Article 8*), and decisions 2/CP.7 and 24/CP.7,

*Cognizant* of decision 17/CP.7 on modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol,

1. *Decides* to confirm, and give full effect to any actions taken pursuant to, decision 17/CP.7 and to any other relevant decisions by the Conference of the Parties, as appropriate;
2. *Adopts* the modalities and procedures for a clean development mechanism contained in the annex below;
3. *Invites* the executive board to review the simplified modalities, procedures and the definitions of small-scale project activities referred to in paragraph 6(c) of decision 17/CP.7 and, if necessary, make appropriate recommendations to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;
4. *Decides* further that any future revision of the modalities and procedures for a clean development mechanism shall be decided in accordance with the rules of procedure of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, as applied. The first review shall be carried out no later than one year after the end of the first commitment period, based on recommendations by the executive board and by the Subsidiary Body for Implementation drawing on technical advice from the Subsidiary Body for Scientific and Technological Advice, as needed. Further reviews shall be carried out periodically thereafter. Any revision of the decision shall not affect clean development mechanism project activities already registered.

## ANNEX

### **Modalities and procedures for a clean development mechanism**

#### **A. Definitions**

1. For the purposes of the present annex the definitions contained in Article 1<sup>1</sup> and the provisions of Article 14 shall apply. Furthermore:

(a) An “emission reduction unit” or “ERU” is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (*Modalities for the accounting of assigned amounts*) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(b) A “certified emission reduction” or “CER” is a unit issued pursuant to Article 12 and requirements thereunder, as well as the relevant provisions in these modalities and procedures, and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(c) An “assigned amount unit” or “AAU” is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (*Modalities for the accounting of assigned amounts*) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(d) A “removal unit” or “RMU” is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (*Modalities for the accounting of assigned amounts*) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(e) “Stakeholders” means the public, including individuals, groups or communities affected, or likely to be affected, by the proposed clean development mechanism project activity.

#### **B. Role of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol**

2. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP) shall have authority over and provide guidance to the clean development mechanism (CDM).

3. The COP/MOP shall provide guidance to the executive board by taking decisions on:

(a) The recommendations made by the executive board on its rules of procedure;

(b) The recommendations made by the executive board, in accordance with provisions of decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;

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<sup>1</sup> In the context of this annex, “Article” refers to an Article of the Kyoto Protocol, unless otherwise specified.

(c) The designation of operational entities accredited by the executive board in accordance with Article 12, paragraph 5, and accreditation standards contained in Appendix A below.

4. The COP/MOP shall further:

(a) Review annual reports of the executive board;

(b) Review the regional and subregional distribution of designated operational entities and take appropriate decisions to promote accreditation of such entities from developing country Parties<sup>2</sup>.

(c) Review the regional and subregional distribution of CDM project activities with a view to identifying systematic or systemic barriers to their equitable distribution and take appropriate decisions, based, *inter alia*, on a report by the executive board;

(d) Assist in arranging funding of CDM project activities, as necessary.

### **C. Executive board**

5. The executive board shall supervise the CDM, under the authority and guidance of the COP/MOP, and be fully accountable to the COP/MOP. In this context, the executive board shall:

(a) Make recommendations to the COP/MOP on further modalities and procedures for the CDM, as appropriate;

(b) Make recommendations to the COP/MOP on any amendments or additions to rules of procedure for the executive board contained in the present annex, as appropriate;

(c) Report on its activities to each session of the COP/MOP;

(d) Approve new methodologies related to, *inter alia*, baselines, monitoring plans and project boundaries in accordance with the provisions of Appendix C below;

(e) Review provisions with regard to simplified modalities, procedures and the definitions of small scale project activities and make recommendations to the COP/MOP;

(f) Be responsible for the accreditation of operational entities, in accordance with accreditation standards contained in Appendix A below, and make recommendations to the COP/MOP for the designation of operational entities, in accordance with Article 12, paragraph 5. This responsibility includes:

(i) Decisions on re-accreditation, suspension and withdrawal of accreditation;

(ii) Operationalization of accreditation procedures and standards;

(g) Review the accreditation standards in Appendix A below and make recommendations to the COP/MOP for consideration, as appropriate;

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<sup>2</sup> In the context of this annex, "Party" refers to a Party to the Kyoto Protocol, unless otherwise specified.

- (h) Report to the COP/MOP on the regional and subregional distribution of CDM project activities with a view to identifying systematic or systemic barriers to their equitable distribution;
- (i) Make publicly available relevant information, submitted to it for this purpose, on proposed CDM project activities in need of funding and on investors seeking opportunities, in order to assist in arranging funding of CDM project activities, as necessary;
- (j) Make any technical reports commissioned available to the public and provide a period of at least eight weeks for public comments on draft methodologies and guidance before documents are finalized and any recommendations are submitted to the COP/MOP for their consideration;
- (k) Develop, maintain and make publicly available a repository of approved rules, procedures, methodologies and standards;
- (l) Develop and maintain the CDM registry as defined in Appendix D below;
- (m) Develop and maintain a publicly available database of CDM project activities containing information on registered project design documents, comments received, verification reports, its decisions as well as information on all CERs issued;
- (n) Address issues relating to observance of modalities and procedures for the CDM by project participants and/or operational entities, and report on them to the COP/MOP;
- (o) Elaborate and recommend to the COP/MOP for adoption at its next session procedures for conducting the reviews referred to in paragraphs 41 and 65 below including, *inter alia*, procedures to facilitate consideration of information from Parties, stakeholders and UNFCCC accredited observers. Until their adoption by the COP/MOP, the procedures shall be applied provisionally;
- (p) Carry out any other functions ascribed to it in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP.

6. Information obtained from CDM project participants marked as proprietary or confidential shall not be disclosed without the written consent of the provider of the information, except as required by national law. Information used to determine additionality as defined in paragraph 43 below, to describe the baseline methodology and its application, and to support an environmental impact assessment referred to in paragraph 37(c) below, shall not be considered as proprietary or confidential.

7. The executive board shall comprise ten members from Parties to the Kyoto Protocol, as follows: one member from each of the five United Nations regional groups, two other members from the Parties included in Annex I, two other members from the Parties not included in Annex I, and one representative of the small island developing States, taking into account the current practice in the Bureau of the Conference of the Parties.

8. Members, including alternate members, of the executive board shall:

(a) Be nominated by the relevant constituencies referred to in paragraph 7 above and be elected by the COP/MOP. Vacancies shall be filled in the same way;

(b) Be elected for a period of two years and be eligible to serve a maximum of two consecutive terms. Terms as alternate members do not count. Five members and five alternate members shall be elected initially for a term of three years and five members and five alternate members for a term of two years. Thereafter, the COP/MOP shall elect, every year, five new members, and five new alternate members, for a term of two years. Appointment pursuant to paragraph 11 below shall count as one term. The members, and alternate members, shall remain in office until their successors are elected;

(c) Possess appropriate technical and/or policy expertise and shall act in their personal capacity. The cost of participation of members, and of alternate members, from developing country Parties and other Parties eligible under UNFCCC practice shall be covered by the budget for the executive board;

(d) Be bound by the rules of procedure of the executive board;

(e) Take a written oath of service witnessed by the Executive Secretary of the UNFCCC or his/her authorized representative before assuming his or her duties;

(f) Have no pecuniary or financial interest in any aspect of a CDM project activity or any designated operational entity;

(g) Subject to their responsibilities to the executive board, not disclose any confidential or proprietary information coming to their knowledge by reason of their duties for the executive board. The duty of the member, including alternate member, not to disclose confidential information constitutes an obligation in respect of that member, and alternate member, and shall remain an obligation after the expiration or termination of that member's function for the executive board.

9. The COP/MOP shall elect an alternate for each member of the executive board based on the criteria in paragraphs 7 and 8 above. The nomination by a constituency of a candidate member shall be accompanied by a nomination for a candidate alternate member from the same constituency.

10. The executive board may suspend and recommend to the COP/MOP the termination of the membership of a particular member, including an alternate member, for cause including, *inter alia*, breach of the conflict of interest provisions, breach of the confidentiality provisions, or failure to attend two consecutive meetings of the executive board without proper justification.

11. If a member, or an alternate member, of the executive board resigns or is otherwise unable to complete the assigned term of office or to perform the functions of that office, the executive board may decide, bearing in mind the proximity of the next session of the COP/MOP, to appoint another member, or an alternate member, from the same constituency to replace the said member for the remainder of that member's mandate.

12. The executive board shall elect its own chairperson and vice-chairperson, with one being a member from a Party included in Annex I and the other being from a Party not included in Annex I. The positions of chairperson and vice-chairperson shall alternate annually between a member from a Party included in Annex I and a member from a Party not included in Annex I.

13. The executive board shall meet as necessary but no less than three times a year, bearing in mind the provisions of paragraph 41 below. All documentation for executive board meetings shall be made available to alternate members.

14. At least two thirds of the members of the executive board, representing a majority of members from Parties included in Annex I and a majority of members from Parties not included in Annex I, must be present to constitute a quorum.

15. Decisions by the executive board shall be taken by consensus, whenever possible. If all efforts at reaching a consensus have been exhausted and no agreement has been reached, decisions shall be taken by a three-fourths majority of the members present and voting at the meeting. Members abstaining from voting shall be considered as not voting.

16. Meetings of the executive board shall be open to attendance, as observers, by all Parties and by all UNFCCC accredited observers and stakeholders, except where otherwise decided by the executive board.

17. The full text of all decisions of the executive board shall be made publicly available. The working language of the executive board shall be English. Decisions shall be made available in all six official languages of the United Nations.

18. The executive board may establish committees, panels or working groups to assist it in the performance of its functions. The executive board shall draw on the expertise necessary to perform its functions, including from the UNFCCC roster of experts. In this context, it shall take fully into account the consideration of regional balance.

19. The secretariat shall service the executive board.

#### **D. Accreditation and designation of operational entities**

20. The executive board shall:

(a) Accredit operational entities which meet the accreditation standards contained in Appendix A below;

(b) Recommend the designation of operational entities to the COP/MOP;

(c) Maintain a publicly available list of all designated operational entities;

(d) Review whether each designated operational entity continues to comply with the accreditation standards contained in Appendix A below and on this basis confirm whether to reaccredit each operational entity every three years;

(e) Conduct spot-checking at any time and, on the basis of the results, decide to conduct the above-mentioned review, if warranted.



21. The executive board may recommend to the COP/MOP to suspend or withdraw the designation of a designated operational entity if it has carried out a review and found that the entity no longer meets the accreditation standards or applicable provisions in decisions of the COP/MOP. The executive board may recommend the suspension or withdrawal of designation only after the designated operational entity has had the possibility of a hearing. The suspension or withdrawal is with immediate effect, on a provisional basis, once the executive board has made a recommendation, and remains in effect pending a final decision by the COP/MOP. The affected entity shall be notified, immediately and in writing, once the executive board has recommended its suspension or withdrawal. The recommendation by the executive board and the decision by the COP/MOP on such a case shall be made public.

22. Registered project activities shall not be affected by the suspension or withdrawal of designation of a designated operational entity unless significant deficiencies are identified in the relevant validation, verification or certification report for which the entity was responsible. In this case, the executive board shall decide whether a different designated operational entity shall be appointed to review, and where appropriate correct, such deficiencies. If such a review reveals that excess CERs were issued, the designated operational entity whose accreditation has been withdrawn or suspended shall acquire and transfer, within 30 days of the end of review, an amount of reduced tonnes of carbon dioxide equivalent equal to the excess CERs issued, as determined by the executive board, to a cancellation account maintained in the CDM registry by the executive board.

23. Any suspension or withdrawal of a designated operational entity that adversely affects registered project activities shall be recommended by the executive board only after the affected project participants have had the possibility of a hearing.

24. Any costs related to the review referred to in paragraph 22 above shall be borne by the designated operational entity whose designation has been withdrawn or suspended.

25. The executive board may seek assistance in performing the functions in paragraph 20 above, in accordance with the provisions of paragraph 18 above.

#### **E. Designated operational entities**

26. Designated operational entities shall be accountable to the COP/MOP through the executive board and shall comply with the modalities and procedures in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP and the executive board.

27. A designated operational entity shall:

- (a) Validate proposed CDM project activities;
- (b) Verify and certify reductions in anthropogenic emissions by sources of greenhouse gases;
- (c) Comply with applicable laws of the Parties hosting CDM project activities when carrying out its functions referred to in subparagraph (e) below;

(d) Demonstrate that it, and its subcontractors, have no real or potential conflict of interest with the participants in the CDM project activities for which it has been selected to carry out validation or verification and certification functions;

(e) Perform one of the following functions related to a given CDM project activity: validation or verification and certification. Upon request, the executive board may, however, allow a single designated operational entity to perform all these functions within a single CDM project activity;

(f) Maintain a publicly available list of all CDM project activities for which it has carried out validation, verification and certification;

(g) Submit an annual activity report to the executive board;

(h) Make information obtained from CDM project participants publicly available, as required by the executive board. Information marked as proprietary or confidential shall not be disclosed without the written consent of the provider of the information, except as required by national law. Information used to determine additionality as defined in paragraph 43 below, to describe the baseline methodology and its application, and to support an environmental impact assessment referred to in paragraph 37(c) below, shall not be considered as proprietary or confidential.

#### **F. Participation requirements**

28. Participation in a CDM project activity is voluntary.

29. Parties participating in the CDM shall designate a national authority for the CDM.

30. A Party not included in Annex I may participate in a CDM project activity if it is a Party to the Kyoto Protocol.

31. Subject to the provisions of paragraph 32 below, a Party included in Annex I with a commitment inscribed in Annex B is eligible to use CERs, issued in accordance with the relevant provisions, to contribute to compliance with part of its commitment under Article 3, paragraph 1, if it is in compliance with the following eligibility requirements:

(a) It is a Party to the Kyoto Protocol;

(b) Its assigned amount pursuant to Article 3, paragraphs 7 and 8, has been calculated and recorded in accordance with decision -/CMP.1 (*Modalities for the accounting of assigned amounts*);

(c) It has in place a national system for the estimation of anthropogenic emissions by sources and anthropogenic removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, in accordance with Article 5, paragraph 1, and the requirements in the guidelines decided thereunder;

(d) It has in place a national registry in accordance with Article 7, paragraph 4, and the requirements in the guidelines decided thereunder;

(e) It has submitted annually the most recent required inventory, in accordance with Article 5, paragraph 2, and Article 7, paragraph 1, and the requirements in the guidelines decided thereunder, including the national inventory report and the common reporting format. For the first commitment period, the quality assessment needed for the purpose of determining eligibility to use the mechanisms shall be limited to the parts of the inventory pertaining to emissions of greenhouse gases from sources/sector categories from Annex A to the Kyoto Protocol and the submission of the annual inventory on sinks;

(f) It submits the supplementary information on assigned amount in accordance with Article 7, paragraph 1, and the requirements in the guidelines decided thereunder and makes any additions to, and subtractions from, assigned amount pursuant to Article 3, paragraphs 7 and 8, including for the activities under Article 3, paragraphs 3 and 4, in accordance with Article 7, paragraph 4, and the requirements in the guidelines decided thereunder.

32. A Party included in Annex I with a commitment inscribed in Annex B shall be considered:

(a) To meet the eligibility requirements referred to in paragraph 31 above after 16 months have elapsed since the submission of its report to facilitate the calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8, and to demonstrate its capacity to account for its emissions and assigned amount, in accordance with the modalities adopted for the accounting of assigned amount under Article 7, paragraph 4, unless the enforcement branch of the compliance committee finds in accordance with decision 24/CP.7 that the Party does not meet these requirements, or, at an earlier date, if the enforcement branch of the compliance committee has decided that it is not proceeding with any questions of implementation relating to these requirements indicated in reports of the expert review teams under Article 8 of the Kyoto Protocol, and has transmitted this information to the secretariat;

(b) To continue to meet the eligibility requirements referred to in paragraph 31 above unless and until the enforcement branch of the compliance committee decides that the Party does not meet one or more of the eligibility requirements, has suspended the Party's eligibility, and has transmitted this information to the secretariat.

33. A Party that authorizes private and/or public entities to participate in Article 12 project activities shall remain responsible for the fulfilment of its obligations under the Kyoto Protocol and shall ensure that such participation is consistent with the present annex. Private and/or public entities may only transfer and acquire CERs if the authorizing Party is eligible to do so at that time.

34. The secretariat shall maintain publicly accessible lists of:

(a) Parties not included in Annex I which are Parties to the Kyoto Protocol;

(b) Parties included in Annex I that do not meet the requirements in paragraph 31 above or have been suspended.

### **G. Validation and registration**

35. Validation is the process of independent evaluation of a project activity by a designated operational entity against the requirements of the CDM as set out in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP, on the basis of the project design document, as outlined in Appendix B below.

36. Registration is the formal acceptance by the executive board of a validated project as a CDM project activity. Registration is the prerequisite for the verification, certification and issuance of CERs related to that project activity.

37. The designated operational entity selected by project participants to validate a project activity, being under a contractual arrangement with them, shall review the project design document and any supporting documentation to confirm that the following requirements have been met:

- (a) The participation requirements as set out in paragraphs 28 to 30 above are satisfied;
- (b) Comments by local stakeholders have been invited, a summary of the comments received has been provided, and a report to the designated operational entity on how due account was taken of any comments has been received;
- (c) Project participants have submitted to the designated operational entity documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts and, if those impacts are considered significant by the project participants or the host Party, have undertaken an environmental impact assessment in accordance with procedures as required by the host Party;
- (d) The project activity is expected to result in a reduction in anthropogenic emissions by sources of greenhouse gases that are additional to any that would occur in the absence of the proposed project activity, in accordance with paragraphs 43 to 52 below;
- (e) The baseline and monitoring methodologies comply with requirements pertaining to:
  - (i) Methodologies previously approved by the executive board; or
  - (ii) Modalities and procedures for establishing a new methodology, as set out in paragraph 38 below;
- (f) Provisions for monitoring, verification and reporting are in accordance with decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;
- (g) The project activity conforms to all other requirements for CDM project activities in decision 17/CP.7, the present annex and relevant decisions by the COP/MOP and the executive board.

38. If the designated operational entity determines that the project activity intends to use a new baseline or monitoring methodology, as referred to in paragraph 37(e) (ii) above, it shall, prior to a submission for registration of this project activity, forward the proposed methodology, together with the draft project design document, including a description of the project and identification of the project participants, to the executive board for review. The executive board shall expeditiously, if possible at its next meeting but not later than four months, review the proposed new methodology in accordance with the modalities and procedures of the present annex. Once approved by the executive board it shall make the approved methodology publicly available along with any relevant guidance and the designated operational entity may proceed with the validation of the project activity and submit the project design document for registration. In the event that the COP/MOP requests the revision of an approved methodology, no CDM project activity may use this methodology. The project participants shall revise the methodology, as appropriate, taking into consideration any guidance received.

39. A revision of a methodology shall be carried out in accordance with the modalities and procedures for establishing new methodologies as set out in paragraph 38 above. Any revision to an approved methodology shall only be applicable to project activities registered subsequent to the date of revision and shall not affect existing registered project activities during their crediting periods.

40. The designated operational entity shall:

- (a) Prior to the submission of the validation report to the executive board, have received from the project participants written approval of voluntary participation from the designated national authority of each Party involved, including confirmation by the host Party that the project activity assists it in achieving sustainable development;
- (b) In accordance with provisions on confidentiality contained in paragraph 27(h) above, make publicly available the project design document;
- (c) Receive, within 30 days, comments on the validation requirements from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available;
- (d) After the deadline for receipt of comments, make a determination as to whether, on the basis of the information provided and taking into account the comments received, the project activity should be validated;
- (e) Inform project participants of its determination on the validation of the project activity. Notification to the project participants will include:
  - (i) Confirmation of validation and date of submission of the validation report to the executive board; or
  - (ii) An explanation of reasons for non-acceptance if the project activity, as documented, is judged not to fulfil the requirements for validation;

(f) Submit to the executive board, if it determines the proposed project activity to be valid, a request for registration in the form of a validation report including the project design document, the written approval of the host Party as referred to in subparagraph (a) above, and an explanation of how it has taken due account of comments received;

(g) Make this validation report publicly available upon transmission to the executive board.

41. The registration by the executive board shall be deemed final eight weeks after the date of receipt by the executive board of the request for registration, unless a Party involved in the project activity or at least three members of the executive board request a review of the proposed CDM project activity. The review by the executive board shall be made in accordance with the following provisions:

(a) It shall be related to issues associated with the validation requirements;

(b) It shall be finalized no later than at the second meeting following the request for review, with the decision and the reasons for it being communicated to the project participants and the public.

42. A proposed project activity that is not accepted may be reconsidered for validation and subsequent registration, after appropriate revisions, provided that it follows the procedures and meets the requirements for validation and registration, including those related to public comments.

43. A CDM project activity is additional if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered CDM project activity.

44. The baseline for a CDM project activity is the scenario that reasonably represents the anthropogenic emissions by sources of greenhouse gases that would occur in the absence of the proposed project activity. A baseline shall cover emissions from all gases, sectors and source categories listed in Annex A within the project boundary. A baseline shall be deemed to reasonably represent the anthropogenic emissions by sources that would occur in the absence of the proposed project activity if it is derived using a baseline methodology referred to in paragraphs 37 and 38 above.

45. A baseline shall be established:

(a) By project participants in accordance with provisions for the use of approved and new methodologies, contained in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;

(b) In a transparent and conservative manner regarding the choice of approaches, assumptions, methodologies, parameters, data sources, key factors and additionality, and taking into account uncertainty;

(c) On a project-specific basis;

(d) In the case of small-scale CDM project activities which meet the criteria specified in decision 17/CP.7 and relevant decisions by the COP/MOP, in accordance with simplified procedures developed for such activities;

(e) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector.

46. The baseline may include a scenario where future anthropogenic emissions by sources are projected to rise above current levels, due to the specific circumstances of the host Party.

47. The baseline shall be defined in a way that CERs cannot be earned for decreases in activity levels outside the project activity or due to *force majeure*.

48. In choosing a baseline methodology for a project activity, project participants shall select from among the following approaches the one deemed most appropriate for the project activity, taking into account any guidance by the executive board, and justify the appropriateness of their choice:

(a) Existing actual or historical emissions, as applicable; or

(b) Emissions from a technology that represents an economically attractive course of action, taking into account barriers to investment; or

(c) The average emissions of similar project activities undertaken in the previous five years, in similar social, economic, environmental and technological circumstances, and whose performance is among the top 20 per cent of their category.

49. Project participants shall select a crediting period for a proposed project activity from one of the following alternative approaches:

(a) A maximum of seven years which may be renewed at most two times, provided that, for each renewal, a designated operational entity determines and informs the executive board that the original project baseline is still valid or has been updated taking account of new data where applicable; or

(b) A maximum of ten years with no option of renewal.

50. Reductions in anthropogenic emissions by sources shall be adjusted for leakage in accordance with the monitoring and verification provisions in paragraphs 59 and 62(f) below, respectively.

51. Leakage is defined as the net change of anthropogenic emissions by sources of greenhouse gases which occurs outside the project boundary, and which is measurable and attributable to the CDM project activity.

52. The project boundary shall encompass all anthropogenic emissions by sources of greenhouse gases under the control of the project participants that are significant and reasonably attributable to the CDM project activity.

## **H. Monitoring**

53. Project participants shall include, as part of the project design document, a monitoring plan that provides for:

(a) The collection and archiving of all relevant data necessary for estimating or measuring anthropogenic emissions by sources of greenhouse gases occurring within the project boundary during the crediting period;

(b) The collection and archiving of all relevant data necessary for determining the baseline of anthropogenic emissions by sources of greenhouse gases within the project boundary during the crediting period;

(c) The identification of all potential sources of, and the collection and archiving of data on, increased anthropogenic emissions by sources of greenhouse gases outside the project boundary that are significant and reasonably attributable to the project activity during the crediting period;

(d) The collection and archiving of information relevant to the provisions in paragraph 37(c) above;

(e) Quality assurance and control procedures for the monitoring process;

(f) Procedures for the periodic calculation of the reductions of anthropogenic emissions by sources by the proposed CDM project activity, and for leakage effects;

(g) Documentation of all steps involved in the calculations referred to in paragraph 53(c) and (f) above.

54. A monitoring plan for a proposed project activity shall be based on a previously approved monitoring methodology or a new methodology, in accordance with paragraphs 37 and 38 above, that:

(a) Is determined by the designated operational entity as appropriate to the circumstances of the proposed project activity and has been successfully applied elsewhere;

(b) Reflects good monitoring practice appropriate to the type of project activity.

55. For small-scale CDM project activities meeting the criteria specified in decision 17/CP.7 and relevant decisions by the COP/MOP, project participants may use simplified modalities and procedures for small-scale projects.

56. Project participants shall implement the monitoring plan contained in the registered project design document.

57. Revisions, if any, to the monitoring plan to improve its accuracy and/or completeness of information shall be justified by project participants and shall be submitted for validation to a designated operational entity.



58. The implementation of the registered monitoring plan and its revisions, as applicable, shall be a condition for verification, certification and the issuance of CERs.
59. Subsequent to the monitoring and reporting of reductions in anthropogenic emissions, CERs resulting from a CDM project activity during a specified time period shall be calculated, applying the registered methodology, by subtracting the actual anthropogenic emissions by sources from baseline emissions and adjusting for leakage.
60. The project participants shall provide to the designated operational entity, contracted by the project participants to perform the verification, a monitoring report in accordance with the registered monitoring plan set out in paragraph 53 above for the purpose of verification and certification.

### **I. Verification and certification**

61. Verification is the periodic independent review and *ex post* determination by the designated operational entity of the monitored reductions in anthropogenic emissions by sources of greenhouse gases that have occurred as a result of a registered CDM project activity during the verification period. Certification is the written assurance by the designated operational entity that, during a specified time period, a project activity achieved the reductions in anthropogenic emissions by sources of greenhouse gases as verified.
62. In accordance with the provisions on confidentiality in paragraph 27(h) above, the designated operational entity contracted by the project participants to perform the verification shall make the monitoring report publicly available, and shall:
- (a) Determine whether the project documentation provided is in accordance with the requirements of the registered project design document and relevant provisions of decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;
  - (b) Conduct on-site inspections, as appropriate, that may comprise, *inter alia*, a review of performance records, interviews with project participants and local stakeholders, collection of measurements, observation of established practices and testing of the accuracy of monitoring equipment;
  - (c) If appropriate, use additional data from other sources;
  - (d) Review monitoring results and verify that the monitoring methodologies for the estimation of reductions in anthropogenic emissions by sources have been applied correctly and their documentation is complete and transparent;
  - (e) Recommend to the project participants appropriate changes to the monitoring methodology for any future crediting period, if necessary;
  - (f) Determine the reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the CDM project activity, based on the data and information derived under subparagraph (a) above and obtained under subparagraph (b) and/or (c) above, as appropriate, using calculation procedures consistent with those contained in the registered project design document and in the monitoring plan;

(g) Identify and inform the project participants of any concerns related to the conformity of the actual project activity and its operation with the registered project design document. Project participants shall address the concerns and supply relevant additional information;

(h) Provide a verification report to the project participants, the Parties involved and the executive board. The report shall be made publicly available.

63. The designated operational entity shall, based on its verification report, certify in writing that, during the specified time period, the project activity achieved the verified amount of reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the CDM project activity. It shall inform the project participants, Parties involved and the executive board of its certification decision in writing immediately upon completion of the certification process and make the certification report publicly available.

#### **J. Issuance of certified emission reductions**

64. The certification report shall constitute a request for issuance to the executive board of CERs equal to the verified amount of reductions of anthropogenic emissions by sources of greenhouse gases.

65. The issuance shall be considered final 15 days after the date of receipt of the request for issuance, unless a Party involved in the project activity or at least three members of the executive board request a review of the proposed issuance of CERs. Such a review shall be limited to issues of fraud, malfeasance or incompetence of the designated operational entities and be conducted as follows:

(a) Upon receipt of a request for such a review, the executive board, at its next meeting, shall decide on its course of action. If it decides that the request has merit it shall perform a review and decide whether the proposed issuance of CERs should be approved;

(b) The executive board shall complete its review within 30 days following its decision to perform the review;

(c) The executive board shall inform the project participants of the outcome of the review, and make public its decision regarding the approval of the proposed issuance of CERs and the reasons for it.

66. Upon being instructed by the executive board to issue CERs for a CDM project activity, the CDM registry administrator, working under the authority of the executive board, shall, promptly, issue the specified quantity of CERs into the pending account of the executive board in the CDM registry, in accordance with Appendix D below. Upon such issuance, the CDM registry administrator shall promptly:

(a) Forward the quantity of CERs corresponding to the share of proceeds to cover administrative expenses and to assist in meeting costs of adaptation, respectively, in accordance with Article 12, paragraph 8, to the appropriate accounts in the CDM registry for the management of the share of proceeds;

(b) Forward the remaining CERs to the registry accounts of Parties and project participants involved, in accordance with their request.

## APPENDIX A

### Standards for the accreditation of operational entities

1. An operational entity shall:

- (a) Be a legal entity (either a domestic legal entity or an international organization) and provide documentation of this status;
- (b) Employ a sufficient number of persons having the necessary competence to perform validation, verification and certification functions relating to the type, range and volume of work performed, under a responsible senior executive;
- (c) Have the financial stability, insurance coverage and resources required for its activities;
- (d) Have sufficient arrangements to cover legal and financial liabilities arising from its activities;
- (e) Have documented internal procedures for carrying out its functions including, among others, procedures for the allocation of responsibility within the organization and for handling complaints. These procedures shall be made publicly available;
- (f) Have, or have access to, the necessary expertise to carry out the functions specified in modalities and procedures of the CDM and relevant decisions by the COP/MOP, in particular knowledge and understanding of:
  - (i) The modalities and procedures and guidelines for the operation of the CDM, relevant decisions of the COP/MOP and of the executive board;
  - (ii) Issues, in particular environmental, relevant to validation, verification and certification of CDM project activities, as appropriate;
  - (iii) The technical aspects of CDM project activities relevant to environmental issues, including expertise in the setting of baselines and monitoring of emissions;
  - (iv) Relevant environmental auditing requirements and methodologies;
  - (v) Methodologies for accounting of anthropogenic emissions by sources;
  - (vi) Regional and sectoral aspects;
- (g) Have a management structure that has overall responsibility for performance and implementation of the entity's functions, including quality assurance procedures, and all relevant decisions relating to validation, verification and certification. The applicant operational entity shall make available:

- (i) The names, qualifications, experience and terms of reference of senior management personnel such as the senior executive, board members, senior officers and other relevant personnel;
- (ii) An organizational chart showing lines of authority, responsibility and allocation of functions stemming from senior management;
- (iii) Its quality assurance policy and procedures;
- (iv) Administrative procedures, including document control;
- (v) Its policy and procedures for the recruitment and training of operational entity personnel, for ensuring their competence for all necessary functions for validation, verification and certification functions, and for monitoring their performance;
- (vi) Its procedures for handling complaints, appeals and disputes;
- (h) Not have pending any judicial process for malpractice, fraud and/or other activity incompatible with its functions as a designated operational entity.

2. An applicant operational entity shall meet the following operational requirements:

(a) Work in a credible, independent, non-discriminatory and transparent manner, complying with applicable national law and meeting, in particular, the following requirements:

- (i) An applicant operational entity shall have a documented structure, which safeguards impartiality, including provisions to ensure impartiality of its operations;
- (ii) If it is part of a larger organization, and where parts of that organization are, or may become, involved in the identification, development or financing of any CDM project activity, the applicant operational entity shall:
  - Make a declaration of all the organization's actual and planned involvement in CDM project activities, if any, indicating which part of the organization is involved and in which particular CDM project activities;
  - Clearly define the links with other parts of the organization, demonstrating that no conflicts of interest exist;
  - Demonstrate that no conflict of interest exists between its functions as an operational entity and any other functions that it may have, and demonstrate how business is managed to minimize any identified risk to impartiality. The demonstration shall cover all sources of conflict of interest, whether they arise from within the applicant operational entity or from the activities of related bodies;

- Demonstrate that it, together with its senior management and staff, is not involved in any commercial, financial or other processes which might influence its judgement or endanger trust in its independence of judgement and integrity in relation to its activities, and that it complies with any rules applicable in this respect;
- (b) Have adequate arrangements to safeguard confidentiality of the information obtained from CDM project participants in accordance with provisions contained in the present annex.

## APPENDIX B

### Project design document

1. The provisions of this appendix shall be interpreted in accordance with the annex above on modalities and procedures for a CDM.
2. The purpose of this appendix is to outline the information required in the project design document. A project activity shall be described in detail taking into account the provisions of the annex on modalities and procedures for a CDM, in particular, section G on validation and registration and section H on monitoring, in a project design document which shall include the following:
  - (a) A description of the project comprising the project purpose, a technical description of the project, including how technology will be transferred, if any, and a description and justification of the project boundary;
  - (b) A proposed baseline methodology in accordance with the annex on modalities and procedures for a CDM including, in the case of the:
    - (i) Application of an approved methodology:
      - Statement of which approved methodology has been selected;
      - Description of how the approved methodology will be applied in the context of the project;
    - (ii) Application of a new methodology:
      - Description of the baseline methodology and justification of choice, including an assessment of strengths and weaknesses of the methodology;
      - Description of key parameters, data sources and assumptions used in the baseline estimate, and assessment of uncertainties;
      - Projections of baseline emissions;
      - Description of how the baseline methodology addresses potential leakage;

- (iii) Other considerations, such as a description of how national and/or sectoral policies and circumstances have been taken into account and an explanation of how the baseline was established in a transparent and conservative manner;
- (c) Statement of the estimated operational lifetime of the project and which crediting period was selected;
- (d) Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity;
- (e) Environmental impacts:
  - (i) Documentation on the analysis of the environmental impacts, including transboundary impacts;
  - (ii) If impacts are considered significant by the project participants or the host Party: conclusions and all references to support documentation of an environmental impact assessment that has been undertaken in accordance with the procedures as required by the host Party;
- (f) Information on sources of public funding for the project activity from Parties included in Annex I which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties;
- (g) Stakeholder comments, including a brief description of the process, a summary of the comments received, and a report on how due account was taken of any comments received;
- (h) Monitoring plan:
  - (i) Identification of data needs and data quality with regard to accuracy, comparability, completeness and validity;
  - (ii) Methodologies to be used for data collection and monitoring including quality assurance and quality control provisions for monitoring, collecting and reporting;
  - (iii) In the case of a new monitoring methodology, provide a description of the methodology, including an assessment of strengths and weaknesses of the methodology and whether or not it has been applied successfully elsewhere;
- (i) Calculations:
  - (i) Description of formulae used to calculate and estimate anthropogenic emissions by sources of greenhouse gases of the CDM project activity within the project boundary;

- (ii) Description of formulae used to calculate and to project leakage, defined as: the net change of anthropogenic emissions by sources of greenhouse gases which occurs outside the CDM project activity boundary, and that is measurable and attributable to the CDM project activity;
- (iii) The sum of (i) and (ii) above representing the CDM project activity emissions;
- (iv) Description of formulae used to calculate and to project the anthropogenic emissions by sources of greenhouse gases of the baseline;
- (v) Description of formulae used to calculate and to project leakage;
- (vi) The sum of (iv) and (v) above representing the baseline emissions;
- (vii) Difference between (vi) and (iii) above representing the emission reductions of the CDM project activity;
- (j) References to support the above, if any.

#### APPENDIX C

##### Terms of reference for establishing guidelines on baselines and monitoring methodologies

The executive board, drawing on experts in accordance with the modalities and procedures for a CDM, shall develop and recommend to the COP/MOP, *inter alia*:

- (a) General guidance on methodologies relating to baselines and monitoring consistent with the principles set out in those modalities and procedures in order to:
  - (i) Elaborate the provisions relating to baseline and monitoring methodologies contained in decision 17/CP.7, the annex above and relevant decisions of the COP/MOP;
  - (ii) Promote consistency, transparency and predictability;
  - (iii) Provide rigour to ensure that net reductions in anthropogenic emissions are real and measurable, and an accurate reflection of what has occurred within the project boundary;
  - (iv) Ensure applicability in different geographical regions and to those project categories which are eligible in accordance with decision 17/CP.7 and relevant decisions of the COP/MOP;
  - (v) Address the additionality requirement of Article 12, paragraph 5(c), and paragraph 43 of the above annex;

- (b) Specific guidance in the following areas:
- (i) Definition of project categories (e.g. based on sector, subsector, project type, technology, geographic area) that show common methodological characteristics for baseline setting, and/or monitoring, including guidance on the level of geographic aggregation, taking into account data availability;
  - (ii) Baseline methodologies deemed to reasonably represent what would have occurred in the absence of a project activity;
  - (iii) Monitoring methodologies that provide an accurate measure of actual reductions in anthropogenic emissions as a result of the project activity, taking into account the need for consistency and cost-effectiveness;
  - (iv) Decision trees and other methodological tools, where appropriate, to guide choices in order to ensure that the most appropriate methodologies are selected, taking into account relevant circumstances;
  - (v) The appropriate level of standardization of methodologies to allow a reasonable estimation of what would have occurred in the absence of a project activity wherever possible and appropriate. Standardization should be conservative in order to prevent any overestimation of reductions in anthropogenic emissions;
  - (vi) Determination of project boundaries including accounting for all greenhouse gases that should be included as a part of the baseline, and monitoring. Relevance of leakage and recommendations for establishing appropriate project boundaries and methods for the *ex post* evaluation of the level of leakage;
  - (vii) Accounting for applicable national policies and specific national or regional circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the sector relevant to the project activity;
  - (viii) The breadth of the baseline, e.g. how the baseline makes comparisons between the technology/fuel used and other technologies/fuels in the sector;
- (c) In developing the guidance in (a) and (b) above, the executive board shall take into account:
- (i) Current practices in the host country or an appropriate region, and observed trends;
  - (ii) Least cost technology for the activity or project category.



## APPENDIX D

### Clean development mechanism registry requirements

1. The executive board shall establish and maintain a CDM registry to ensure the accurate accounting of the issuance, holding, transfer and acquisition of CERs by Parties not included in Annex I. The executive board shall identify a registry administrator to maintain the registry under its authority.
2. The CDM registry shall be in the form of a standardized electronic database which contains, *inter alia*, common data elements relevant to the issuance, holding, transfer and acquisition of CERs. The structure and data formats of the CDM registry shall conform to technical standards to be adopted by the COP/MOP for the purpose of ensuring the accurate, transparent and efficient exchange of data between national registries, the CDM registry and the independent transaction log.
3. The CDM registry shall have the following accounts:
  - (a) One pending account for the executive board, into which CERs are issued before being transferred to other accounts;
  - (b) At least one holding account for each Party not included in Annex I hosting a CDM project activity or requesting an account;
  - (c) At least one account for the purpose of cancelling ERUs, CERs, AAUs and RMUs equal to excess CERs issued, as determined by the executive board, where the accreditation of a designated operational entity has been withdrawn or suspended;
  - (d) At least one account for the purpose of holding and transferring CERs corresponding to the share of proceeds to cover administrative expenses and to assist in meeting costs of adaptation in accordance with Article 12, paragraph 8. Such an account may not otherwise acquire CERs.
4. Each CER shall be held in only one account in one registry at a given time.
5. Each account within the CDM registry shall have a unique account number comprising the following elements:
  - (a) Party/organization identifier: the Party for which the account is maintained, using the two-letter country code defined by the International Organization for Standardization (ISO 3166), or, in the cases of the pending account and an account for managing the CERs corresponding to the share of proceeds, the executive board or another appropriate organization;
  - (b) A unique number: a number unique to that account for the Party or organization for which the account is maintained.
6. Upon being instructed by the executive board to issue CERs for a CDM project activity, the registry administrator shall, in accordance with the transaction procedures set out in decision -/CMP.1 (*Modalities for the accounting of assigned amounts*):

- (a) Issue the specified quantity of CERs into a pending account of the executive board;
  - (b) Forward the quantity of CERs corresponding to the share of proceeds to cover administrative expenses and to assist in meeting costs of adaptation, in accordance with Article 12, paragraph 8, to the appropriate accounts in the CDM registry for holding and transferring such CERs;
  - (c) Forward the remaining CERs to the registry accounts of project participants and Parties involved, in accordance with their request.
7. Each CER shall have a unique serial number comprising the following elements:
- (a) Commitment period: the commitment period for which the CER is issued;
  - (b) Party of origin: the Party which hosted the CDM project activity, using the two-letter country code defined by ISO 3166;
  - (c) Type: this shall identify the unit as a CER;
  - (d) Unit: a number unique to the CER for the identified commitment period and Party of origin;
  - (e) Project identifier: a number unique to the CDM project activity for the Party of origin.
8. Where the accreditation of a designated operational entity has been withdrawn or suspended, ERUs, CERs, AAUs and/or RMUs equal to the excess CERs issued, as determined by the executive board, shall be transferred to a cancellation account in the CDM registry. Such ERUs, CERs, AAUs and RMUs may not be further transferred or used for the purpose of demonstrating the compliance of a Party with its commitment under Article 3, paragraph 1.
9. The CDM registry shall make non-confidential information publicly available and provide a publicly accessible user interface through the Internet that allows interested persons to query and view it.
10. The information referred to in paragraph 9 above shall include up-to-date information, for each account number in the registry, on the following:
- (a) Account name: the holder of the account;
  - (b) Representative identifier: the representative of the account holder, using the Party/organization identifier (the two-letter country code defined by ISO 3166) and a number unique to that representative for that Party or organization;
  - (c) Representative name and contact information: the full name, mailing address, telephone number, facsimile number and e-mail address of the representative of the account holder.

11. The information referred to in paragraph 9 above shall include the following CDM project activity information, for each project identifier against which the CERs have been issued:

- (a) Project name: a unique name for the CDM project activity;
- (b) Project location: the Party and town or region in which the CDM project activity is located;
- (c) Years of CER issuance: the years in which CERs have been issued as a result of the CDM project activity;
- (d) Operational entities: the operational entities involved in the validation, verification and certification of the CDM project activity;
- (e) Reports: downloadable electronic versions of documentation to be made publicly available in accordance with the provisions of the present annex.

12. The information referred to in paragraph 9 above shall include the following holding and transaction information relevant to the CDM registry, by serial number, for each calendar year (defined according to Greenwich Mean Time):

- (a) The total quantity of CERs in each account at the beginning of the year;
- (b) The total quantity of CERs issued;
- (c) The total quantity of CERs transferred and the identity of the acquiring accounts and registries;
- (d) The total quantity of ERUs, CERs, AAUs and RMUs cancelled in accordance with paragraph 8 above;
- (e) Current holdings of CERs in each account.

## Decision 18/CP.7

### **Modalities, rules and guidelines for emissions trading under Article 17 of the Kyoto Protocol**

*The Conference of the Parties,*

*Recalling* its decision 5/CP.6 containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Aware* of its decisions 3/CP.7, 11/CP.7, 15/CP.7, 16/CP.7, 17/CP.7, 19/CP.7, 20/CP.7, 21/CP.7, 22/CP.7, 23/CP.7 and 24/CP.7,

1. *Decides* to adopt the modalities, rules and guidelines for emissions trading contained in the annex below;
2. *Decides further* that any future revision of the modalities, rules and guidelines shall be decided in accordance with the rules of procedures of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol as applied. The first review shall be carried out no later than one year after the end of the first commitment period, based on recommendations by the Subsidiary Body for Implementation drawing on technical advice of the Subsidiary Body for Scientific and Technological Advice, as needed. Further reviews shall be carried out periodically thereafter;
3. *Urges* the Parties included in Annex II to the Convention to facilitate the participation in emissions trading under Article 17 of the Kyoto Protocol of Parties included in Annex I to the Convention with commitments inscribed in Annex B which are undergoing the process of transition to a market economy;
4. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session, adopt the draft decision below.

*8<sup>th</sup> plenary meeting  
10 November 2001*

**Draft decision -/CMP.1 (Article 17)**

**Modalities, rules and guidelines for emissions trading  
under Article 17 of the Kyoto Protocol**

*The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,*

*Aware of its decisions -/CMP.1 (Mechanisms), -/CMP.1 (Article 6), -/CMP.1 (Article 12), -/CMP.1 (Land use, land-use change and forestry), -/CMP.1 (Modalities for the accounting of assigned amounts), -/CMP.1 (Article 5.1), -/CMP.1 (Article 5.2), -/CMP.1 (Article 7) and -/CMP.1 (Article 8) and decisions 3/CP.7 and 24/CP.7,*

1. *Decides to confirm and give full effect to any actions taken pursuant to decision 18/CP.7 and to any other relevant decisions by the Conference of the Parties, as appropriate,*
2. *Urges the Parties included in Annex II to the Convention to facilitate the participation in emissions trading under Article 17 of the Kyoto Protocol of Parties included in Annex I to the Convention with commitments inscribed in Annex B which are undergoing the process of transition to a market economy.*

ANNEX

**Modalities, rules and guidelines for emissions trading  
under Article 17 of the Kyoto Protocol<sup>1</sup>**

1. For the purpose of the present annex the definitions contained in Article 1<sup>2</sup> and the provisions of Article 14 shall apply. Furthermore:

(a) An “emission reduction unit” or “ERU” is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (*Modalities for the accounting of assigned amounts*) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(b) A “certified emission reduction” or “CER” is a unit issued pursuant to Article 12 and requirements thereunder, as well as the relevant provisions in the annex to decision -/CMP.1 (*Article 12*), and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(c) An “assigned amount unit” or “AAU” is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (*Modalities for the accounting of assigned amounts*) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(d) A “removal unit” or “RMU” is a unit issued pursuant to the relevant provisions in the annex to decision -/CMP.1 (*Modalities for the accounting of assigned amounts*) and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5.

2. Subject to the provisions of paragraph 3 below, a Party<sup>3</sup> included in Annex I with a commitment inscribed in Annex B is eligible to transfer and/or acquire ERUs, CERs, AAUs, or RMUs issued in accordance with the relevant provisions, if it is in compliance with the following eligibility requirements:

(a) It is a Party to the Kyoto Protocol;

(b) Its assigned amount pursuant to Article 3, paragraphs 7 and 8, has been calculated and recorded in accordance with decision -/CMP.1 (*Modalities for the accounting of assigned amounts*);

(c) It has in place a national system for the estimation of anthropogenic emissions by sources and anthropogenic removals by sinks of all greenhouse gases not controlled by the

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<sup>1</sup> The annex to decision -/CMP.1 (*Modalities for the accounting of assigned amounts*) contains operational provisions and procedures relevant to this annex.

<sup>2</sup> In the context of this annex, “Article” refers to an Article of the Kyoto Protocol, unless otherwise specified.

<sup>3</sup> In the context of this annex, “Party” refers to a Party to the Kyoto Protocol, unless otherwise specified.

Montreal Protocol, in accordance with Article 5, paragraph 1, and the requirements in the guidelines decided thereunder;

(d) It has in place a national registry in accordance with Article 7, paragraph 4, and the requirements in the guidelines decided thereunder;

(e) It has submitted annually the most recent required inventory, in accordance with Article 5, paragraph 2, and Article 7, paragraph 1, and the requirements in the guidelines decided thereunder, including the national inventory report and the common reporting format. For the first commitment period, the quality assessment needed for the purpose of determining eligibility to use the mechanisms shall be limited to the parts of the inventory pertaining to emissions of greenhouse gases from sources/sector categories from Annex A to the Kyoto Protocol and the submission of the annual inventory on sinks;

(f) It submits the supplementary information on assigned amount in accordance with Article 7, paragraph 1, and the requirements in the guidelines decided thereunder and makes any additions to, and subtractions from, assigned amount pursuant to Article 3, paragraphs 7 and 8, including for the activities under Article 3, paragraphs 3 and 4, in accordance with Article 7, paragraph 4, and the requirements in the guidelines decided thereunder;

3. A Party included in Annex I with a commitment inscribed in Annex B shall be considered:

(a) To meet the eligibility requirements referred to in paragraph 2 above after 16 months have elapsed since the submission of its report to facilitate the calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8, and to demonstrate its capacity to account for its emissions and assigned amount, in accordance with the modalities adopted for the accounting of assigned amount under Article 7, paragraph 4, unless the enforcement branch of the compliance committee finds in accordance with decision 24/CP.7 that the Party does not meet these requirements, or, at an earlier date, if the enforcement branch of the compliance committee has decided that it is not proceeding with any questions of implementation relating to these requirements indicated in reports of the expert review teams under Article 8 of the Kyoto Protocol, and has transmitted this information to the secretariat;

(b) To continue to meet the eligibility requirements referred to in paragraph 2 above unless and until the enforcement branch of the compliance committee decides that the Party does not meet one or more of the eligibility requirements, has suspended the Party's eligibility and has transmitted this information to the secretariat.

4. The secretariat shall maintain a publicly accessible list of Parties that meet the eligibility requirements and of Parties that have been suspended.

5. Transfers and acquisitions between national registries shall be made under the responsibility of the Parties concerned in accordance with the provisions in decision -/CMP.1 (*Modalities for the accounting of assigned amounts*). A Party that authorizes legal entities to transfer and/or acquire under Article 17 shall remain responsible for the fulfilment of its obligations under the Kyoto Protocol and shall ensure that such participation is consistent with the present annex. The Party shall maintain an up-to-date list of such entities and make it

available to the secretariat and the public through its national registry. Legal entities may not transfer and/or acquire under Article 17 during any period of time in which the authorizing Party does not meet the eligibility requirements or has been suspended.

6. Each Party included in Annex I shall maintain, in its national registry, a commitment period reserve which should not drop below 90 per cent of the Party's assigned amount calculated pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol, or 100 per cent of five times its most recently reviewed inventory, whichever is lowest.
7. The commitment period reserve shall consist of holdings of ERUs, CERs, AAUs and/or RMUs for the relevant commitment period which have not been cancelled in accordance with decision -/CMP.1 (*Modalities for the accounting of assigned amounts*).
8. Upon establishment of its assigned amount pursuant to Article 3, paragraphs 7 and 8, and until expiration of the additional period for fulfilling commitments, a Party shall not make a transfer which would result in these holdings being below the required level of the commitment period reserve.
9. If calculations under paragraph 6 above, or cancellations of ERUs, CERs, AAUs and/or RMUs raise the required level of the commitment period reserve above the Party's holdings of ERUs, CERs, AAUs and/or RMUs valid for the relevant commitment period, which have not been cancelled, the Party shall be notified by the secretariat and, within 30 days of this notification, shall bring its holdings to the required level.
10. Any provisions relating to the commitment period reserve or other limitations to transfers under Article 17 shall not apply to transfers by a Party of ERUs issued into its national registry which were verified in accordance with the verification procedure under the Article 6 supervisory committee.
11. The secretariat shall perform functions as requested.



**Decision 19/CP.7**

**Modalities for the accounting of assigned amounts under  
Article 7, paragraph 4, of the Kyoto Protocol**

*The Conference of the Parties,*

*Recalling* its decisions 1/CP.3, 1/CP.4, 8/CP.4, and 5/CP.6 containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action,

*Noting* the relevant provisions of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, in particular its Articles 3, 4, 5, 6, 7, 8, 12, 17 and 18,

*Being aware* of its decisions 11/CP.7, 15/CP.7, 16/CP.7, 17/CP.7, 18/CP.7, 20/CP.7, 21/CP.7, 22/CP.7, 23/CP.7 and 24/CP.7,

1. *Requests* the Subsidiary Body for Scientific and Technical Advice to develop technical standards for the purpose of ensuring the accurate, transparent and efficient exchange of data between national registries, the clean development mechanism registry and the transaction log, based on the annex to the decision below, with a view to recommending to the Conference of the Parties, at its eighth session, a decision on this matter, for adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session, to facilitate the early development and establishment of national registries, as well as of the clean development mechanism registry and transaction log;

2. *Requests* the secretariat to develop the transaction log referred to in the annex to the draft decision below, taking into account the technical standards referred to in paragraph 1 above, with a view to establishing it no later than the second session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

3. *Requests* the Chairman of the Subsidiary Body for Scientific and Technological Advice, with the assistance of the secretariat, to convene inter-sessional consultations with Parties and experts for the purposes of:

(a) Preparing draft technical standards, as referred to in paragraph 1 above, for consideration by the Subsidiary Body for Scientific and Technological Advice at its sixteenth and seventeenth sessions;

(b) Providing for the exchange of information and experience between Parties included in Annex I and Parties not included in Annex I, as well as the secretariat, in relation to the development and establishment of national registries, the clean development mechanism registry and the transaction log.

4. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its first session, adopt the draft decision below.

*8<sup>th</sup> plenary meeting  
10 November 2001*

**Draft decision -/CMP.1 (*Modalities for the accounting of assigned amounts*)**

**Modalities for the accounting of assigned amounts under  
Article 7, paragraph 4, of the Kyoto Protocol**

*The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,*

*Recalling* Article 7, paragraph 4, of the Kyoto Protocol,

*Recalling* decision 19/CP.7,

*Being aware* of its decisions -/CMP.1 (*Mechanisms*), -/CMP.1 (*Article 6*), -/CMP.1 (*Article 12*), -/CMP.1 (*Article 17*), -/CMP.1 (*Land use, land-use change and forestry*), -/CMP.1 (*Article 5.1*), -/CMP.1 (*Article 5.2*), -/CMP.1 (*Article 7*) and -/CMP.1 (*Article 8*) and decision 24/CP.7,

1. *Adopts* the modalities for the accounting of assigned amounts under Article 7, paragraph 4, of the Kyoto Protocol, as contained in the annex to the present decision;
2. *Decides* that each Party included in Annex I with a commitment inscribed in Annex B shall submit to the secretariat, prior to 1 January 2007 or one year after the entry into force of the Kyoto Protocol for that Party, whichever is later, the report referred to in paragraph 6 of the annex to the present decision. After completion of the initial review under Article 8 and resolution of any question of implementation relating to adjustments under Article 5, paragraph 2, or its assigned amount pursuant to Article 3, paragraphs 7 and 8, the assigned amount pursuant to Article 3, paragraphs 7 and 8, of each Party shall be recorded in the database for the compilation and accounting of emissions and assigned amounts referred to in paragraph 50 of the annex to the present decision and shall remain fixed for the commitment period;
3. *Decides* that each Party included in Annex I with a commitment inscribed in Annex B shall submit to the secretariat, upon expiration of the additional period for fulfilling commitments, the report referred to in paragraph 49 of the annex to the present decision;
4. *Requests* the secretariat to begin publishing the annual compilation and accounting reports referred to in paragraph 61 of the annex to the present decision after completion of the initial review under Article 8 and resolution of any question of implementation relating to adjustments under Article 5, paragraph 2, or its assigned amount pursuant to Article 3, paragraphs 7 and 8, and to forward them to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, the compliance committee and each Party concerned;
5. *Requests* the secretariat to publish, after the additional period for fulfilling commitments, the final compilation and accounting reports referred to in paragraph 62 of the annex to the present decision and forward them to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, the compliance committee and each Party concerned.

ANNEX

**Modalities for the accounting of assigned amounts under  
Article 7, paragraph 4, of the Kyoto Protocol<sup>1</sup>**

**I. MODALITIES**

**A. Definitions**

1. An “emission reduction unit” or “ERU” is a unit issued pursuant to the relevant provisions in these modalities for the accounting of assigned amounts and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5.
2. A “certified emission reduction” or “CER” is a unit issued pursuant to Article 12 and requirements thereunder, as well as the relevant provisions in the annex to decision -/CMP.1 (*Article 12*), and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5.
3. An “assigned amount unit” or “AAU” is a unit issued pursuant to the relevant provisions in these modalities for the accounting of assigned amounts and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5.
4. A “removal unit” or “RMU” is a unit issued pursuant to the relevant provisions in these modalities for the accounting of assigned amounts and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5.

**B. Calculation of assigned amount pursuant to Article 3, paragraphs 7 and 8**

5. The assigned amount pursuant to Article 3, paragraphs 7 and 8, for the first commitment period, from 2008 to 2012, for each Party included in Annex I with a commitment inscribed in Annex B to the Kyoto Protocol<sup>2</sup> shall be equal to the percentage inscribed for it in Annex B of its aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases, and from the sources, listed in Annex A to the Kyoto Protocol in the base year, multiplied by five, taking into account the following:

(a) The base year shall be 1990 except for those Parties undergoing the process of transition to a market economy that have selected a historical base year or period other than 1990, in accordance with Article 3, paragraph 5, and for those Parties that have selected 1995 as the base year for total emissions of hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride, in accordance with Article 3, paragraph 8;

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<sup>1</sup> “Article” in these modalities refers to an article of the Kyoto Protocol, unless otherwise specified.

<sup>2</sup> Hereafter referred to as a “Party included in Annex I”.

(b) Those Parties for which land-use change and forestry (all emissions by sources and removals by sinks under category 5 of the *Revised 1996 Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories*) constituted a net source of greenhouse gas emissions in the base year or period shall include in their emissions during that year or period the aggregate anthropogenic carbon dioxide equivalent emissions by sources minus removals by sinks in that year or period from land-use change (all emissions by sources minus removals by sinks reported in relation to the conversion of forests (deforestation));

(c) Those Parties that have reached an agreement in accordance with Article 4 to fulfil their commitments under Article 3 jointly shall use the respective emission level allocated to each of the Parties in that agreement instead of the percentage inscribed for it in Annex B.

6. Each Party included in Annex I shall facilitate the calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8, for the commitment period and demonstrate its capacity to account for its emissions and assigned amount. To this end, each Party shall submit a report, in two parts, containing the information specified in paragraphs 7 and 8 below.

7. Part one of the report referred to in paragraph 6 above shall contain the following information, or references to such information where it has been previously submitted to the secretariat:

(a) Complete inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for all years from 1990, or another approved base year or period under Article 3, paragraph 5, to the most recent year available, prepared in accordance with Article 5, paragraph 2, and relevant decisions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP), taking into account any relevant decisions of the Conference of the Parties (COP);

(b) Identification of its selected base year for hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride in accordance with Article 3, paragraph 8;

(c) The agreement under Article 4, where the Party has reached such an agreement to fulfil its commitments under Article 3 jointly with other Parties;

(d) Calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8, on the basis of its inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol.

8. Part two of the report referred to in paragraph 6 above shall contain the following information, or references to such information where it has been previously submitted to the secretariat:

(a) Calculation of its commitment period reserve in accordance with decision -/CMP.1 (*Article 17*);

(b) Identification of its selection of single minimum values for tree crown cover, land area and tree height for use in accounting for its activities under Article 3, paragraphs 3 and 4, together with a justification of the consistency of those values with the information that has been

historically reported to the Food and Agriculture Organization of the United Nations or other international bodies, and in the case of difference, an explanation of why and how such values were chosen, in accordance with decision -/CMP.1 (*Land use, land-use change and forestry*);

(c) Identification of its election of activities under Article 3, paragraph 4, for inclusion in its accounting for the first commitment period, together with information on how its national system under Article 5, paragraph 1, will identify land areas associated with the activities, in accordance with decision -/CMP.1 (*Land use, land-use change and forestry*);

(d) Identification of whether, for each activity under Article 3, paragraphs 3 and 4, it intends to account annually or for the entire commitment period;

(e) A description of its national system in accordance with Article 5, paragraph 1, reported in accordance with the guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol;

(f) A description of its national registry, reported in accordance with the guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol.

#### **C. Recording of assigned amount pursuant to Article 3, paragraphs 7 and 8**

9. After initial review under Article 8 and resolution of any questions of implementation relating to adjustments or the calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8, the assigned amount pursuant to Article 3, paragraphs 7 and 8, of each Party shall be recorded in the database for the compilation and accounting of emissions and assigned amounts referred to in paragraph 50 below.

10. Once recorded in the compilation and accounting database referred to in paragraph 50 below, the assigned amount pursuant to Article 3, paragraphs 7 and 8, of each Party shall remain fixed for the commitment period.

#### **D. Additions to, and subtractions from, assigned amount pursuant to Article 3, paragraphs 7 and 8, for the accounting of the compliance assessment**

11. At the end of the additional period for fulfilling commitments, the following additions to the assigned amount pursuant to Article 3, paragraphs 7 and 8, of a Party shall be made in accordance with Article 3, paragraphs 3, 4, 10, 12 and 13, for the accounting of the compliance assessment for the commitment period:

- (a) Acquisitions by the Party of ERUs in accordance with Articles 6 and 17;
- (b) Net acquisitions by the Party of CERs, where it acquires more CERs in accordance with Articles 12 and 17 than it transfers in accordance with Article 17;
- (c) Acquisitions by the Party of AAUs in accordance with Article 17;
- (d) Acquisitions by the Party of RMUs in accordance with Article 17;
- (e) Issuance by the Party of RMUs on the basis of its activities under Article 3, paragraph 3, and its elected activities under Article 3, paragraph 4, where such activities result in

a net removal of greenhouse gases, as reported in accordance with Article 7, reviewed in accordance with Article 8, taking into account any adjustments applied under Article 5, paragraph 2, accounted in accordance with the decision -/CMP.1 (*Land use, land-use change and forestry*) and subject to any question of implementation relating to those activities having been resolved;

(f) Carry-over by the Party of ERUs, CERs and/or AAUs from the previous commitment period, in accordance with paragraph 15 below.

12. At the end of the additional period for fulfilling commitments, the following subtractions from the assigned amount pursuant to Article 3, paragraphs 7 and 8, of a Party shall be made in accordance with Article 3, paragraphs 3, 4 and 11, for the accounting of the compliance assessment for the commitment period:

(a) Transfers by the Party of ERUs in accordance with Articles 6 and 17;

(b) Transfers by the Party of AAUs in accordance with Article 17;

(c) Transfers by the Party of RMUs in accordance with Article 17;

(d) Cancellation by the Party of ERUs, CERs, AAUs and/or RMUs on the basis of its activities under Article 3, paragraph 3, and its elected activities under Article 3, paragraph 4, where such activities result in a net source of greenhouse gas emissions, as reported in accordance with Article 7, reviewed in accordance with Article 8, taking into account any adjustments applied under Article 5, paragraph 2, and accounted in accordance with decision -/CMP.1 (*Land use, land-use change and forestry*);

(e) Cancellation by the Party of ERUs, CERs, AAUs and/or RMUs following determination by the compliance committee that the Party was not in compliance with its commitment under Article 3, paragraph 1, for the previous commitment period, in accordance with decision 24/CP.7;

(f) Other cancellations by the Party of ERUs, CERs, AAUs and/or RMUs.

#### **E. Basis for the compliance assessment**

13. Each Party included in Annex I shall retire ERUs, CERs, AAUs and/or RMUs for the purpose of demonstrating its compliance with its commitment under Article 3, paragraph 1.

14. The assessment, after the expiration of the additional period for fulfilling commitments, of the compliance of a Party included in Annex I with its commitment under Article 3, paragraph 1, shall be based on the comparison of the quantity of ERUs, CERs, AAUs and/or RMUs, valid for the commitment period in question, retired by the Party in accordance with paragraph 13 above, with its aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases, and from the sources, listed in Annex A to the Kyoto Protocol during the commitment period as reported in accordance with Article 7 and reviewed in accordance with Article 8, taking into account any adjustments in accordance with Article 5, paragraph 2, as recorded in the compilation and accounting database referred to in paragraph 50 below.

## **F. Carry-over**

15. After expiration of the additional period for fulfilling commitments and where the final compilation and accounting report referred to in paragraph 62 below indicates that the quantity of ERUs, CERs, AAUs and/or RMUs retired by the Party in accordance with paragraph 13 above is at least equivalent to its anthropogenic carbon dioxide equivalent emissions of the greenhouse gases, and from the sources, listed in Annex A to the Kyoto Protocol for that commitment period, the Party may carry over to the subsequent commitment period:

(a) Any ERUs held in its national registry, which have not been converted from RMUs and have not been retired for that commitment period or cancelled, to a maximum of 2.5 per cent of the assigned amount pursuant to Article 3, paragraphs 7 and 8, of that Party;

(b) Any CERs held in its national registry, which have not been retired for that commitment period or cancelled, to a maximum of 2.5 per cent of the assigned amount pursuant to Article 3, paragraphs 7 and 8, of that Party;

(c) Any AAUs held in its national registry, which have not been retired for that commitment period or cancelled.

16. RMUs may not be carried over to the subsequent commitment period.

## **II. REGISTRY REQUIREMENTS**

### **A. National registries**

17. Each Party included in Annex I shall establish and maintain a national registry to ensure the accurate accounting of the issuance, holding, transfer, acquisition, cancellation and retirement of ERUs, CERs, AAUs and RMUs and the carry-over of ERUs, CERs and AAUs.

18. Each Party shall designate an organization as its registry administrator to maintain the national registry of that Party. Any two or more Parties may voluntarily maintain their respective national registries in a consolidated system, provided that each national registry remains distinct.

19. A national registry shall be in the form of a standardized electronic database which contains, *inter alia*, common data elements relevant to the issuance, holding, transfer, acquisition, cancellation and retirement of ERUs, CERs, AAUs and RMUs and the carry-over of ERUs, CERs and AAUs. The structure and data formats of national registries shall conform to technical standards to be adopted by the COP/MOP for the purpose of ensuring the accurate, transparent and efficient exchange of data between national registries, the clean development mechanism (CDM) registry and the independent transaction log.

20. Each ERU, CER, AAU and RMU shall be held in only one account in one registry at a given time.

21. Each national registry shall have the following accounts:

(a) At least one holding account for the Party;

- (b) At least one holding account for each legal entity authorized by the Party to hold ERUs, CERs, AAUs and/or RMUs under its responsibility;
- (c) At least one cancellation account for each commitment period for the purposes of cancelling ERUs, CERs, AAUs and/or RMUs under paragraph 12(d) above;
- (d) One cancellation account for each commitment period for the purposes of cancelling ERUs, CERs, AAUs and/or RMUs under paragraph 12(e) above;
- (e) At least one cancellation account for each commitment period for the purposes of cancelling ERUs, CERs, AAUs and/or RMUs under paragraph 12(f) above;
- (f) One retirement account for each commitment period.

22. Each account within a national registry shall have a unique account number comprising the following elements:

- (a) Party identifier: the Party in whose national registry the account is maintained, identified by means of the two-letter country code defined by the International Organization for Standardization (ISO 3166);
- (b) A unique number: a number unique to that account for the Party in whose national registry the account is maintained.

#### **B. Issuance of ERUs, AAUs and RMUs**

23. Each Party included in Annex I shall, prior to any transactions taking place for that commitment period, issue a quantity of AAUs equivalent to its assigned amount pursuant to Article 3, paragraphs 7 and 8, calculated and recorded in accordance with paragraphs 5 to 10 above, in its national registry.

24. Each AAU shall have a unique serial number comprising the following elements:

- (a) Commitment period: the commitment period for which the AAU is issued;
- (b) Party of origin: the Party issuing the AAU, identified by means of the two-letter country code defined by ISO 3166;
- (c) Type: an element identifying the unit as an AAU;
- (d) Unit: a number unique to the AAU for the identified commitment period and Party of origin.

25. Each Party included in Annex I shall issue in its national registry RMUs equivalent to the net removals of anthropogenic greenhouse gases resulting from its activities under Article 3, paragraph 3, and its elected activities under Article 3, paragraph 4, accounted in accordance with decision -/CMP.1 (*Land use, land-use change and forestry*) as reported under Article 7, paragraph 1, following completion of the review in accordance with Article 8, taking into account any adjustments applied in accordance with Article 5, paragraph 2, and resolution of any questions of implementation related to the reported net removals of anthropogenic greenhouse



gases. Each Party shall elect for each activity, prior to the start of the commitment period, to issue such RMUs annually or for the entire commitment period. The decision of a Party shall remain fixed for the first commitment period.

26. Where a question of implementation is identified by an expert review team under Article 8 in relation to the calculation of the net removals of greenhouse gases from the activities of a Party under Article 3, paragraph 3 or 4, or where adjustments exceed thresholds to be decided according to paragraph 2 of decision 22/CP.7, the Party shall not issue the RMUs relating to the reported net removals of anthropogenic greenhouse gases for each activity under Article 3, paragraph 3, and for each elected activity under Article 3, paragraph 4, until the question of implementation is resolved.

27. Each RMU shall have a unique serial number comprising the following elements:

- (a) Commitment period: the commitment period for which the RMU is issued;
- (b) Party of origin: the Party included in Annex I issuing the RMU, identified by means of the two-letter country code defined by ISO 3166;
- (c) Type: an element identifying the unit as an RMU;
- (d) Activity: the type of activity for which the RMU was issued;
- (e) Unit: a number unique to the RMU for the identified commitment period and Party of origin.

28. Each Party included in Annex I shall ensure that the total quantity of RMUs issued into its registry pursuant to Article 3, paragraph 4, for the commitment period does not exceed the limits established for that Party as set out in decision -/CMP.1 (*Land use, land-use change and forestry*).

29. Prior to their transfer, each Party shall issue ERUs into its national registry by converting AAUs or RMUs previously issued by that Party and held in its national registry. An AAU or RMU shall be converted into an ERU by adding a project identifier to the serial number and changing the type indicator in the serial number to indicate an ERU. Other elements of the serial number of the AAU or RMU shall remain unchanged. The project identifier shall identify the specific Article 6 project for which the ERU is issued, using a number unique to the project for the Party of origin, including whether the relevant reductions in anthropogenic emissions by sources or enhancements of anthropogenic removals by sinks were verified under the Article 6 supervisory committee.

### **C. Transfer, acquisition, cancellation, retirement and carry-over**

30. ERUs, CERs, AAUs and RMUs may be transferred between registries in accordance with decisions -/CMP.1 (*Article 6*), -/CMP.1 (*Article 12*), -/CMP.1 (*Article 17*) and -/CMP.1 (*Land use, land-use and forestry*), and may be transferred within registries.

31. Each Party included in Annex I shall ensure that its net acquisitions of CERs from afforestation and reforestation activities under Article 12 for the first commitment period do not

exceed the limits established for that Party as set out in decision -/CMP.1 (*Land use, land-use and forestry*).

32. Each Party included in Annex I shall cancel CERs, ERUs, AAUs and/or RMUs equivalent to the net emissions of anthropogenic greenhouse gases resulting from its activities under Article 3, paragraph 3, and its elected activities under Article 3, paragraph 4, accounted in accordance with decision -/CMP.1 (*Land use, land-use change and forestry*) as reported under Article 7, paragraph 1, following completion of the review in accordance with Article 8, taking into account any adjustments applied in accordance with Article 5, paragraph 2, and resolution of any questions of implementation related to the reported net emissions of anthropogenic greenhouse gases, in accordance with paragraph 12(d) above, by transferring the ERUs, CERs, AAUs and/or RMUs to the appropriate cancellation account in its national registry. Each Party shall cancel ERUs, CERs, AAUs and/or RMUs for each activity for the same period for which it has elected to issue RMUs for that activity.

33. Each Party included in Annex I may cancel ERUs, CERs, AAUs and/or RMUs so they cannot be used in fulfilment of commitments under Article 3, paragraph 1, in accordance with paragraph 12 (f) above, by transferring ERUs, CERs, AAUs and/or RMUs to a cancellation account in its national registry. Legal entities, where authorized by the Party, may also transfer ERUs, CERs, AAUs and RMUs into a cancellation account.

34. Prior to the end of the additional period for fulfilling commitments, each Party included in Annex I shall retire ERUs, CERs, AAUs and/or RMUs valid for that commitment period for use towards meeting its commitments under Article 3, paragraph 1, in accordance with paragraph 13 above, by transferring ERUs, CERs, AAUs and/or RMUs to the retirement account for that commitment period in its national registry.

35. ERUs, CERs, AAUs and RMUs transferred to cancellation accounts or the retirement account for a commitment period may not be further transferred or carried over to the subsequent commitment period. ERUs, CERs, AAUs and RMUs transferred to cancellation accounts may not be used for the purpose of demonstrating the compliance of a Party with its commitment under Article 3, paragraph 1.

36. Each Party included in Annex I may carry over ERUs, CERs and/or AAUs held in its registry, that have not been cancelled or retired for a commitment period, to the subsequent commitment period in accordance with paragraph 15 above. Each ERU, CER and/or AAU carried over in this manner shall maintain its original serial number and shall be valid in the subsequent commitment period. ERUs, CERs, AAUs and RMUs of a previous commitment period held in the registry of a Party which have not been carried over in this manner shall be cancelled in accordance with paragraph 12(f) above once the additional period for fulfilling commitments has ended.

37. Where the compliance committee determines that the Party is not in compliance with its commitment under Article 3, paragraph 1, for a commitment period, the Party shall transfer the quantity of ERUs, CERs, AAUs and/or RMUs calculated in accordance with decision 24/CP.7 into the relevant cancellation account, in accordance with paragraph 12(e) above.

#### **D. Transaction procedures**

38. The secretariat shall establish and maintain an independent transaction log to verify the validity of transactions, including issuance, transfer and acquisition between registries, cancellation and retirement of ERUs, CERs, AAUs and RMUs and the carry-over of ERUs, CERs and AAUs.
39. A Party included in Annex I shall initiate issuance of AAUs or RMUs by directing its national registry to issue AAUs or RMUs into a specific account within that registry. The executive board of the CDM shall initiate issuance of CERs by directing the CDM registry to issue CERs into its pending account in accordance with the requirements in Article 12 and requirements thereunder, as well as the relevant provisions in the annex to decision -/CMP.1 (*Article 12*). A Party included in Annex I shall initiate issuance of ERUs by directing its national registry to convert specified AAUs or RMUs into ERUs within an account of that national registry. Subject to notification by the transaction log that there are no discrepancies pertaining to the issuance, the issuance shall be completed when specific ERUs, CERs, AAUs or RMUs are recorded in the specified account and, in the case of ERUs, the specified AAUs or RMUs are removed from the account.
40. A Party included in Annex I shall initiate any transfer of ERUs, CERs, AAUs or RMUs, including those to cancellation and retirement accounts, by directing its national registry to transfer specified ERUs, CERs, AAUs or RMUs to a specific account within that registry or another registry. The executive board of the CDM shall initiate any transfer of CERs held in the CDM registry by directing it to transfer specified CERs to a specific account within that registry or another registry. Subject to notification by the transaction log, where applicable, that there are no discrepancies pertaining to the transfer, the transfer shall be completed when the specified ERUs, CERs, AAUs or RMUs are removed from the transferring account and are recorded in the acquiring account.
41. Upon the initiation of any issuance, transfer between registries, cancellation or retirement of ERUs, CERs, AAUs or RMUs, and prior to the completion of those transactions:
- (a) The initiating registry shall create a unique transaction number comprising: the commitment period for which the transaction is proposed; the Party identifier for the Party initiating the transaction (using the two-letter country code defined by ISO 3166); and a number unique to that transaction for the commitment period and initiating Party;
  - (b) The initiating registry shall send a record of the proposed transaction to the transaction log and, in the case of transfers to another registry, to the acquiring national registry. The record shall include: the transaction number; the transaction type (issuance, transfer, cancellation or retirement, further distinguished in accordance with the categories in paragraphs 11 and 12 above); the serial numbers of the relevant ERUs, CERs, AAUs or RMUs; and the relevant account numbers.
42. Upon receipt of the record, the transaction log shall conduct an automated check to verify that there is no discrepancy, with regard to:

(a) In all transactions: units previously retired or cancelled; units existing in more than one registry; units for which a previously identified discrepancy has not been resolved; units improperly carried over; units improperly issued, including those which infringe upon the limits contained in decision -/CMP.1 (*Land use, land-use change and forestry*); and the authorization of legal entities involved to participate in the transaction;

(b) In the case of transfers between registries: the eligibility of Parties involved in the transaction to participate in the mechanisms; and infringement upon the commitment period reserve of the transferring Party;

(c) In the case of acquisitions of CERs from land use, land-use change and forestry projects under Article 12: infringement of the limits contained in decision -/CMP.1 (*Land use, land-use change and forestry*);

(d) In the case of a retirement of CERs: the eligibility of the Party involved to use CERs to contribute to its compliance under Article 3, paragraph 1;

43. Upon completion of the automated check, the transaction log shall notify the initiating and, in the case of transfers to another registry, the acquiring registry of the results of the automated check. Depending on the outcome of the check, the following procedures shall apply:

(a) If a discrepancy is notified by the transaction log, the initiating registry shall terminate the transaction, notify the transaction log and, in the case of transfers to another registry, the acquiring registry of the termination. The transaction log shall forward a record of the discrepancy to the secretariat for consideration as part of the review process for the relevant Party or Parties under Article 8;

(b) In the event of a failure by the initiating registry to terminate the transaction, the ERUs, CERs, AAUs or RMUs involved in the transaction shall not be valid for use towards compliance with commitments under Article 3, paragraph 1, until the problem has been corrected and any questions of implementation pertaining to the transaction have been resolved. Upon resolution of a question of implementation pertaining to a Party's transactions, that Party shall perform any necessary corrective action within 30 days;

(c) If no discrepancy is notified by the transaction log, the initiating registry and, in the case of transfers to another registry, the acquiring registry, shall complete or terminate the transaction and send the record and a notification of completion or termination of the transaction to the transaction log. In the case of transfers to another registry, the initiating and acquiring registries shall also send their records and notifications to each other;

(d) The transaction log shall record, and make publicly available, all transaction records and the date and time of completion of each transaction, to facilitate its automated checks and the review under Article 8.

### **E. Publicly accessible information**

44. Each national registry shall make non-confidential information publicly available and provide a publicly accessible user interface through the Internet that allows interested persons to query and view it.

45. The information referred to in paragraph 44 above shall include up-to-date information for each account number in that registry on the following:

- (a) Account name: the holder of the account;
- (b) Account type: the type of account (holding, cancellation or retirement);
- (c) Commitment period: the commitment period with which a cancellation or retirement account is associated;
- (d) Representative identifier: the representative of the account holder, using the Party identifier (the two-letter country code defined by ISO 3166) and a number unique to that representative within the Party's registry;
- (e) Representative name and contact information: the full name, mailing address, telephone number, facsimile number and email address of the representative of the account holder.

46. The information referred to in paragraph 44 above shall include the following Article 6 project information, for each project identifier against which the Party has issued ERUs:

- (a) Project name: a unique name for the project;
- (b) Project location: the Party and town or region in which the project is located;
- (c) Years of ERU issuance: the years in which ERUs have been issued as a result of the Article 6 project;
- (d) Reports: downloadable electronic versions of all publicly available documentation relating to the project, including proposals, monitoring, verification and issuance of ERUs, where relevant, subject to the confidentiality provisions in decision -/CMP.1 (*Article 6*).

47. The information referred to in paragraph 44 above shall include the following holding and transaction information relevant to the national registry, by serial number, for each calendar year (defined according to Greenwich Mean Time):

- (a) The total quantity of ERUs, CERs, AAUs and RMUs in each account at the beginning of the year;
- (b) The total quantity of AAUs issued on the basis of the assigned amount pursuant to Article 3, paragraphs 7 and 8;
- (c) The total quantity of ERUs issued on the basis of Article 6 projects;

- (d) The total quantity of ERUs, CERs, AAUs and RMUs acquired from other registries and the identity of the transferring accounts and registries;
- (e) The total quantity of RMUs issued on the basis of each activity under Article 3, paragraphs 3 and 4;
- (f) The total quantity of ERUs, CERs, AAUs and RMUs transferred to other registries and the identity of the acquiring accounts and registries;
- (g) The total quantity of ERUs, CERs, AAUs and RMUs cancelled on the basis of activities under Article 3, paragraphs 3 and 4;
- (h) The total quantity of ERUs, CERs, AAUs and RMUs cancelled following determination by the compliance committee that the Party is not in compliance with its commitment under Article 3, paragraph 1;
- (i) The total quantity of other ERUs, CERs, AAUs and RMUs cancelled;
- (j) The total quantity of ERUs, CERs, AAUs and RMUs retired;
- (k) The total quantity of ERUs, CERs, AAUs carried over from the previous commitment period;
- (l) Current holdings of ERUs, CERs, AAUs and RMUs in each account.

48. The information referred to in paragraph 44 above shall include a list of legal entities authorized by the Party to hold ERUs, CERs, AAUs and/or RMUs under its responsibility.

### **III. COMPILATION AND ACCOUNTING OF EMISSION INVENTORIES AND ASSIGNED AMOUNTS**

#### **A. Report upon expiration of the additional period for fulfilling commitments**

49. Upon expiration of an additional period for fulfilling commitments, each Party included in Annex I shall report to the secretariat and make available to the public, in a standard electronic format, the following information. This information shall only include ERUs, CERs, AAUs and RMUs valid for the commitment period in question:

- (a) The total quantities of the categories of ERUs, CERs, AAUs and RMUs listed in paragraph 47(a) to (j) above, for the current calendar year until the end of the additional period for fulfilling commitments (defined according to Greenwich Mean Time);
- (b) The total quantity and serial numbers of ERUs, CERs, AAUs and RMUs in its retirement account;
- (c) The total quantity and serial numbers of ERUs, CERs and AAUs which the Party requests to be carried over to the subsequent commitment period.

## **B. Compilation and accounting database**

50. The secretariat shall establish a database to compile and account for emissions and assigned amounts pursuant to Article 3, paragraphs 7 and 8, and additions to, and subtractions from assigned amounts pursuant to Article 3, paragraphs 7 and 8, for the accounting of the compliance assessment, in accordance with paragraphs 11 and 12 above. The purpose of this database is to facilitate the assessment of the compliance of each Party included in Annex I with its commitment under Article 3, paragraph 1.

51. A separate record shall be maintained in the database for each Party included in Annex I for each commitment period. Information on ERUs, CERs, AAUs and RMUs shall only include units valid for the commitment period in question and shall be recorded separately for each type of unit.

52. The secretariat shall record in the database for each Party included in Annex I the following information:

- (a) The assigned amount pursuant to Article 3, paragraphs 7 and 8;
- (b) For the first commitment period, the total allowable issuances of RMUs resulting from forest management activities under Article 3, paragraph 4, and limits on net acquisitions of CERs from afforestation and reforestation activities under Article 12 pursuant to decision -/CMP.1 (*Land use, land-use change and forestry*).

53. The secretariat shall record in the database, for each Party included in Annex I, whether it is eligible to transfer and/or acquire ERUs, CERs, AAUs and RMUs pursuant to decisions -/CMP.1 (*Article 6*) and -/CMP.1 (*Article 17*) and to use CERs to contribute to its compliance under Article 3, paragraph 1, pursuant to decision -/CMP.1 (*Article 12*).

54. The secretariat shall annually record the following information relating to emissions for each Party included in Annex I, following the annual review under Article 8, the application of any adjustment under Article 5, paragraph 2, and the resolution of any questions of implementation pertaining to emission estimates:

- (a) Aggregate annual anthropogenic carbon dioxide equivalent emissions of the greenhouse gases, and from the sources, listed in Annex A to the Kyoto Protocol for each year of the commitment period that has been reported in accordance with Article 7;
- (b) Any adjustments under Article 5, paragraph 2, recorded as the difference, in carbon dioxide equivalent terms, between the adjusted estimate and the inventory estimate reported under Article 7;
- (c) Aggregate anthropogenic carbon dioxide equivalent emissions in the commitment period, calculated as the sum of the amounts in subparagraphs (a) and (b) above for all years of the commitment period to date.

55. The secretariat shall annually record in the database the following information for each Party included in Annex I related to accounting for net emissions and removals of greenhouse

gases resulting from its activities under Article 3, paragraph 3, and its elected activities under Article 3, paragraph 4, following the annual review under Article 8, the application of any adjustment under Article 5, paragraph 2, and the resolution of any relevant questions of implementation:

(a) The calculation of whether the activities under Article 3, paragraphs 3 and 4, that have been reported in accordance with Article 7 result in net anthropogenic emissions or net anthropogenic removals of greenhouse gases pursuant to decision -/CMP.1 (*Land use, land-use change and forestry*);

(b) For those activities for which the Party has elected to account annually, the net anthropogenic emissions and removals of greenhouse gases pursuant to decision -/CMP.1 (*Land use, land-use change and forestry*) for the calendar year;

(c) For those activities for which the Party has elected to account for the entire commitment period, the net anthropogenic emissions and removals of greenhouse gases pursuant to decision -/CMP.1 (*Land use, land-use change and forestry*) for the calendar year;

(d) Any adjustments under Article 5, paragraph 2, recorded as the difference in carbon dioxide equivalent terms between the adjusted estimate and the estimate reported under Article 7;

(e) The total net anthropogenic emissions and removals of greenhouse gases pursuant to decision -/CMP.1 (*Land use, land-use change and forestry*) for the commitment period, calculated as the sum for all years of the commitment period to date of the amounts referred to in subparagraphs (b), (c) and (d) above.

56. Where a Party submits recalculated estimates of emissions and removals of greenhouse gases for a year of the commitment period, subject to the review in accordance with Article 8, the secretariat shall make appropriate amendments to the information contained in the database including, where relevant, the removal of previously applied adjustments.

57. The secretariat shall record and update the required level of the commitment period reserve for each Party included in Annex I, in accordance with decision -/CMP.1 (*Article 17*).

58. The secretariat shall annually record in the database for each Party included in Annex I the following information related to transactions, for the previous calendar year and to date for the commitment period, following completion of the annual review under Article 8, including the application of any corrections, and resolution of any relevant questions of implementation:

(a) Total transfers of ERUs, CERs, AAUs and RMUs;

(b) Total acquisitions of ERUs, CERs, AAUs and RMUs;

(c) Net acquisitions of CERs resulting from afforestation and reforestation activities under Article 12;

(d) Total issuances of RMUs relating to each activity under Article 3, paragraphs 3 and 4;



- (e) Total issuances of ERUs on the basis of Article 6 projects;
- (f) Total of ERUs, CERs and AAUs carried over from the previous commitment period;
- (g) Total cancellations of ERUs, CERs, AAUs and RMUs relating to each activity under Article 3, paragraphs 3 and 4;
- (h) Total cancellations of ERUs, CERs, AAUs and RMUs following determination by the compliance committee that the Party is not in compliance with its commitment under Article 3, paragraph 1;
- (i) Total of any other cancellations of ERUs, CERs, AAUs and RMUs;
- (j) Total retirements of ERUs, CERs, AAUs and RMUs.

59. Upon expiration of the additional period for the fulfilment of commitments, and following review under Article 8 of the report submitted by the Party under paragraph 49 above, including the application of any corrections, and the resolution of any relevant questions of implementation, the secretariat shall record in the database the following information for each Party included in Annex I:

- (a) The total additions to, or subtractions from, the assigned amount pursuant to Article 3, paragraphs 7 and 8, for the accounting of the compliance assessment, in accordance with paragraphs 11 and 12 above;
- (b) The total quantity of ERUs, CERs, AAUs and RMUs in the retirement account of the Party for that commitment period.

60. Upon completion of the Article 8 review of the annual inventory for the last year of the commitment period, and the resolution of any related question of implementation, the secretariat shall record in the database the aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases, and from the sources, listed in Annex A to the Kyoto Protocol of the Party for the commitment period.

### **C. Compilation and accounting reports**

61. The secretariat shall publish an annual compilation and accounting report for each Party included in Annex I and forward it to the COP/MOP, the compliance committee and the Party concerned.

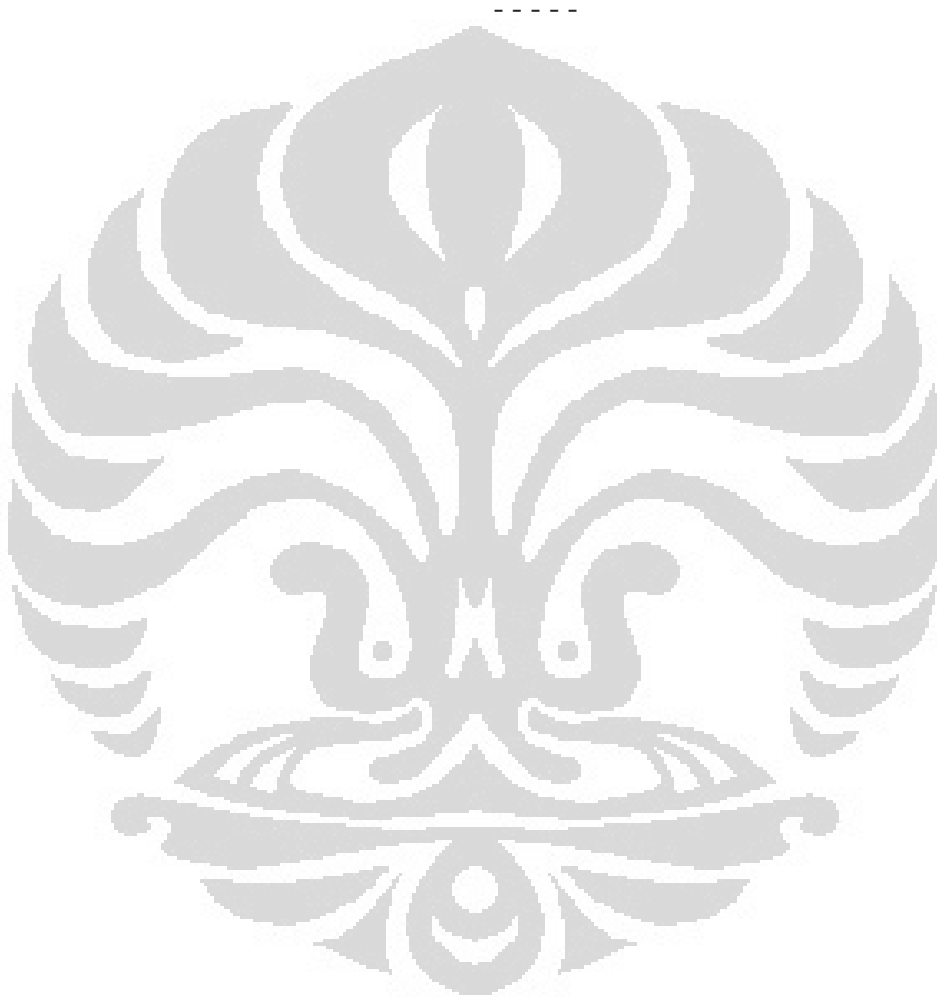
62. After the commitment period and the additional period for fulfilling commitments, the secretariat shall publish a final compilation and accounting report for each Party included in Annex I and forward it to the COP/MOP, the compliance committee and the Party concerned, indicating:

- (a) The aggregate anthropogenic carbon dioxide equivalent emissions of the Party for the commitment period as recorded under paragraph 60 above;

(b) The total quantity of ERUs, CERs, AAUs and RMUs in the retirement account of the Party for the commitment period, as recorded under paragraph 59 (b) above;

(c) Where applicable, the quantities of ERUs, CERs and AAUs in the registry available for carry-over to the subsequent commitment period;

(d) Where applicable, the quantity in tonnes by which the aggregate anthropogenic carbon dioxide equivalent emissions exceed the total quantity of ERUs, CERs, AAUs and RMUs in the retirement account of the Party for the commitment period.





CONFERENCE OF THE PARTIES

**Report of the Conference of the Parties  
on its thirteenth session, held in Bali  
from 3 to 15 December 2007**

**Addendum**

**Part Two: Action taken by the Conference of the Parties  
at its thirteenth session**

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## Decision 1/CP.13

### Bali Action Plan

*The Conference of the Parties,*

*Resolving* to urgently enhance implementation of the Convention in order to achieve its ultimate objective in full accordance with its principles and commitments,

*Reaffirming* that economic and social development and poverty eradication are global priorities,

*Responding* to the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change that warming of the climate system is unequivocal, and that delay in reducing emissions significantly constrains opportunities to achieve lower stabilization levels and increases the risk of more severe climate change impacts,

*Recognizing* that deep cuts in global emissions will be required to achieve the ultimate objective of the Convention and emphasizing the urgency<sup>1</sup> to address climate change as indicated in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change,

1. *Decides* to launch a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an agreed outcome and adopt a decision at its fifteenth session, by addressing, inter alia:
  - (a) A shared vision for long-term cooperative action, including a long-term global goal for emission reductions, to achieve the ultimate objective of the Convention, in accordance with the provisions and principles of the Convention, in particular the principle of common but differentiated responsibilities and respective capabilities, and taking into account social and economic conditions and other relevant factors;
  - (b) Enhanced national/international action on mitigation of climate change, including, inter alia, consideration of:
    - (i) Measurable, reportable and verifiable nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives, by all developed country Parties, while ensuring the comparability of efforts among them, taking into account differences in their national circumstances;
    - (ii) Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner;
    - (iii) Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries;

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<sup>1</sup> Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Technical Summary, pages 39 and 90, and Chapter 13, page 776.

- (iv) Cooperative sectoral approaches and sector-specific actions, in order to enhance implementation of Article 4, paragraph 1(c), of the Convention;
  - (v) Various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries;
  - (vi) Economic and social consequences of response measures;
  - (vii) Ways to strengthen the catalytic role of the Convention in encouraging multilateral bodies, the public and private sectors and civil society, building on synergies among activities and processes, as a means to support mitigation in a coherent and integrated manner;
- (c) Enhanced action on adaptation, including, inter alia, consideration of:
- (i) International cooperation to support urgent implementation of adaptation actions, including through vulnerability assessments, prioritization of actions, financial needs assessments, capacity-building and response strategies, integration of adaptation actions into sectoral and national planning, specific projects and programmes, means to incentivize the implementation of adaptation actions, and other ways to enable climate-resilient development and reduce vulnerability of all Parties, taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods;
  - (ii) Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance;
  - (iii) Disaster reduction strategies and means to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change;
  - (iv) Economic diversification to build resilience;
  - (v) Ways to strengthen the catalytic role of the Convention in encouraging multilateral bodies, the public and private sectors and civil society, building on synergies among activities and processes, as a means to support adaptation in a coherent and integrated manner;
- (d) Enhanced action on technology development and transfer to support action on mitigation and adaptation, including, inter alia, consideration of:
- (i) Effective mechanisms and enhanced means for the removal of obstacles to, and provision of financial and other incentives for, scaling up of the development and transfer of technology to developing country Parties in order to promote access to affordable environmentally sound technologies;
  - (ii) Ways to accelerate deployment, diffusion and transfer of affordable environmentally sound technologies;

- (iii) Cooperation on research and development of current, new and innovative technology, including win-win solutions;
  - (iv) The effectiveness of mechanisms and tools for technology cooperation in specific sectors;
- (e) Enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation, including, inter alia, consideration of:
- (i) Improved access to adequate, predictable and sustainable financial resources and financial and technical support, and the provision of new and additional resources, including official and concessional funding for developing country Parties;
  - (ii) Positive incentives for developing country Parties for the enhanced implementation of national mitigation strategies and adaptation action;
  - (iii) Innovative means of funding to assist developing country Parties that are particularly vulnerable to the adverse impacts of climate change in meeting the cost of adaptation;
  - (iv) Means to incentivize the implementation of adaptation actions on the basis of sustainable development policies;
  - (v) Mobilization of public- and private-sector funding and investment, including facilitation of climate-friendly investment choices;
  - (vi) Financial and technical support for capacity-building in the assessment of the costs of adaptation in developing countries, in particular the most vulnerable ones, to aid in determining their financial needs;

2. *Decides* that the process shall be conducted under a subsidiary body under the Convention, hereby established and known as the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, that shall complete its work in 2009 and present the outcome of its work to the Conference of the Parties for adoption at its fifteenth session;

3. *Agrees* that the process shall begin without delay, that the sessions of the group will be scheduled as often as is feasible and necessary to complete the work of the group, where possible in conjunction with sessions of other bodies established under the Convention, and that its sessions may be complemented by workshops and other activities, as required;

4. *Decides* that the first session of the group shall be held as soon as is feasible and not later than April 2008;

5. *Decides* that the Chair and Vice-Chair of the group, with one being from a Party included in Annex I to the Convention (Annex I Party) and the other being from a Party not included in Annex I to the Convention (non-Annex I Party), shall alternate annually between an Annex I Party and a non-Annex I Party;

6. *Takes note* of the proposed schedule of meetings contained in the annex to this decision;

7. *Instructs* the group to develop its work programme at its first session in a coherent and integrated manner;

8. *Invites* Parties to submit to the secretariat, by 22 February 2008, their views regarding the work programme, taking into account the elements referred to in paragraph 1 above, to be compiled by the secretariat for consideration by the group at its first meeting;

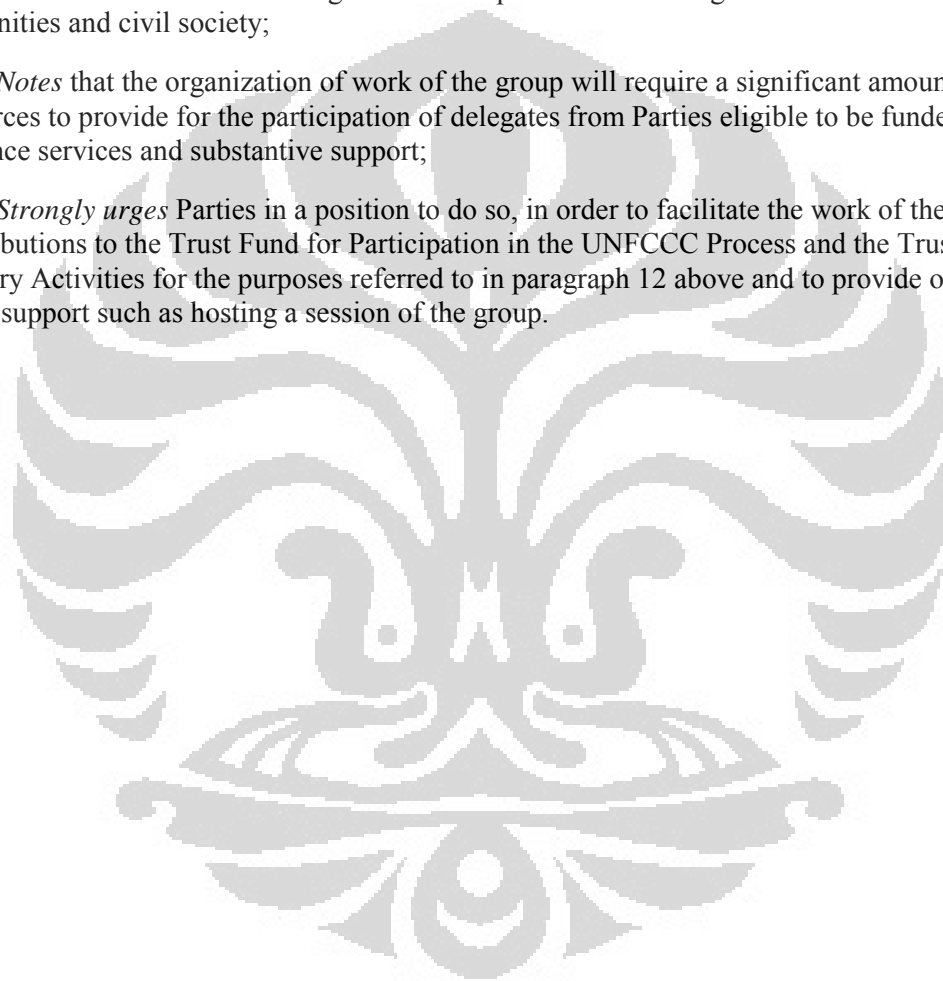
9. *Requests* the group to report to the Conference of the Parties at its fourteenth session on progress made;

10. *Agrees* to take stock of the progress made, at its fourteenth session, on the basis of the report by the group;

11. *Agrees* that the process shall be informed by, inter alia, the best available scientific information, experience in implementation of the Convention and its Kyoto Protocol, and processes thereunder, outputs from other relevant intergovernmental processes and insights from the business and research communities and civil society;

12. *Notes* that the organization of work of the group will require a significant amount of additional resources to provide for the participation of delegates from Parties eligible to be funded and to provide conference services and substantive support;

13. *Strongly urges* Parties in a position to do so, in order to facilitate the work of the group, to provide contributions to the Trust Fund for Participation in the UNFCCC Process and the Trust Fund for Supplementary Activities for the purposes referred to in paragraph 12 above and to provide other forms of in kind support such as hosting a session of the group.



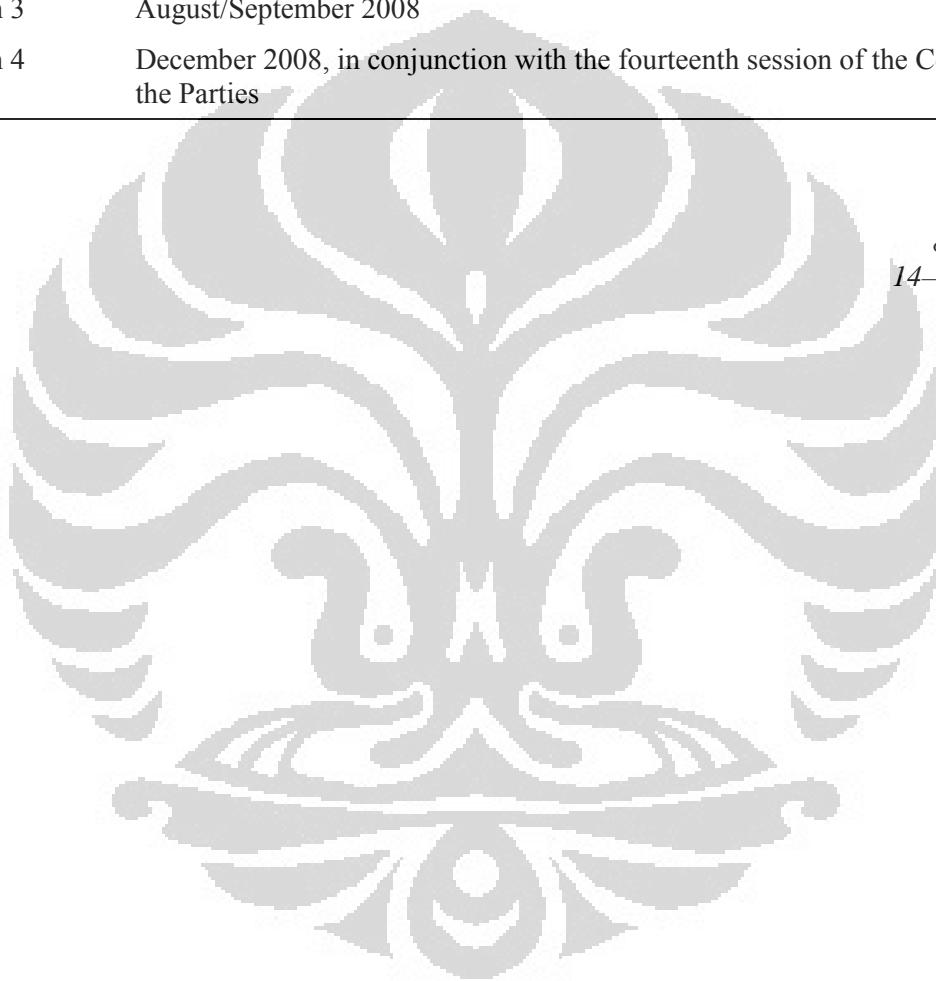


ANNEX

**Indicative timetable for meetings of the Ad Hoc Working Group on  
Long-term Cooperative Action under the Convention in 2008**

| <b>Session</b> | <b>Dates</b>   |
|----------------|--|
| Session 1      | March/April 2008   |
| Session 2      | June 2008, in conjunction with the twenty-eighth sessions of the subsidiary bodies         |
| Session 3      | August/September 2008  |
| Session 4      | December 2008, in conjunction with the fourteenth session of the Conference of the Parties |

*8<sup>th</sup> plenary meeting  
14–15 December 2007*



## Decision 2/CP.13

### **Reducing emissions from deforestation in developing countries: approaches to stimulate action**

*The Conference of the Parties,*

*Recalling* the relevant provisions of the Convention, in particular Article 2, Article 3, paragraphs 1, 3 and 4, and Article 4, paragraphs 1(a)–(d), 3, 5 and 7,

*Acknowledging* the contribution of the emissions from deforestation to global anthropogenic greenhouse gas emissions,

*Acknowledging* that forest degradation also leads to emissions, and needs to be addressed when reducing emissions from deforestation,

*Recognizing* that efforts and actions to reduce deforestation and to maintain and conserve forest carbon stocks in developing countries are already being taken,

*Recognizing* the complexity of the problem, different national circumstances and the multiple drivers of deforestation and forest degradation,

*Recognizing* the potential role of further actions to reduce emissions from deforestation and forest degradation in developing countries in helping to meet the ultimate objective of the Convention,

*Affirming* the urgent need to take further meaningful action to reduce emissions from deforestation and forest degradation in developing countries,

*Noting* that sustainable reduction in emissions from deforestation and forest degradation in developing countries requires stable and predictable availability of resources,

*Recognizing* that reducing emissions from deforestation and forest degradation in developing countries can promote co-benefits and may complement the aims and objectives of other relevant international conventions and agreements,

*Recognizing also* that the needs of local and indigenous communities should be addressed when action is taken to reduce emissions from deforestation and forest degradation in developing countries,

1. *Invites* Parties to further strengthen and support ongoing efforts to reduce emissions from deforestation and forest degradation on a voluntary basis;
2. *Encourages* all Parties, in a position to do so, to support capacity-building, provide technical assistance, facilitate the transfer of technology to improve, inter alia, data collection, estimation of emissions from deforestation and forest degradation, monitoring and reporting, and address the institutional needs of developing countries to estimate and reduce emissions from deforestation and forest degradation;
3. *Further encourages* Parties to explore a range of actions, identify options and undertake efforts, including demonstration activities, to address the drivers of deforestation relevant to their national circumstances, with a view to reducing emissions from deforestation and forest degradation and thus enhancing forest carbon stocks due to sustainable management of forests;

4. *Encourages*, without prejudice to future decisions of the Conference of the Parties, the use of the indicative guidance provided in the annex to this decision as an aid in undertaking and evaluating the range of demonstration activities;
5. *Invites* Parties, in particular Parties included in Annex II to the Convention, to mobilize resources to support efforts in relation to the actions referred to in paragraphs 1–3 above;
6. *Encourages* the use of the most recent reporting guidelines<sup>1</sup> as a basis for reporting greenhouse gas emissions from deforestation, noting also that Parties not included in Annex I to the Convention are encouraged to apply the *Good Practice Guidance for Land Use, Land-Use Change and Forestry*;<sup>2</sup>
7. *Requests* the Subsidiary Body for Scientific and Technological Advice to undertake a programme of work on methodological issues related to a range of policy approaches and positive incentives that aim to reduce emissions from deforestation and forest degradation in developing countries noting relevant documents;<sup>3</sup> the work should include:
- (a) Inviting Parties to submit, by 21 March 2008, their views on how to address outstanding methodological issues including, inter alia, assessments of changes in forest cover and associated carbon stocks and greenhouse gas emissions, incremental changes due to sustainable management of the forest, demonstration of reductions in emissions from deforestation, including reference emissions levels, estimation and demonstration of reduction in emissions from forest degradation, implications of national and subnational approaches including displacement of emissions, options for assessing the effectiveness of actions in relation to paragraphs 1, 2, 3 and 5 above, and criteria for evaluating actions, to be compiled into a miscellaneous document for consideration by the Subsidiary Body for Scientific and Technological Advice at its twenty-eighth session;
  - (b) Requesting the secretariat, subject to availability of supplementary funding, to organize a workshop on methodological issues identified in paragraph 7 (a) above, before its twenty-ninth session, and to prepare a report on the workshop for consideration by the Subsidiary Body for Scientific and Technological Advice at that session;
  - (c) Advancing the development of methodological approaches, taking into account the outcome of the workshop referred to in paragraph 7 (b) above at its twenty-ninth session;
8. *Requests* the Subsidiary Body for Scientific and Technological Advice to report to the Conference of the Parties, at its fourteenth session, on the outcomes of the work referred to in paragraph 7 (a)–(c) above, including any recommendations on possible methodological approaches;

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<sup>1</sup> At the time of this decision, the most recent reporting guidelines for national communications from Parties not included in Annex I to the Convention are found in decision 17/CP.8.

<sup>2</sup> Decision 13/CP.9.

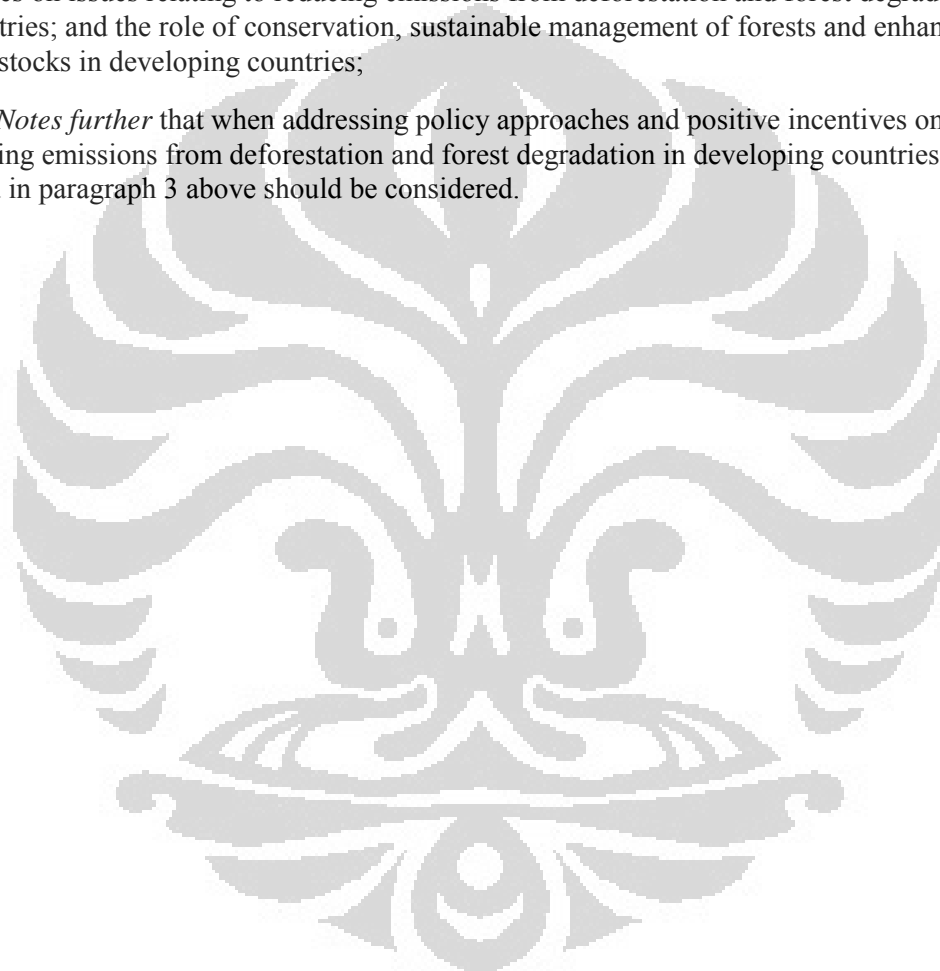
<sup>3</sup> FCCC/SBSTA/2006/10, FCCC/SBSTA/2007/3, FCCC/SBSTA/2007/MISC.2 and Add.1, FCCC/SBSTA/2007/MISC.14 and Add. 1–3; and the background paper prepared for the workshop on reducing emissions from deforestation held in Rome, Italy, from 30 August to 1 September 2006, available at <[http://unfccc.int/methods\\_and\\_science/lulucf/items/3757.php](http://unfccc.int/methods_and_science/lulucf/items/3757.php)>.

9. *Invites* relevant organizations and stakeholders, without prejudice to any future decision of the Conference of the Parties on reducing emissions from deforestation and forest degradation in developing countries, to support efforts in relation to paragraphs 1, 2, 3 and 5 above and to share outcomes of these efforts with the Subsidiary Body for Scientific and Technological Advice by providing corresponding information to the secretariat;

10. *Requests* the secretariat to support, subject to the availability of supplementary funding, the activities of all Parties, in particular developing countries, in relation to paragraphs 3, 5, 7 and 9 above, by developing a Web platform where information submitted by Parties, relevant organizations and stakeholders will be made available;

11. *Notes* the further consideration, under decision 1/CP.13, of policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries;

12. *Notes further* that when addressing policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries, the efforts described in paragraph 3 above should be considered.



## ANNEX

**Indicative guidance**

1. Demonstration activities should be undertaken with the approval of the host Party.
2. Estimates of reductions or increases of emissions should be results based, demonstrable, transparent and verifiable, and estimated consistently over time.
3. The use of the methodologies described in paragraph 6 of this decision is encouraged as a basis for estimating and monitoring emissions.
4. Emission reductions from national demonstration activities should be assessed on the basis of national emissions from deforestation and forest degradation.
5. Subnational demonstration activities should be assessed within the boundary used for the demonstration, and assessed for associated displacement of emissions.
6. Reductions in emissions or increases resulting from the demonstration activity should be based on historical emissions, taking into account national circumstances.
7. Subnational<sup>1</sup> approaches, where applied, should constitute a step towards the development of national approaches, reference levels and estimates.
8. Demonstration activities should be consistent with sustainable forest management, noting, inter alia, the relevant provisions of the United Nations Forum on Forests, the United Nations Convention to Combat Desertification and the Convention on Biological Diversity.
9. Experiences in implementing activities should be reported and made available via the Web platform.<sup>2</sup>
10. Reporting on demonstration activities should include a description of the activities and their effectiveness, and may include other information.
11. Independent expert review is encouraged.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*

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<sup>1</sup> Activities carried out within the national boundary.

<sup>2</sup> To be developed by the secretariat as referred to in paragraph 10 of this decision.

## Decision 3/CP.13

### Development and transfer of technologies under the Subsidiary Body for Scientific and Technological Advice

*The Conference of the Parties,*

*Recalling* chapter 34 of Agenda 21 and the relevant provisions of the programme for the further implementation of Agenda 21 on the transfer of environmentally sound technologies adopted by the United Nations General Assembly at its nineteenth special session,

*Recalling* the relevant provisions of the Convention, in particular Article 4, paragraphs 1, 3, 5, 7, 8 and 9, Article 9, paragraph 2(c), Article 11, paragraphs 1 and 5, and Article 12, paragraphs 3 and 4,

*Recalling* decisions 4/CP.7, 6/CP.10, 6/CP.11 and 3/CP.12,

*Welcoming* the progress of the work and achievements of the Expert Group on Technology Transfer since its inception in advancing and facilitating the implementation of the framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention, and its related activities under the framework,

*Noting* the range of important actions and partnerships undertaken by Parties within and outside the framework of the Convention, which contribute to the development, transfer and deployment of environmentally sound technologies, including through joint research and development programmes,

*Noting with appreciation* the progress made by Parties included in Annex II to the Convention in establishing innovative financing partnerships such as the Global Energy Efficiency and Renewable Energy Fund and the European Union Energy Initiative,

*Further noting* the actions of Parties to contribute to addressing technology financing issues, through such vehicles as the Global Environment Facility, the Special Climate Change Fund, the Least Developed Countries Fund, the World Bank and the Climate Technology Initiative,

*Recognizing* that there is a crucial need to accelerate innovation in the development, deployment, adoption, diffusion and transfer of environmentally sound technologies among all Parties, and particularly from developed to developing countries, for both mitigation and adaptation,

*Emphasizing* that effective actions to address climate change require a broad portfolio of activities, including the widespread uptake of new and existing technologies and the creation of appropriate enabling environments,

*Recognizing* that close collaboration between government, industry and the research community, in particular through public-private partnerships, can stimulate the development of a wide range of mitigation and adaptation technologies and reduce their costs,

*Further recognizing* that the immediate and urgent delivery of technology development, deployment, diffusion and transfer to developing countries requires suitable responses, including a continued emphasis by all Parties, in particular Parties included in Annex I to the Convention, on enhancement of enabling environments, facilitating access to technology information and

capacity-building, identification of technology needs and innovative financing that mobilizes the vast resources of the private sector to supplement public finance sources where appropriate,

*Further recognizing* the importance of an effective institutional arrangement, access to financing and suitable indicators for monitoring and evaluating effectiveness to the development, deployment, diffusion and transfer of environmentally sound technologies to developing countries,

1. *Agrees* that the five themes listed in the framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention (the technology transfer framework), as contained in the annex to decision 4/CP.7, and the structure, definitions and purpose of this framework, continue to provide a solid basis for enhancing the implementation of Article 4, paragraph 5, of the Convention;

2. *Adopts* the set of actions, for consideration by the Expert Group on Technology Transfer in formulating its future work programmes, as set out in the recommendations for enhancing the technology transfer framework contained in annex I to this decision, and agrees that these activities would complement the actions in the technology transfer framework;

3. *Agrees* to reconstitute the Expert Group on Technology Transfer for a further five years with the terms of reference contained in annex II to this decision, and to review, at its eighteenth session, progress of the work and terms of reference, including, if appropriate, the status and continuation of this body; and agrees that the Expert Group on Technology Transfer should provide advice as appropriate to the subsidiary bodies;

4. *Decides* that the Expert Group on Technology Transfer shall constitute an effective institutional arrangement within the Convention, which is necessary to support action, and that this Expert Group on Technology Transfer shall have particular regard to the need for, and in accordance with the terms of reference referred to in paragraph 3 above:

- (a) Adequate and timely financial support, within the context of Article 4, paragraph 5, of the Convention;
- (b) Development of performance indicators, for monitoring and evaluating effectiveness;

5. *Requests* the Expert Group on Technology Transfer, with the support of the secretariat, to consult with relevant international organizations, and solicit information on their abilities to support certain activities identified in the set of actions contained in annex I to this decision, and to report on its findings to the subsidiary bodies at their twenty-ninth session;

6. *Invites* each of the relevant international organizations and initiatives referred to in paragraph 5 above to closely coordinate with the Expert Group on Technology Transfer on the relevant activities in its work programme;

7. *Urges* Parties not included in Annex I to the Convention to use the United Nations Development Programme handbook *Conducting Technology Needs Assessments for Climate Change*<sup>1</sup> when undertaking their technology needs assessments;

8. *Urges* Parties included in Annex II to the Convention, relevant intergovernmental organizations, international financial institutions, and other partnerships and initiatives, including the Climate Technology Initiative, in a position to do so, to provide technical and financial support to Parties

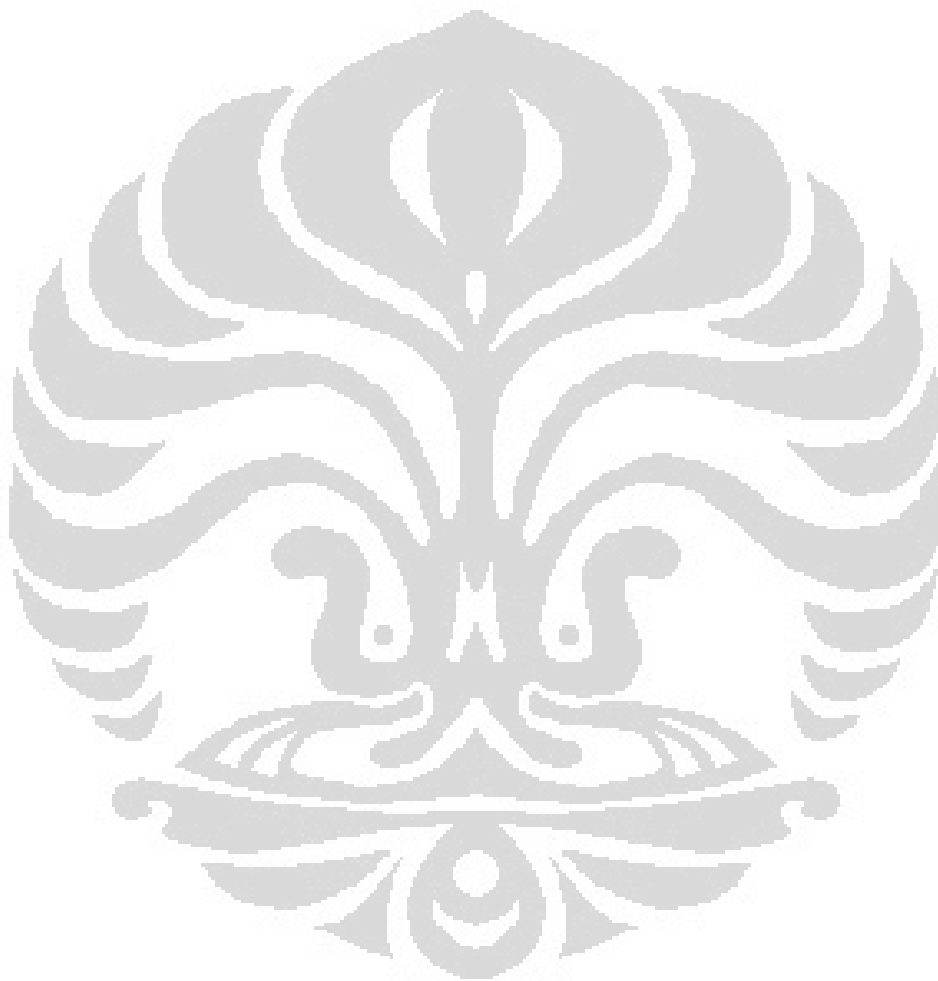
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<sup>1</sup> <[http://ttclear.unfccc.int/ttclear/pdf/TNA/UNDP/TNA%20Handbook\\_Final%20version.pdf](http://ttclear.unfccc.int/ttclear/pdf/TNA/UNDP/TNA%20Handbook_Final%20version.pdf)>.

not included in Annex I to the Convention and countries with economies in transition to help them conduct, identify and implement prioritized technology needs;

9. *Requests* the secretariat to facilitate the implementation of the actions for enhancing the technology transfer framework further elaborated in annex I to this decision, and of the work of the Expert Group on Technology Transfer in cooperation with Parties, the Global Environment Facility and other relevant international organizations, initiatives and intergovernmental processes;

10. *Requests* the Global Environment Facility, as an operating entity of the financial mechanism of the Convention, to provide financial support for the technology transfer framework, and complemented by the set of actions referred to in paragraph 2 above.





## ANNEX I

**Recommendations for enhancing the implementation of the framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention<sup>1</sup>**

1. The purpose of these recommendations is to identify specific actions for enhancing the implementation of the framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention (referred to hereinafter as the technology transfer framework), as requested by decision 6/CP.10.
2. These recommendations were developed taking into account:
  - (a) Experience and lessons learned from the implementation of the technology transfer framework since its adoption by the Conference of the Parties (COP) at its seventh session (decision 4/CP.7);
  - (b) Progress of the work and the activities completed since the inception of the Expert Group on Technology Transfer (EGTT) in 2001 and the outcomes of its deliberations;
  - (c) Relevant ongoing activities relating to the development and transfer of technologies of various national, regional and international organizations, governments and the private sector, in different forums;
  - (d) That the work on advancing the uptake of mitigation technologies and technologies for adaptation to climate change involves cross-cutting activities and, as such, normally is implemented under multiple key themes of the framework;
  - (e) The need to promote a broader involvement of Parties, international organizations, the private sector (in particular business and industry as well as the financial community), technology practitioners and other relevant stakeholders for the implementation of the framework;
  - (f) The need to strike a balance between strategic and operational actions, whereby the strategic actions are implemented by organizing technical workshops and expert meetings. These lead to the preparation of reports, technical papers and other tools on specific issues that provide technical inputs and operational guidance for the benefit of Parties and other users.
3. The existing structure, five thematic areas of work, definitions and purpose under the current technology transfer framework contained in the annex to decision 4/CP.7 continue to provide a solid basis for implementing the provisions of Article 4, paragraph 5, of the Convention.
4. Given that technology is one of the important elements for discussions on the future long-term cooperative actions to address climate change by enhancing implementation of the Convention, the suggested time frame for the implementation of the actions outlined below is for the medium term covering the period between 2007 and 2012 or until the eighteenth session of the COP. These recommendations address the medium-term work, pending the results of the dialogue on long-term cooperative action to address climate change by enhancing implementation of the Convention (Dialogue).

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<sup>1</sup> The recommendations presented here are reproduced as included in document FCCC/SBSTA/2006/5, annex II.

5. The implementation of the recommendations presented below should be considered as further actions for enhancing the implementation of Article 4, paragraph 5, of the Convention set out in the technology transfer framework.

6. Work developed under each key theme has evolved to a more practical and results-oriented level and should continue to do so by promoting actions in specific sectors and regions. Therefore, there is a need to undertake periodic review on implementation of the framework and its effectiveness.

7. The EGTT recognized the need for financial and technical support to enable the Parties not included in the Annex I to the Convention (non-Annex I Parties) to implement the recommended actions below. In this regard Parties, when considering these recommendations, may wish to consider ways and means to address these needs.

#### **A. Technology needs and needs assessments**

8. Most of the actions described in paragraph 7 of the technology transfer framework under the theme of technology needs assessments (TNAs) have been completed as described in paragraphs 16–21 of the main part of document FCCC/SBSTA/2006/INF.4. Based on lessons learned in the implementation of this theme, the following recommendations are made to enhance the implementation of this key theme:

- (a) To encourage non-Annex I Parties that have not yet undertaken or completed their TNAs, to do so as soon as possible, and to make these reports available to the secretariat for posting on the UNFCCC technology information clearing house (TT:CLEAR);
- (b) To encourage non-Annex I Parties to provide updated information on their technology needs in their second national communications and other national reports and to make them available to the secretariat;
- (c) To request the secretariat to prepare a synthesis report(s) of the information mentioned in paragraph 8 (a) and (b) above for consideration by the Subsidiary Body for Scientific and Technological Advice (SBSTA);
- (d) To request the Global Environment Facility (GEF) and its implementing agencies, other intergovernmental organizations (IGOs), international financial institutions (IFIs), the Climate Technology Initiative (CTI) and Parties that are in a position to do so to provide capacity-building for non-Annex I Parties to conduct, report and use TNAs;
- (e) To request that, not later than 2009:
  - (i) The secretariat, in collaboration with the EGTT, United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP) and CTI, update the handbook for conducting technology needs assessments before SBSTA 28, taking into account experience and lessons learned indicated in the synthesis report on technology needs prepared by the secretariat,<sup>2</sup> cross-referencing the work on innovative financing and technologies for adaptation, and widely disseminate the updated handbook to Parties through TT:CLEAR and other means in different United Nations official languages;
  - (ii) The EGTT, with the assistance of the secretariat, prepare a report on good practices for conducting TNAs in collaboration with UNDP, UNEP and CTI for

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<sup>2</sup> FCCC/SBSTA/2006/INF.1.

consideration by the SBSTA, and disseminate it to relevant stakeholders and practitioners;

- (f) To make available the results of TNAs, related experience and lessons learned in the TNA process and share them at national and international levels through the network of technology information centres, including through the organization of workshops by the secretariat in collaboration with relevant international organizations and initiatives;
- (g) The secretariat to provide regular updates on progress of the implementation of the results of technology needs identified in TNAs, including success stories for consideration by the SBSTA at its subsequent sessions, as appropriate;
- (h) To invite the EGTT to cooperate closely with the other expert groups constituted under the Convention, especially the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention, with the aim of coordinating activities relating to TNAs and national communications.

9. The main actors in this work are Parties, the EGTT, the secretariat, the GEF and its implementing agencies, and CTI in collaboration with relevant national and international stakeholders.

### **B. Technology information**

10. The actions identified under this theme of the technology transfer framework were mainly completed as described in paragraphs 27–34 of the main part of document FCCC/SBSTA/2006/INF.4. Based on lessons learned in the implementation of this theme, the following recommendations are made to enhance the implementation of this theme:

- (a) To maintain, update and further develop TT:CLEAR taking into account relevant conclusions of the SBSTA at its twentieth session and client surveys;
- (b) To enhance outreach activities by the secretariat to increase the numbers of users of TT:CLEAR from developing country Parties;
- (c) To share experiences and lessons learned among national and regional experts participating in the pilot project on TT:CLEAR networking through the organization of expert meetings;
- (d) To use TT:CLEAR and the network of technology centres developed through the current pilot programme to share technical information on technologies for adaptation and the associated capacity-building to meet the needs for technology information of vulnerable communities and countries;
- (e) To encourage the link between TT:CLEAR and technical information providers, including the private sector, in technology transfer;
- (f) To encourage the organization of training programmes and workshops by the secretariat in collaboration with the EGTT and relevant national, regional and international organizations for building capacity of experts in the creation of their national technology information databases;
- (g) To encourage Parties to provide more information on their technology transfer activities in their national communications.

11. The main actors in the work are the secretariat, Parties and their national and regional technology centres, relevant international organizations and the private sector.

### **C. Enabling environments for technology transfer**

12. Based on lessons learned in the implementation of this theme, the following recommendations are made to enhance the implementation of this theme:

- (a) Preparation of technical studies on barriers, good practice and recommendations for developing enhanced enabling environments that accelerate the development and transfer of environmentally sound technologies (ESTs), at the national and international levels. This should cover related trade issues, technology development (including endogenous technologies), and technology push and market pull factors for consideration by the SBSTA;
- (b) To encourage Parties to avoid trade and intellectual property rights policies, or lack thereof, restricting transfer of technology;
- (c) To encourage Parties to make available through TT:CLEAR and other means information on ongoing and planned publicly funded research and development (R&D) activities where there are opportunities for non-Annex I Parties to jointly participate in such R&D activities, along with the terms under which Parties might participate and the steps necessary to establish such a collaborative relationship;
- (d) Close cooperation with public and/or private partnerships that focus on improving enabling environments for accelerating development and transfer of ESTs and which have been established in the context of processes such as the World Summit on Sustainable Development, the Group of Eight and other initiatives (Renewable Energy and Energy Efficiency Partnership, Johannesburg Renewable Energy Coalition, Carbon Sequestration Leadership Forum, and CTI and other International Energy Agency implementing agreements);
- (e) To encourage Parties to integrate the objective of technology transfer into national policies and to enhance the interaction between governments and the private sector.

13. The main actors in this work are Parties, the secretariat, relevant international organizations and initiatives, and the private sector.

### **D. Capacity-building for technology transfer**

14. Activities relating to capacity-building are also listed under other sections of these recommendations. Based on lessons learned in the implementation of this theme, the following additional recommendations are made to enhance its implementation:

- (a) To encourage Parties, IGOs and other institutions and initiatives to support capacity-building activities to promote technology transfer, at the regional and national levels, that are targeted to respond to priority capacity-building needs identified by non-Annex I Parties in their TNAs, national communications and other national reports;
- (b) The secretariat to prepare periodic reports containing information relating to capacity-building needs for the development, deployment, application and transfer of technologies from all relevant sources of information, such as national communications of non-Annex I Parties, reports of TNAs and National Capacity Self Assessment reports supported by the GEF for consideration by the SBSTA. To the extent possible those reports could identify key elements for successful capacity-building for development and transfer of technologies for both mitigation of and adaptation to climate change;

- (c) To increase communication and outreach with regard to technology transfer activities under the framework and the work of the EGTT by creating learning centres (tools and methods) and partnership fairs (opportunities) in parallel with subsidiary body sessions and side events;
- (d) To encourage Parties, IGOs and other institutions and initiatives to organize training in management and operation of climate technologies; to establish/strengthen relevant organizations/institutions in developing countries for capacity-building for technology transfer; to establish/strengthen training, expert exchange, scholarship and cooperative research programmes in relevant national and regional institutions in developing countries for transfer of ESTs; and to organize seminars/training/workshops on capacity-building for adapting to the adverse effects of climate change.

15. The main actors in this work are Parties, the EGTT, the secretariat, the GEF and its implementing agencies, and relevant international organizations and initiatives.

#### **E. Mechanisms for technology transfer**

16. The following recommendations were built on ongoing work of the secretariat and the EGTT in different areas for enhancing the implementation of the technology transfer framework.

##### 1. Innovative options for financing the development and transfer of technologies

17. The recommended actions in this area are:

- (a) To invite relevant international organizations and initiatives, such as CTI, in collaboration with the EGTT and the secretariat, to provide technical support through coaching and training programmes for project developers in developing countries and countries with economies in transition to transform project ideas resulting from TNAs into project proposals that meet the standards of the international financial providers;
- (b) To disseminate the new UNFCCC practitioners' guide for preparing and presenting project financing proposals to Parties and practitioners in developing countries and encourage its use in the activity mentioned in paragraph 14 (a) above, and post the guide on TT:CLEAR for distance learning purposes and for use in other training programmes;
- (c) To request the EGTT to promote success stories in financing technology transfer projects in emerging markets involving the private sector, including carbon funds, corporate-social-responsible, and triple-bottom-line<sup>3</sup> investors;
- (d) To encourage Parties to create an environment conducive for private sector investments by providing such incentives as greater access to multilateral sources and other sources of targeted "smart" subsidy schemes that trigger private sector co-financing;
- (e) To encourage Parties to scale up and/or develop innovative public-private financing mechanisms and instruments that increase access to developing country project and business developers that play a role in the transfer, development and/or deployment of ESTs, focusing in particular on:
  - (i) Increasing the potential of public funds to leverage private sector capital;

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<sup>3</sup> These measure the economic, social and environmental benefits of a project.

- (ii) Increasing options for sharing and mitigating risks and for bundling small-scale projects to bridge the distance between large-scale infrastructure investors and small-scale project and business developers;
  - (iii) The role that small and medium-sized enterprises, particularly joint ventures, can play in transferring, deploying and developing ESTs;
  - (iv) Providing options for integrated technical assistance to help developing, managing and operating EST projects and businesses;
  - (v) Promoting enterprise and corporate-driven R&D, innovation, and cost reductions;
- (f) To strengthen the dialogue between government and industry to encourage discussions between relevant ministries in recipient countries and private sector organizations to enhance the investment conditions for climate-friendly technologies;
  - (g) For the EGTT to report regularly on the implementation of the mechanisms for technology transfer as spelled out in this document on a regular basis with a view to recommending new approaches that will further enhance technology transfer.

18. The main actors in this work are Parties, the EGTT, the secretariat, the GEF and its implementing agencies, public and private funding institutions, relevant international organizations and initiatives, and the private sector.

2. Possible ways and means to enhance cooperation with relevant conventions and intergovernmental processes

19. The recommended actions in this area are:

- (a) For the EGTT to explore possible ways to enhance cooperation between the UNFCCC and other multilateral environmental agreements (MEAs), through, inter alia, the Joint Liaison Group and other intergovernmental processes, in particular the Commission on Sustainable Development, where technology transfer is considered. It may be useful to look beyond MEAs and look for synergy with other intergovernmental processes (e.g. World Trade Organization, International Energy Agency (IEA), the Group of Eight and Asia–Pacific Economic Cooperation);
- (b) For the UNFCCC to be proactive in sharing information and experiences relating to the transfer of technologies, in particular for adaptation;
- (c) For the COP to encourage Parties, when formulating climate change strategies, programmes and projects, to take into consideration objectives of other MEAs;
- (d) Identification of areas for potential cooperation and formulation of clear objectives for this cooperation.

20. The main actors in this work are Parties, the EGTT, the secretariat, and relevant international organizations and processes.

3. Promotion of endogenous development of technology through provision of financial resources and joint research and development

21. The recommended actions in this area are:
- (a) To invite non-Annex I Parties to provide information on barriers encountered in the development of endogenous technologies, and to invite Parties to share good experiences in the promotion of endogenous technologies in non-Annex I Parties;
  - (b) To consider options for encouraging the setting up of institutions such as national systems of innovation that could lead to the endogenous development of technologies in developing countries and countries with economies in transition;
  - (c) To share lessons learned in endogenous technology development through TT:CLEAR;
  - (d) To report regularly to the SBSTA on endogenous technology development and seek further guidance from the SBSTA and the COP.

22. The main actors in this work are Parties, the EGTT and the secretariat.

4. Promotion of collaborative research and development on technologies

23. The recommended actions in this area are:
- (a) To provide guidance for TNA reporting on joint R&D needs and use of information in the national communications and TNAs to identify needs and opportunities for R&D;
  - (b) To provide opportunities for reporting joint R&D agreements, including voluntary agreements, on TT:CLEAR;
  - (c) To invite relevant intergovernmental organizations (e.g. Intergovernmental Panel on Climate Change, UNDP, UNEP, United Nations International Development Organization, Food and Agriculture Organization of the United Nations) and international organizations (e.g. IEA) to provide information on supported R&D activities relating to climate change;
  - (d) To consider options for promoting regional research platforms, making use of existing networks of centres of excellence, where possible;
  - (e) To prepare periodic stocktaking papers on status, opportunities and needs for further R&D;
  - (f) To invite governments to encourage academia and industry to develop research programmes to address climate-friendly technologies and to promote investment in climate change.

5. The Expert Group on Technology Transfer

24. The COP may wish to take into account the work of the EGTT and the recommendations contained in this document when reviewing the EGTT at its twelfth session.

## ANNEX II

**Terms of reference of the Expert Group on Technology Transfer**1. Objectives

1. The Expert Group on Technology Transfer shall have the objectives of enhancing the implementation of Article 4, paragraph 5, of the Convention and advancing the development and transfer of technology activities under the Convention.
2. The Expert Group on Technology Transfer shall have the objectives of enhancing the implementation of the Convention provisions relevant to advancing the development, deployment, adoption, diffusion and transfer of environmentally sound technologies to developing countries, taking into consideration differences in accessing and applying technologies for mitigation and adaptation.

2. Functions

3. The Expert Group on Technology Transfer shall:
  - (a) Analyse and identify ways to facilitate and advance the development and transfer of technology activities, including those identified in the technology transfer framework and in annex I to this decision, and make recommendations for consideration, as appropriate, by the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI) to inform subsequent decisions by the Conference of the Parties (COP) related to the development and transfer of technology;
  - (b) Help implement results of technology needs assessments (TNAs), building on the work of the Expert Group on Technology Transfer on innovative financing and on other areas of the technology transfer framework;
  - (c) Develop, as part of its future programme of work, a set of performance indicators that could be used by the SBI to regularly monitor and evaluate the effectiveness of the implementation of the technology transfer framework, complemented with the set of actions set out in annex I, as referred to in paragraph 2 of this decision, considering the related work under the Convention and other relevant bodies. The terms of reference should be available for consideration by the SBSTA at its twenty-eighth session, with a view to proposing a draft report with a set of performance indicators to the subsidiary bodies for consideration at their thirtieth sessions, in order to make its final report available to the COP at its fifteenth session;
  - (d) Propose a two-year rolling programme of work, for endorsement by the twenty-eighth session of the subsidiary bodies following consideration by a joint contact group of the subsidiary bodies,<sup>1</sup> to facilitate the development, deployment, diffusion and transfer of technologies under the Convention. The setting of this programme of work should:
    - (i) For the medium-term perspective (2008–2012), take into account the set of actions for enhancing the implementation of the technology transfer framework complemented by annex I to this decision; this work in the context of the Convention could benefit from becoming more focused on practical actions, in particular with special attention given to the African region, small island developing States and least developed countries. It should also:

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<sup>1</sup> To be established at the plenary of the SBSTA and at the plenary of the SBI.



- a. Accelerate the implementation of development and transfer of technologies through practical actions that fully consider sectoral and regional aspects and differences in national circumstances;
  - b. Consider a better integration of national strategies for sustainable development and poverty reduction, based on the United Nations Millennium Development Goals;
- (ii) For the long-term perspective beyond 2012: develop the terms of reference for elaborating a strategy paper, including sectoral approaches, that could draw on the work undertaken by Parties in processes under the Convention and outside the Convention as well as the results of work undertaken by other international organizations and forums. The strategy paper should be considered by the subsidiary bodies at their thirtieth sessions;
- (e) Assess strategies and innovative funding opportunities or incentives for engaging the participation of relevant stakeholders and partner organizations, and make recommendations to the subsidiary bodies for their consideration;
- (f) As part of its first two-year programme of work (2008–2009):
- (i) Identify and analyse existing and potential new financing resources and relevant vehicles in supporting the development, deployment, diffusion and transfer of environmentally sound technologies in developing countries;
  - (ii) Based on the above identification and analysis, assess gaps and barriers to the use of and access to these financing resources in order to provide information to Parties to consider their adequacy and predictability;
- (g) In this identification, analysis and assessment, take into account the checklist of the following criteria:
- (i) The implementation of TNAs;
  - (ii) Joint research and development programmes and activities in the development of new technologies;
  - (iii) Demonstration projects;
  - (iv) Enabling environments for technology transfer;
  - (v) Incentives for the private sector;
  - (vi) North–South and South–South cooperation;
  - (vii) Endogenous capacities and technologies;
  - (viii) Issues associated with meeting the agreed full incremental costs;
  - (ix) Licences to support the access to and transfer of low-carbon technologies and know-how;
  - (x) A window for, inter alia, a venture capital fund related to or possibly located in a multilateral financial institution;

- (h) Make available the terms of reference for this work (identification, analysis and assessment) for consideration by the SBSTA at its twenty-eighth session, with a view to proposing a report with recommendations on future financing options necessary for enhancing the implementation of the Convention with regard to the technology transfer framework complemented with the set of actions set out in annex I, as referred to in paragraph 2 of this decision, to the subsidiary bodies at their thirtieth sessions. The criteria in the checklist shall be regarded as important points for attention in funding through existing vehicles and new initiatives;
- (i) The Expert Group on Technology Transfer, with the assistance of the UNFCCC secretariat, should communicate the results of this work broadly, including to appropriate intergovernmental bodies and international financial institutions.

### 3. Membership

- 4. The Expert Group on Technology Transfer shall comprise 19 experts, as follows:
  - (a) Three members from each of the regions of the Parties not included in Annex I to the Convention (non-Annex I Parties), namely Africa, Asia and the Pacific, and Latin America and the Caribbean;
  - (b) One member from the small island developing States;
  - (c) Eight members from Parties included in Annex I to the Convention (Annex I Parties);
  - (d) One member from other non-Annex I Parties.
- 5. In addition, four resource persons may be invited, who represent relevant international organizations and initiatives (e.g. the GEF, the United Nations Development Programme, the African Development Bank, the Food and Agriculture Organization of the United Nations, the Asian Development Bank, the United Nations Environment Programme, the United Nations Industrial Development Organization, the World Bank, the International Energy Agency and Climate Technology Initiative). The Expert Group on Technology Transfer will proactively engage with these organizations and initiatives. If needed, the group may invite resource persons from other relevant organizations on an issue-oriented basis.
- 6. The members of the Expert Group on Technology Transfer shall be nominated by Parties for a period of two years and be eligible to serve two consecutive terms. Half of the members of the expert group nominated initially shall serve for a period of three years, taking into account the need to maintain the overall balance of the group. Every year thereafter, half of the members shall be nominated for a period of two years. Appointment pursuant to paragraph 7 below shall count as one term. The members shall remain in office until their successors are nominated. The resource persons from four relevant international organizations and initiatives shall serve on an issue-oriented basis.
- 7. If a member of the Expert Group on Technology Transfer resigns or is otherwise unable to complete the assigned term of office or to perform the functions of that office, the secretariat may, depending on the proximity of the next session of the COP, request the group that had nominated the member to nominate another member to replace the said member for the remainder of that member's mandate. In such a case, the secretariat shall take into account any views expressed by the group that had nominated the member.

8. The Expert Group on Technology Transfer shall elect annually a Chair and a Vice-Chair from among its members, with one being a member from an Annex I Party and the other being a member from a non-Annex I Party. The positions of Chair and Vice-Chair shall alternate annually between a member from an Annex I Party and a member from a non-Annex I Party.

9. The members of the Expert Group on Technology Transfer shall serve in their personal capacity and shall have expertise in the five thematic areas of the current framework and/or in any of the following areas, inter alia: greenhouse gas mitigation and technologies for adaptation; technology assessments; information technology; resource economics including public and private financing instruments; and social development.

#### 4. Organization of work

10. The Expert Group on Technology Transfer shall provide a report at each session of the subsidiary bodies with a view to seeking guidance for further actions.

11. The secretariat shall facilitate the organization of meetings of the group and shall prepare its reports and recommendations to the SBSTA and SBI and at their subsequent sessions.

12. The Expert Group on Technology Transfer shall meet twice a year in conjunction with the sessions of the subsidiary bodies, and resources permitting, additional meetings may be organized.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*

## Decision 4/CP.13

### Development and transfer of technologies under the Subsidiary Body for Implementation

*The Conference of the Parties,*

*Recalling* chapter 34 of Agenda 21 and the relevant provisions of the programme for the further implementation of Agenda 21 on the transfer of environmentally sound technologies adopted by the United Nations General Assembly at its nineteenth special session,

*Recalling* the relevant provisions of the Convention, in particular Article 4, paragraphs 1, 3, 5, 7, 8 and 9, Article 9, paragraph 2(c), Article 11, paragraphs 1 and 5, and Article 12, paragraphs 3 and 4,

*Recalling* decisions 13/CP.3, 4/CP.7, 6/CP.10, 6/CP.11 and 3/CP.12,

*Recognizing* that there is a crucial need to accelerate innovation in the development, deployment, adoption, diffusion and transfer of environmentally sound technologies among all Parties, and particularly from developed countries to developing countries, for both mitigation and adaptation,

*Further recognizing* that current institutional arrangements, access to financing and suitable indicators for monitoring under the Convention for the implementation of Article 4, paragraph 5, are limited and should be enhanced to deliver immediate and urgent technology development, deployment, diffusion and transfer to developing countries,

*Further recognizing* that the immediate and urgent delivery of technology development, deployment, diffusion and transfer to developing countries requires suitable responses, including a continued emphasis by all Parties on the enhancement of enabling environments, facilitating access to technology information and capacity-building, identification of technology needs and innovative financing that mobilizes the vast resources of the private sector to supplement public finance sources where appropriate,

*Also recognizing* that the implementation of the results of technology needs assessments and national communications remains a key objective, which could be enhanced through technical assistance to improve the preparation of project proposals and improve access to financing resources and models, which could be based on advisory networks such as the pilot project on the Private Financing Advisory Network of the Climate Technology Initiative,

*Further recognizing* the good work of the Expert Group on Technology Transfer during the past six years, which has contributed to better understanding of the issues related to effective technology transfer,

1. *Agrees* that the Expert Group on Technology Transfer shall make recommendations for consideration, as appropriate, by the subsidiary bodies to inform subsequent decisions of the Conference of the Parties related to development and transfer of technologies;
2. *Decides* that the following points are important for funding through existing vehicles and new initiatives:
  - (a) The implementation of technology needs assessments;

- (b) Joint research and development programmes and activities in the development of new technologies;
- (c) Demonstration projects;
- (d) Enabling environments for technology transfer;
- (e) Incentives for the private sector;
- (f) North–South and South–South cooperation;
- (g) Endogenous capacities and technologies;
- (h) Issues associated with meeting the agreed full incremental costs;
- (i) Licences to support the access to and transfer of low-carbon technologies and know-how;
- (j) A window for, *inter alia*, a venture capital fund related to, or possibly located in, a multilateral financial institution;

and agrees that the Expert Group on Technology Transfer, through the Subsidiary Body for Scientific and Technological Advice, should, based on the identification and analysis of existing and potential new financing resources and vehicles, assess gaps and barriers to the use of, and the access to, these financing resources; and that the results of this work (identification, analysis and assessment) should be made available to the Subsidiary Body for Implementation not later than its thirtieth session, with a view to considering the role of new financing mechanisms and tools for scaling up development and transfer of technologies;

3. *Requests* the Global Environment Facility, as an operational entity of the financial mechanism under the Convention, in consultation with interested Parties, international financial institutions, other relevant multilateral institutions and representatives of the private financial community, to elaborate a strategic programme to scale up the level of investment for technology transfer to help developing countries address their needs for environmentally sound technologies, specifically considering how such a strategic programme might be implemented along with its relationship to existing and emerging activities and initiatives regarding technology transfer and to report on its findings to the twenty-eighth session of the Subsidiary Body for Implementation for consideration by Parties;

4. *Requests* the Expert Group on Technology Transfer, as part of its future programme of work, to develop a set of performance indicators that could be used by the Subsidiary Body for Implementation to regularly monitor and evaluate the effectiveness of the implementation of the framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention (the technology transfer framework), complemented with the set of actions set out in annex I to decision 3/CP.13, as referred to in paragraph 2 of that decision, considering the related work under the Convention and other relevant bodies; the results of this work should be made available to the subsidiary bodies for consideration at their thirtieth session, in order to make the final report of the Expert Group on Technology Transfer available to the Conference of the Parties at its fifteenth session;

5. *Agrees* that the issues concerning the implementation of Article 4, paragraph 5, of the Convention on the development and transfer of, or access to, environmentally sound technologies and know-how is a continuing process, and that, *inter alia*, the assessment of technologies, terms of access and technology needs of Parties will continue to be undertaken under the Convention, in order to ensure that further substantive progress is made;

6. *Urges* all Parties, and in particular developed country Parties, to provide technical and financial assistance, as appropriate, through existing and potential future bilateral and multilateral cooperative programmes to support the efforts of developing country Parties in implementing the set of actions referred to in paragraph 4 above;

7. *Requests* Parties to submit to the secretariat, by 15 February 2008, for synthesis and compilation, their views on elements for the terms of reference for the review and assessment of the effectiveness of the implementation of Article 4, paragraph 5, and Article 4, paragraph 1(c), in accordance with decision 13/CP.3;

8. *Invites* Parties in a position to do so to identify and designate their national entity for the development and transfer of technologies and to communicate this to the secretariat by the fourteenth session of the Conference of the Parties;

9. *Requests* the secretariat to facilitate the implementation of the technology transfer framework and of the work of the Expert Group on Technology Transfer, in cooperation with Parties, the Global Environment Facility and other relevant international organizations, initiatives and intergovernmental processes;

10. *Requests* the Global Environment Facility, as an operating entity of the financial mechanism of the Convention, to provide financial support to developing countries for the implementation of the technology transfer framework, and complemented by the set of actions referred to in paragraph 4 above.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*

## Decision 5/CP.13

### Fourth Assessment Report of the Intergovernmental Panel on Climate Change

*The Conference of the Parties,*

*Recalling* paragraphs 3, 4 and 5 of decision 25/CP.7,

*Having considered* the recommendations of the Subsidiary Body for Scientific and Technological Advice at its twenty-seventh session,

1. *Welcomes* the Fourth Assessment Report of the Intergovernmental Panel on Climate Change;
2. *Expresses its appreciation and gratitude* to all those involved in the preparation of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change for their excellent work;
3. *Recognizes* that the Fourth Assessment Report represents the most comprehensive and authoritative assessment of climate change to date, providing an integrated scientific, technical and socio-economic perspective on relevant issues;
4. *Urges* Parties to the Convention and invites Parties to the Kyoto Protocol to make use of the information contained in the Fourth Assessment Report in their discussions under all relevant agenda items, including those pertaining to the negotiations on future action on climate change;
5. *Further encourages* Parties to draw, as appropriate, on the information contained in the Fourth Assessment Report in the development of their national policies on climate change;
6. *Invites* the Intergovernmental Panel on Climate Change to continue to provide timely information to Parties on the latest scientific, technical and socio-economic aspects of climate change, including on mitigation and adaptation;
7. *Encourages* Parties to continue to support the work of the Intergovernmental Panel on Climate Change, including through contributions by Parties included in Annex I to the Convention and those in a position to do so to the Intergovernmental Panel on Climate Change Trust Fund.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*

## Decision 6/CP.13

### Fourth review of the financial mechanism

*The Conference of the Parties,*

*Recalling* decisions 3/CP.4 and 2/CP.12,

*Noting* the technical paper on the review of the experience of international funds, multilateral financial institutions and other sources of funding relevant to the current and future investment and financial needs of developing countries,<sup>1</sup>

*Noting further* the report on the assessment of the funding necessary to assist developing countries, in accordance with the guidance provided by the Conference of the Parties, in meeting their commitments under the Convention over the next Global Environment Facility replenishment cycle, taking into account paragraph 1 (a)–(d) of the annex to the memorandum of understanding between the Conference of the Parties and the Global Environment Facility Council (decision 12/CP.3),<sup>2</sup>

*Noting* the report on analysis of existing and potential investment and financial flows relevant to the development of an effective and appropriate international response to climate change,<sup>3</sup>

*Keeping in mind* the report on the dialogue on long-term cooperative action to address climate change by enhancing implementation of the Convention, note by the co-facilitators,<sup>4</sup>

*Noting* the reform agenda of the Global Environment Facility initiated by the recommendations for the fourth replenishment period,

1. *Decides* to adopt the additional guidelines for the review of the financial mechanism, as contained in the annex to this decision;

2. *Invites* Parties to submit to the secretariat, by 21 March 2008, for consideration by the Subsidiary Body for Implementation at its twenty-eighth session, their views on the following:

- (a) The technical paper on the review of the experience of international funds, multilateral financial institutions and other sources of funding relevant to the current and future investment and financial needs of developing countries;<sup>5</sup>
- (b) The report prepared by the secretariat, in collaboration with the Global Environment Facility secretariat, on the assessment of the funding necessary to assist developing countries, in accordance with the guidance provided by the Conference of the Parties, in meeting their commitments under the Convention over the next Global Environment Facility replenishment cycle, taking into account paragraph 1 (a)–(d) of the annex to the memorandum of understanding

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<sup>1</sup> FCCC/TP/2007/4.

<sup>2</sup> FCCC/SBI/2007/21.

<sup>3</sup> <[http://unfccc.int/files/cooperation\\_and\\_support/financial\\_mechanism/financial\\_mechanism\\_gef/application/pdf/dialogue\\_working\\_paper\\_8.pdf](http://unfccc.int/files/cooperation_and_support/financial_mechanism/financial_mechanism_gef/application/pdf/dialogue_working_paper_8.pdf)>.

<sup>4</sup> FCCC/CP/2007/4, paragraphs 49–55.

<sup>5</sup> FCCC/TP/2007/4.



between the Conference of the Parties and the Global Environment Facility Council (decision 12/CP.3);<sup>6</sup>

- (c) The report on the analysis of existing and potential investment and financial flows relevant to the development of an effective and appropriate international response to climate change;<sup>7</sup>
- (d) Options for scaling up the international financial response to climate change, based on national experiences and on available relevant documents;

3. *Requests* the secretariat to compile the views submitted by Parties referred to in paragraph 2 above and prepare a synthesis report for consideration by the Subsidiary Body for Implementation at its twenty-eighth session;

4. *Requests* the Subsidiary Body for Implementation to consider the submissions by Parties referred to in paragraph 2 above and recommend a draft decision for adoption by the Conference of the Parties at its fourteenth session on the assessment of the funding necessary to assist developing countries, in accordance with the guidance provided by the Conference of the Parties, in fulfilling their commitments under the Convention over the next Global Environment Facility replenishment cycle, taking into account paragraph 1 (a)–(d) of the annex to the memorandum of understanding between the Conference of the Parties and the Global Environment Facility Council (decision 12/CP.3), for consideration by the Global Environment Facility in its negotiations of the fifth replenishment of the Global Environment Facility;

5. *Requests* the Subsidiary Body for Implementation to continue consideration of the fourth review of the financial mechanism, on the basis of the guidelines contained in the annex to this decision and in the annex to decision 3/CP.4, with a view to recommending, in accordance with decision 2/CP.12, a draft decision on the review for adoption by the Conference of the Parties no later than at its fifteenth session.

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<sup>6</sup> FCCC/SBI/2007/21.

<sup>7</sup> Dialogue working paper 8. 2007. Dialogue on long-term cooperative action to address climate change by enhancing implementation of the Convention, fourth workshop. Available at: <[http://unfccc.int/files/cooperation\\_and\\_support/financial\\_mechanism/financial\\_mechanism\\_gef/application/pdf/dialogue\\_working\\_paper\\_8.pdf](http://unfccc.int/files/cooperation_and_support/financial_mechanism/financial_mechanism_gef/application/pdf/dialogue_working_paper_8.pdf)>.

## ANNEX

**Additional guidelines for the review of the financial mechanism****A. Objectives**

1. In accordance with Article 11 of the Convention, an additional objective of the review of the financial mechanism is to examine how to facilitate consistency in financing activities and how to improve the complementarity of the financial mechanism with other sources of investment and financial flows, including:
  - (a) Examining relevant sources and means of financing, as indicated in Article 11, paragraph 5, of the Convention, that would assist developing countries to contribute to the achievement of the objective of the Convention, in particular innovative means of financing, such as for the development of endogenous technologies in developing countries;
  - (b) Examining the role of the financial mechanism in scaling up the level of resources;
  - (c) Assessing enabling environments for catalysing investment in, and the transfer of, sustainable technologies that mitigate greenhouse gas emissions, and for enhancing resilience to climate change.

**B. Methodology**

2. The review shall draw upon the following additional sources of information:
  - (a) Technical papers and reports prepared by the secretariat upon the request of the Conference of the Parties, which are relevant to the financial needs of developing countries under the Convention;
  - (b) Information contained in the national communications of Parties to the Convention, technology needs assessments and national adaptation programmes of action;
  - (c) All relevant information provided by other intergovernmental and non-governmental organizations, including in particular the Assessment Reports of the Intergovernmental Panel on Climate Change, as well as information on enabling environments for catalysing investment in, and the transfer of, sustainable technologies that mitigate greenhouse gas emissions and for enhancing resilience to climate change;
  - (d) Relevant information available on private-sector financing and investment for climate change activities.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*

## Decision 7/CP.13

### Additional guidance to the Global Environment Facility

*The Conference of the Parties,*

*Recalling* Article 3, Article 4, paragraphs 1, 3, 4, 5, 7, 8 and 9, Article 11 and Article 12, paragraphs 3, 4 and 7, of the Convention,

*Also recalling* decisions 13/CP.1, 10/CP.2, 11/CP.2, 12/CP.2, 12/CP.3, 1/CP.4, 2/CP.4, 8/CP.5, 2/CP.7, 3/CP.7, 6/CP.7, 7/CP.7, 5/CP.8, 6/CP.8, 7/CP.8, 3/CP.9, 4/CP.9, 9/CP.9, 8/CP.10, 5/CP.11 and 3/CP.12,

*Noting* the report of the Global Environment Facility to the Conference of the Parties,<sup>1</sup>

1. *Requests* the Global Environment Facility, as an operating entity of the financial mechanism of the Convention:

- (a) To continue to take the necessary steps to enhance its country dialogues, including ensuring the clarity, transparency and timeliness in its communications with Parties on changes undertaken in the Global Environment Facility reform agenda;
- (b) To inform the implementing/executing agencies of the Global Environment Facility of the relevant Convention provisions and decisions of the Conference of Parties in the performance of their Global Environment Facility obligations, and to encourage them, as a first priority, whenever possible, to use national experts/consultants in all aspects of project development and implementation;
- (c) To continue to simplify and streamline the application of the incremental cost principle, building on its recent reforms and taking into account lessons learned on the constraints in resource mobilization by developing countries;
- (d) To take fully into account lessons learned in the strategic priority “Piloting an Operational Approach to Adaptation”, including the application of incremental cost, to help inform on how the Global Environment Facility could best support climate adaptation activities;
- (e) To continue to improve access to Global Environment Facility funds, as highlighted in the Third Overall Performance Study of the Global Environment Facility,<sup>2</sup> for those countries that are particularly vulnerable to the adverse effects of climate change;
- (f) To submit the report of the Global Environment Facility to the Conference of the Parties within a time frame that would allow Parties to the Convention to examine the report carefully prior to the start of the sessions of the Conference of the Parties;

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<sup>1</sup> FCCC/CP/2007/3 and Corr.1.

<sup>2</sup> “OPS3: Progressing Toward Environmental Results – Third Overall Performance Study of the Global Environment Facility, Executive Version”, GEF, June 2005.

- (g) To continue to ensure that financial resources are provided to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1, of the Convention;
- (h) To take into consideration the request contained in paragraph 1 (g) above in its planned mid-term review in 2008;
- (i) To work with its implementing agencies to continue to simplify its procedures and improve the effectiveness and efficiency of the process through which Parties not included in Annex I to the Convention (non-Annex I Parties) receive funding to meet their obligations under Article 12, paragraph 1, of the Convention, with the aim of ensuring the timely disbursement of funds to meet the agreed full costs incurred by developing country Parties in complying with these obligations;
- (j) To refine, as appropriate, operational procedures to ensure the timely disbursement of funds to meet the agreed full costs incurred by those non-Annex I Parties that are in the process of preparing their third and, where appropriate, fourth national communications, in the light of paragraph 1 (g)–(i) above;
- (k) To assist, as appropriate, non-Annex I Parties in formulating and developing project proposals identified in their national communications in accordance with Article 12, paragraph 4, of the Convention and decision 5/CP.11, paragraph 2;
- (l) To ensure, together with its implementing agencies, that the analysis of project proposals for the financing of second and subsequent national communications is consistent with the guidelines for the preparation of national communications from non-Annex I Parties;<sup>3</sup>

2. *Invites* the Global Environment Facility:

- (a) To continue to provide information on funding for projects identified in the national communications of non-Annex I Parties<sup>4</sup> in accordance with Article 12, paragraph 4, of the Convention and subsequently submitted and approved;
- (b) To consider the views of, and any concerns expressed by, Parties regarding their current experiences with the Global Environment Facility and its implementing agencies in relation to the provision of financial support for the preparation of national communications from non-Annex I Parties, as contained in documents FCCC/SBI/2007/MISC.13 and Add.1;

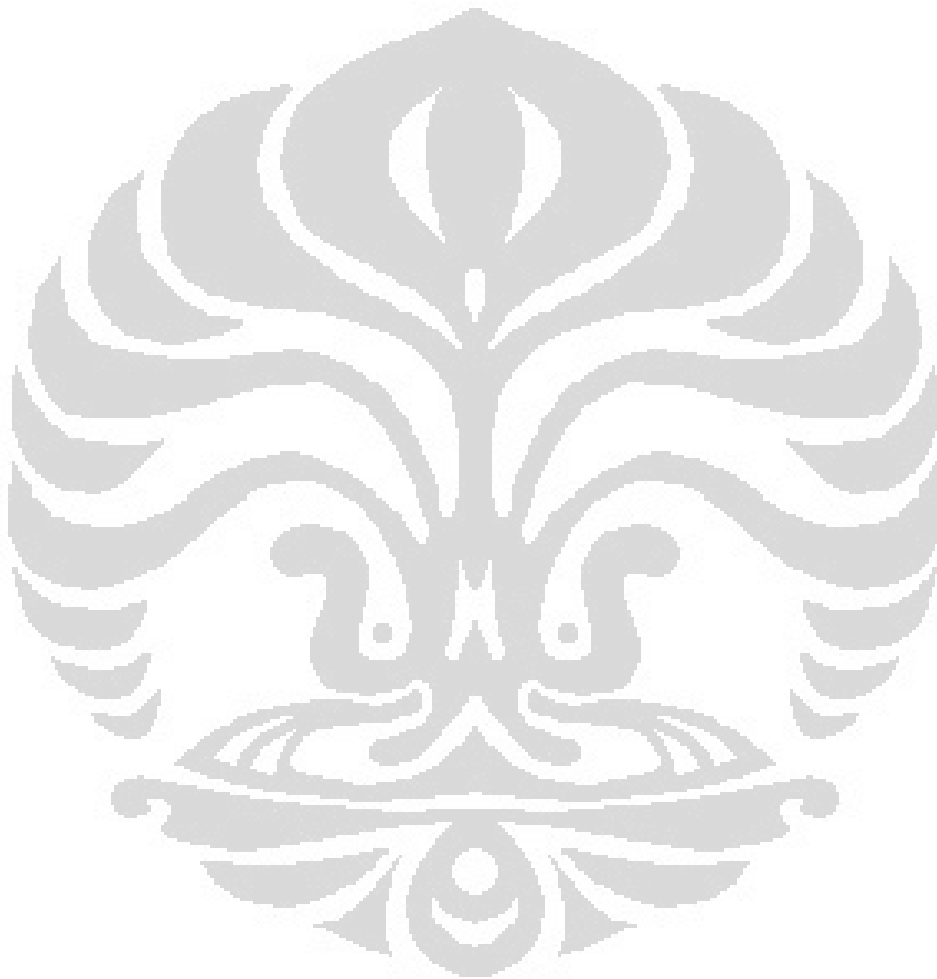
3. *Requests* the Global Environment Facility to include, in its regular report to the Conference of the Parties, information on the specific steps it has taken to implement the guidance contained in paragraphs 1 and 2 above;

<sup>3</sup> The current guidelines are contained in decision 17/CP.8.

<sup>4</sup> Decision 5/CP.11, paragraph 2.

4. *Requests* the Global Environment Facility to continue to provide, as appropriate, financial resources to developing country Parties, in particular the least developed countries and small island developing States among them, in accordance with decisions 11/CP.1, 6/CP.7, 4/CP.9 and 7/CP.10, to support the implementation of the New Delhi work programme on Article 6 of the Convention and to regularly report to the Conference of the Parties on the activities it has supported.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*



## Decision 8/CP.13

### Extension of the mandate of the Least Developed Countries Expert Group

*The Conference of the Parties,*

*Recalling* decisions 5/CP.7, 29/CP.7, 7/CP.9, 4/CP.10 and 4/CP.11,

*Recognizing* the specific needs and special situation of the least developed countries referred to in Article 4, paragraph 9, of the Convention,

*Having considered* the twelfth report on the work of the Least Developed Countries Expert Group<sup>1</sup> and the report of the Least Developed Countries Expert Group stocktaking meeting on the progress made by Parties in the preparation and implementation of national adaptation programmes of action,<sup>2</sup>

*Expressing* its appreciation to the Least Developed Countries Expert Group for its good work in implementing its work programme for 2006–2007, supporting the preparation of national adaptation programmes of action and of conducting the stocktaking meeting,

1. *Decides* to extend the mandate of the Least Developed Countries Expert Group under the terms of reference adopted by decision 29/CP.7;
2. *Requests* the Least Developed Countries Expert Group, serving in an advisory capacity to the least developed countries, to develop a work programme that contains its objectives, activities and expected outcomes and takes into account the results of the stocktaking meeting and the Nairobi work programme on impacts, vulnerability and adaptation to climate change, for consideration by the Subsidiary Body for Implementation at its twenty-eighth session;
3. *Decides* that, consistent with decision 7/CP.9, paragraph 2, new experts may be nominated to the Least Developed Countries Expert Group, or existing members of the group may continue in office, as determined by the respective regions or groups;
4. *Decides further* that the Least Developed Countries Expert Group, taking into account the initiation of implementation of the national adaptation programmes of action, may invite, when deemed necessary, the Global Environment Facility and its agencies to its meetings;
5. *Requests* the secretariat to continue to facilitate the work of the Least Developed Countries Expert Group;
6. *Decides* to review, at its sixteenth session, the progress, need for continuation and terms of reference of the group, and to adopt a decision thereon.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*

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<sup>1</sup> FCCC/SBI/2007/31.

<sup>2</sup> FCCC/SBI/2007/32.

## Decision 9/CP.13

### Amended New Delhi work programme on Article 6 of the Convention

*The Conference of the Parties,*

*Recalling* Articles 2, 3, 4 and 6 of the Convention,

*Recalling also* decision 11/CP.8,

*Having considered* the recommendations of the Subsidiary Body for Implementation at its twenty-seventh session,

1. *Decides* to adopt the amended New Delhi work programme on Article 6 of the Convention as contained in the annex to this decision and to extend it for five years;
2. *Decides* to undertake a review of the work programme in 2012, with an intermediate review of progress in 2010, to evaluate its effectiveness and identify any emerging gaps and needs;
3. *Requests* Parties to prepare reports (as part of their national communications, where possible) on their efforts to implement the work programme and to share information on their experiences and best practices for the purpose of reviewing the programme in 2010 and 2012;
4. *Encourages* intergovernmental and non-governmental organizations to continue their activities relevant to Article 6 and to share information on their programmatic responses to the work programme through the information network clearing house and other media;
5. *Requests* the Global Environment Facility to continue to provide, as appropriate, financial resources to Parties not included in Annex I to the Convention (non-Annex I Parties), in particular the least developed countries and small island developing States among them, in accordance with decisions 11/CP.1, 6/CP.7, 4/CP.9 and 7/CP.10, to support the implementation of the work programme and to regularly report to the Conference of the Parties on the activities it has supported;
6. *Requests* the secretariat to encourage other intergovernmental organizations in a position to do so to provide technical or financial support, and to promote partnerships with other organizations and the private sector, in order to support the implementation of the work programme;
7. *Encourages* multilateral and bilateral organizations to support the activities relating to the implementation of Article 6 and its work programme in non-Annex I Parties, in particular the least developed countries and small island developing States among them.

## ANNEX

**Amended New Delhi work programme on Article 6 of the Convention****A. Observations**

1. The implementation of all elements of Article 6 of the Convention, including education, training, public awareness, public participation, public access to information and international cooperation, will contribute to meeting the objective of the Convention.
2. All Parties, taking into account their common but differentiated responsibilities, are responsible for the implementation of Article 6 of the Convention. The capacity to implement Article 6 activities will vary among countries, as will the priority thematic areas and target audiences, consistent with their sustainable development priorities and the culturally preferred method of programme delivery, in order to increase people's understanding of the climate change issue.
3. Regional, subregional and international cooperation can enhance the collective ability of Parties to implement the Convention, improve synergies, avoid duplication of effort between the different conventions, and ultimately both improve the effectiveness of programming and facilitate its support.
4. It is important to learn more from countries regarding the needs and gaps in their Article 6 activities, so that Parties and intergovernmental and non-governmental organizations that have the resources to do so might effectively target their efforts at providing appropriate support.
5. Many Parties, intergovernmental organizations, non-governmental organizations and community-based organizations, as well as the private and public sectors, are already working actively to raise awareness on, and increase understanding of, the causes and impacts of climate change, as well as solutions. In particular, many governments are already implementing measures that could be linked to Article 6 activities. However, the lack of adequate financial and technical resources could inhibit some Parties' efforts to implement such activities, in particular developing country Parties.
6. The nature of Article 6 activities carried out by Parties can easily be reported. However, measuring or quantifying the impacts of these activities may be more challenging.

**B. Purposes and guiding principles**

7. The present work programme sets out the scope of, and provides the basis for action on, activities related to Article 6, in accordance with the provisions of the Convention. It should serve as a flexible framework for country-driven action addressing the specific needs and circumstances of Parties, and reflecting their national priorities and initiatives.
8. The Article 6 work programme builds on existing decisions of the Conference of the Parties, specifically the Marrakesh Accords, which contain a number of references to Article 6 activities, in particular decisions 2/CP.7 and 3/CP.7 on capacity-building in developing countries and in countries with economies in transition, 4/CP.7 on development and transfer of technologies, and 5/CP.7 on implementation of Article 4, paragraphs 8 and 9.
9. The Article 6 work programme shall be guided by:
  - (a) A country-driven approach;
  - (b) Cost-effectiveness;



- (c) A phased approach integrating Article 6 activities into existing climate change programmes and strategies;
- (d) Promotion of partnerships, networks and synergies, in particular, synergies between conventions;
- (e) An interdisciplinary approach;
- (f) A holistic, systematic approach;
- (g) The principles of sustainable development.

### **C. Scope of the amended New Delhi work programme**

10. As part of their national programmes to implement the Convention, and taking into account national circumstances and capacities, Parties are encouraged to undertake activities under the categories listed below, which reflect the six elements of Article 6.

#### Education

11. In order to advance implementation of Article 6 of the Convention, it is useful to cooperate in, promote, facilitate, develop and implement education and training programmes focused on climate change, targeting youth in particular, and including exchange or secondment of personnel to train experts.

#### Training

12. In order to advance implementation of Article 6 of the Convention, it is useful to cooperate in, promote, facilitate, develop and implement training programmes focused on climate change, for scientific, technical and managerial personnel at the national and, as appropriate, subregional, regional and international levels. Technical skills and knowledge provide an opportunity to adequately address and respond to climate change issues.

#### Public awareness

13. In order to advance implementation of Article 6 of the Convention, it is useful to cooperate in, promote, facilitate, develop and implement public awareness programmes on climate change and its effects at the national and, as appropriate, subregional, regional and international levels by, inter alia, encouraging contributions and personal action in addressing climate change, supporting climate-friendly policies and fostering behavioural changes, including by using popular media.

#### Public access to information

14. In order to advance the implementation of Article 6 of the Convention, it is useful to facilitate public access to data and information, by providing the information on climate change initiatives, policies and results of actions that is needed by the public and other stakeholders to understand, address and respond to climate change, taking into account local and national circumstances such as quality of Internet access, literacy and language issues.

#### Public participation

15. In order to advance the implementation of Article 6 of the Convention, it is useful to promote public participation in addressing climate change and its effects and in developing adequate responses, by facilitating feedback, debate and partnership in climate change activities and in governance.

*International cooperation*

16. Subregional, regional and international cooperation in undertaking activities within the scope of the work programme can enhance the collective ability of Parties to implement the Convention, and the efforts of intergovernmental and non-governmental organizations can also contribute to its implementation. Such cooperation can further enhance synergies between conventions and improve the effectiveness of all sustainable development efforts.

**D. Implementation***Parties*

17. As part of their national programmes and activities in implementing the Convention, and within the scope of the Article 6 work programme, Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities and capacities, could, inter alia:

- (a) Develop institutional and technical capacity to identify gaps and needs for the implementation of Article 6, assess the effectiveness of Article 6 activities and consider the linkages between Article 6 activities, implementation of policies and measures to mitigate and adapt to climate change, and other commitments under the Convention, such as technology transfer and capacity-building;
- (b) Prepare assessments of needs specific to national circumstances in the area of the implementation of Article 6, including the use of social research methods and other relevant instruments to determine target audiences and potential partnerships;
- (c) Prepare a national Article 6 plan of action, which could be structured according to the six (or fewer, as appropriate) elements. Each element could have a primary goal, suggested activities, targets and actors. Suggested activities could target specific needs of various population groups (youth, business persons, mass media, decision makers, etc.), and clear time frames and milestones could be defined;
- (d) Designate, and provide support, including technical and financial support, and access to information and materials to, a national focal point for Article 6 activities and assign specific responsibilities. These responsibilities could include the identification of areas for possible international cooperation and opportunities for strengthening synergies with other conventions, and the coordination of the preparation of the Article 6 chapter in the national communications, ensuring that relevant contact information, including website addresses, is provided therein;
- (e) Develop a directory of organizations and individuals, with an indication of their experience and expertise relevant to Article 6 activities, with a view to building active networks involved in the implementation of these activities;
- (f) Develop criteria for identifying and disseminating information on good practices for Article 6 activities, in accordance with national circumstances;
- (g) Increase the availability of copyright-free and translated climate change materials, in accordance with laws and standards relating to the protection of copyrighted materials;
- (h) Promote and enhance the inclusion of climate change in school curricula at all levels and across disciplines. Efforts could be made to develop materials, and promote teacher-

training focused on climate change at the regional and international levels where appropriate;

- (i) Conduct surveys, such as 'knowledge-attitude-practice/behaviour' surveys, to establish a baseline of public awareness, which can serve as a basis for further work and support monitoring of the impact of activities;
- (j) Seek opportunities to disseminate widely relevant information on climate change. Measures could include translation into appropriate languages and distribution of popularized versions of the Intergovernmental Panel on Climate Change Fourth Assessment Report and other key documents on climate change;
- (k) Seek input and public participation, including participation by youth and other groups, in the formulation and implementation of efforts to address climate change and encourage the involvement and participation of representatives of all stakeholders and major groups in the climate change negotiation process;
- (l) Inform the public about causes of climate change and sources of greenhouse gas emissions, as well as actions that can be taken at all levels to address climate change;
- (m) Share the findings contained in their national communications and national action plans or domestic programmes on climate change with the general public and all stakeholders.

18. In developing and implementing Article 6 activities, Parties should seek to enhance cooperation and coordination at international and regional levels, including the identification of partners and networks with other Parties, intergovernmental and non-governmental organizations, the private sector, state and local governments, and community-based organizations, and to promote and facilitate the exchange of information and material, and the sharing of experience and good practices.

Regional and international efforts

19. To strengthen regional and international efforts, Parties and other relevant organizations and agencies in a position to do so could cooperate in and support the following activities:

- (a) Promote awareness of regional and subregional needs and concerns;
- (b) Strengthen existing regional institutions and networks;
- (c) Promote and encourage regional programmes and projects that support the implementation of Article 6 and promote sharing of experiences including through the dissemination of best practices and lessons learned, and the exchange of information and data;
- (d) Create regional portals for the information network clearing house (CC:iNet), in collaboration with regional centres of excellence, to further develop and enhance the functionality and user-friendliness of the clearing house;
- (e) Develop regional programmes and activities, including preparation of training and education materials as well as other tools, using local languages where applicable and practical;
- (f) Conduct regional and subregional workshops to promote: exchange and sharing of experiences; best practices; and transfer of knowledge and skills.

Intergovernmental organizations

20. Intergovernmental organizations, including convention secretariats, are invited, inter alia:
- (a) To continue supporting efforts to implement activities under Article 6 through their regular programmes, and through specific programmes focused on climate change, including, as appropriate, through the provision and dissemination of information and resource materials, such as diagrams that could easily be translated and adapted, as well as through the provision of financial and technical support;
  - (b) To strengthen collaboration with, and enhance involvement of, other intergovernmental and non-governmental organizations, with a view to ensuring coordinated support to Parties in their activities related to Article 6 and avoiding duplication of work.

Non-governmental organizations

21. Non-governmental organizations are encouraged to continue their activities relating to Article 6 and are invited to consider ways to enhance cooperation between non-governmental organizations from Parties included in Annex I to the Convention and those from Parties not included in Annex I to the Convention, as well as collaboration on activities between intergovernmental organizations, non-governmental organizations, and governments.

Support

22. Parties will need to determine the most efficient and cost-effective way to implement Article 6 activities, and are encouraged to create partnerships with other Parties, as well as intergovernmental and non-governmental organizations and relevant stakeholders, to facilitate the implementation of these activities, including the identification of priority areas for support and funding.
23. As initial priorities, the implementation of the work programme will require the strengthening of national institutions and capacities, in particular in developing countries.

Review of progress and reporting

24. The Conference of the Parties, through the Subsidiary Body for Implementation, will undertake a review of progress in the implementation of this work programme by 2012, with an intermediate review of progress in 2010.
25. All Parties are requested to report in their national communications, where possible, and in other reports, on their accomplishments, lessons learned, experiences gained, and remaining gaps and barriers observed.
26. Parties and relevant organizations are encouraged to share information on the implementation of the work programme through CC:iNet, in addition to formal reporting channels such as national communications.
27. Intergovernmental organizations are invited to develop programmatic responses to the Article 6 work programme and, following consultations with the UNFCCC secretariat, to communicate to the Subsidiary Body for Implementation through the secretariat the responses and progress achieved, for the purpose of reviewing the programme and evaluating its effectiveness in 2010 and 2012.

28. Non-governmental organizations are invited to provide relevant information to the secretariat and in accordance with their national circumstances, informing and involving their national focal point as appropriate, on progress achieved for the purpose of reviewing the Article 6 work programme and evaluating its effectiveness in 2010 and 2012.

*Role of the secretariat*

29. In accordance with Article 8 of the Convention, the secretariat is requested to facilitate efforts under the Article 6 work programme and, in particular:

- (a) To prepare reports to the Subsidiary Body for Implementation on progress achieved by Parties in implementing Article 6, based on information contained in national communications and other sources of information. These reports will be issued regularly, and in particular for the interim progress review in 2010 and the review in 2012;
- (b) To mobilize relevant organizations and facilitate coordinated inputs into the five-year Article 6 work programme from these organizations;
- (c) To organize thematic regional and subregional workshops to share lessons learned and best practices, in collaboration with relevant partners, and prior to the intermediate review of the work programme in 2010, subject to availability of funds;
- (d) To further enhance the usefulness and relevance of CC:iNet, in line with the evaluation report of the clearing house,<sup>1</sup> and facilitate dissemination of information from CC:iNet and other sources.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*

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<sup>1</sup> FCCC/SBI/2007/26.

## Decision 10/CP.13

### Compilation and synthesis of fourth national communications

*The Conference of the Parties,*

*Recalling* Article 4, paragraph 2(a) and (b), Article 12 and other relevant provisions of the Convention,

*Further recalling* decisions 2/CP.1, 3/CP.1, 6/CP.3, 11/CP.4, 4/CP.5, 26/CP.7, 33/CP.7, 4/CP.8, 1/CP.9 and 7/CP.11,

*Emphasizing* that the national communications and annual greenhouse gas inventories submitted by Parties included in Annex I to the Convention are the main source of information for reviewing the implementation of the Convention by these Parties, and that the reports from the in-depth reviews of these national communications provide important additional information for this purpose,

*Welcoming* the work of the secretariat in preparing the compilation and synthesis report on fourth national communications,<sup>1</sup>

1. *Urges* Parties included in Annex I to the Convention (Annex I Parties) that have not submitted their national communications in accordance with decision 4/CP.8 to do so as a matter of priority;
2. *Requests* Annex I Parties to submit to the secretariat a fifth national communication by 1 January 2010 in accordance with Article 12, paragraphs 1 and 2 of the Convention, with a view to submitting the sixth national communication four years after this date;
3. *Concludes* that the review of the national communications and consideration of the outcomes of this review have proved to be useful and should continue in accordance with decisions 2/CP.1, 6/CP.3 and 11/CP.4;
4. *Decides* that national communications can be submitted to the secretariat in electronic format only;
5. *Decides* to consider the date of submission of sixth national communications of Annex I Parties at its fifteenth session to be held in December 2009 at the latest.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*

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<sup>1</sup> FCCC/SBI/2007/INF.6 and Add.1 and 2.

## Decision 11/CP.13

### Reporting on global observing systems for climate

*The Conference of the Parties,*

*Recalling* decisions 4/CP.5, 5/CP.5, 11/CP.9 and 5/CP.10,

*Noting* the need to revise the “UNFCCC reporting guidelines on global climate change observing systems”<sup>1</sup> in order to reflect the priorities of the Global Climate Observing System implementation plan and incorporate the reporting on essential climate variables,

*Recognizing* the proposals made by the secretariat of the Global Climate Observing System,

*Having considered* the recommendations of the Subsidiary Body for Scientific and Technological Advice on this matter at its twenty-third, twenty-fifth and twenty-seventh sessions,<sup>2</sup>

1. *Adopts* the revised UNFCCC reporting guidelines on global climate change observing systems as contained in the annex to this decision,<sup>3</sup>
2. *Decides* that these revised guidelines should take effect immediately for the preparation of detailed technical reports on systematic observations in accordance with the provisions of decisions 4/CP.5 and 5/CP.5;
3. *Requests* Parties included in Annex I to the Convention to continue providing such reports in conjunction with their national communications;
4. *Invites* Parties not included in Annex I to the Convention to provide such reports on a voluntary basis.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*

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<sup>1</sup> See decision 5/CP.5 and document FCCC/CP/1999/7, chapter III.

<sup>2</sup> FCCC/SBSTA/2005/10, paragraph 97; FCCC/SBSTA/2006/11, paragraph 95; and FCCC/SBSTA/2007/16, paragraph 35.

<sup>3</sup> For ease of reference, the annex containing the revised UNFCCC reporting guidelines can be found in document FCCC/CP/2007/6/Add.2.

## Decision 12/CP.13

### Budget performance and the functions and operations of the secretariat

*The Conference of the Parties,*

*Having considered* the information in documents prepared by the secretariat on administrative, financial and institutional matters,<sup>1</sup>

*Recalling* paragraphs 11 and 19 of the financial procedures for the Conference of the Parties adopted in decision 15/CP.1,

#### I. Budget performance for the biennium 2006–2007

1. *Takes note* of the interim financial statements as at 31 December 2006, the report on budget performance for the period 1 January 2006 to 30 June 2007 and the status of contributions to the Trust Fund for the Core Budget, the Trust Fund for Supplementary Activities and the Trust Fund for Participation in the UNFCCC Process, as at 15 November 2007;
2. *Calls upon* Parties that have not paid their contributions to the core budget to do so without delay, bearing in mind that contributions are due on 1 January of each year in accordance with the financial procedures;
3. *Expresses appreciation* to Parties that have paid their contributions to the core budget in a timely manner;
4. *Also expresses appreciation* for the contributions received from Parties to the Trust Fund for Participation in the UNFCCC Process and for contributions to the Trust Fund for Supplementary Activities;
5. *Encourages* Parties to increase their efforts to contribute to the Trust Fund for Participation in the UNFCCC Process and to the Trust Fund for Supplementary Activities in the light of the increased work for which provisions are not made in the core budget;
6. *Reiterates* its appreciation to the Government of Germany for its annual voluntary contribution to the core budget of EUR 766,938 and its special contribution of EUR 1,789,522 as Host Government to the secretariat;

#### II. Continuing review of the functions and operations of the secretariat

7. *Notes* the information relating to the functions and operations of the secretariat as contained in several documents, particularly in document FCCC/SBI/2007/19;
8. *Agrees* that the Subsidiary Body for Implementation should consider this matter at its twenty-ninth session, in keeping with its decision taken at its twenty-first session to continue to consider this matter annually.<sup>2</sup>

*8<sup>th</sup> plenary meeting  
14–15 December 2007*

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<sup>1</sup> FCCC/SBI/2007/19, FCCC/SBI/2007/INF.1 and FCCC/SBI/2007/INF.11.

<sup>2</sup> FCCC/SBI/2004/19, paragraph 105.



## Decision 13/CP.13

### Programme budget for the biennium 2008–2009

*The Conference of the Parties,*

*Recalling* paragraph 4 of the financial procedures for the Conference of the Parties to the United Nations Framework Convention on Climate Change,<sup>1</sup>

*Having considered* the proposed programme budget for the biennium 2008–2009 submitted by the Executive Secretary,<sup>2</sup>

1. *Approves* the programme budget for the biennium 2008–2009, amounting to USD 54,031,584 (EUR 41,172,068) for the purposes specified in table 1 below;
2. *Notes with appreciation* the annual contribution of the Host Government, EUR 766,938, which offsets planned expenditures;
3. *Approves* a drawing of USD 2 million from the unspent balances or contributions (carry-over) from previous financial periods to cover part of the 2008–2009 budget;
4. *Approves* the staffing table (table 2 below) for the programme budget;
5. *Notes* that the programme budget contains elements relating to the Convention as well as to the Kyoto Protocol;
6. *Adopts* the indicative scale of contributions for 2008 and 2009 contained in the annex to this decision, covering 63.2 per cent of the indicative contributions specified in table 1 below;
7. *Invites* the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its third session, to endorse the elements of the recommended budget as it applies to the Kyoto Protocol;
8. *Approves* a contingency budget for conference services, amounting to USD 7,710,600, to be added to the programme budget for the biennium 2008–2009 in the event that the United Nations General Assembly decides not to provide resources for these activities in the United Nations regular budget (see table 3 below);
9. *Invites* the United Nations General Assembly to decide at its sixty-second session on the issue of meeting the conference services expenses from its regular budget;
10. *Requests* the Executive Secretary to report to the Subsidiary Body for Implementation on the implementation of paragraph 8 above, as necessary;
11. *Authorizes* the Executive Secretary to make transfers between each of the main appropriation lines set out in table 1 below, up to an aggregate limit of 15 per cent of total estimated expenditure for those appropriation lines, provided that a further limitation of up to minus 25 per cent of each such appropriation line shall apply;
12. *Decides* to maintain the level of the working capital reserve at 8.3 per cent of the estimated expenditure;

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<sup>1</sup> Decision 15/CP.1, annex I.

<sup>2</sup> FCCC/SBI/2007/8 and Add.1 and 2.

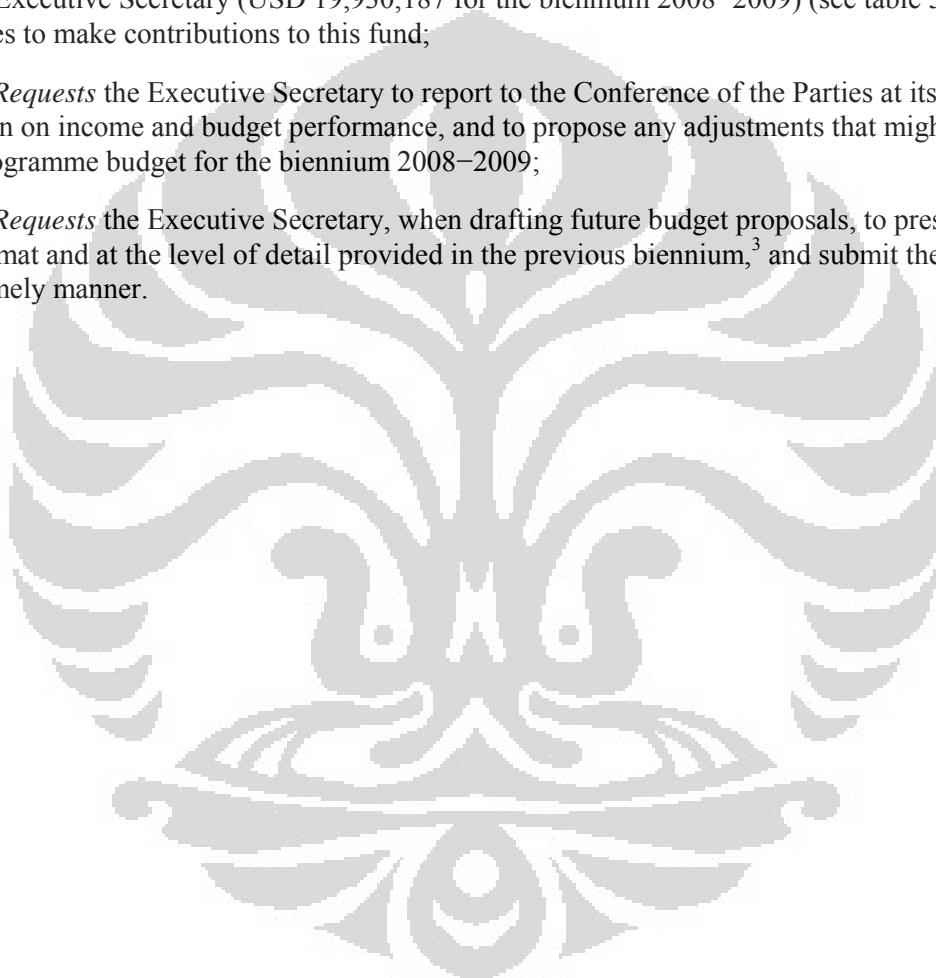
13. *Invites* all Parties to the Convention to note that contributions to the core budget are due on 1 January of each year in accordance with paragraph 8 (b) of the financial procedures and to pay promptly and in full, for each of the years 2008 and 2009, the contributions required to finance expenditures approved under paragraph 1 above, as offset by the contributions noted in paragraph 2 above, and any contributions required to finance the expenditures arising from the decisions referred to in paragraph 8 above;

14. *Takes note* of the funding estimates for the Trust Fund for Participation in the UNFCCC Process specified by the Executive Secretary (USD 5,650,000 for the biennium 2008–2009) (see table 4 below), and invites Parties to make contributions to this fund;

15. *Takes note* of the funding estimates for the Trust Fund for Supplementary Activities specified by the Executive Secretary (USD 19,930,187 for the biennium 2008–2009) (see table 5 below) and invites Parties to make contributions to this fund;

16. *Requests* the Executive Secretary to report to the Conference of the Parties at its fourteenth session on income and budget performance, and to propose any adjustments that might be needed in the programme budget for the biennium 2008–2009;

17. *Requests* the Executive Secretary, when drafting future budget proposals, to present the budget in the format and at the level of detail provided in the previous biennium,<sup>3</sup> and submit the proposals in a timely manner.



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<sup>3</sup> FCCC/SBI/2005/8 and Add.1.

Table 1. Core programme budget for 2008–2009 by programme

| Expenditure  | 2008              | 2009              | Total 2008–2009   |                     |
|--|-------------------|-------------------|-------------------|---------------------|
|  | (USD)             | (USD)             | (USD)             | (EUR <sup>a</sup> ) |
| <b>A. Programme appropriations<sup>b</sup></b>                                 |                   |                   |                   |                     |
| EDM  | 2 121 798         | 2 161 693         | 4 283 491         | 3 264 020           |
| RDA  | 4 624 557         | 4 541 167         | 9 165 724         | 6 984 282           |
| FTS  | 2 848 304         | 2 919 524         | 5 767 828         | 4 395 085           |
| ATS  | 2 846 267         | 2 905 301         | 5 751 568         | 4 382 695           |
| SDM  | 1 371 438         | 1 411 333         | 2 782 771         | 2 120 472           |
| LA   | 1 950 152         | 1 990 047         | 3 940 199         | 3 002 432           |
| DES  | 761 007           | 761 007           | 1 522 014         | 1 159 775           |
| CAS  | 1 610 290         | 1 644 377         | 3 254 667         | 2 480 056           |
| IS   | 4 153 567         | 3 951 331         | 8 104 898         | 6 175 932           |
| AS <sup>c</sup>  | --                | --                | --                | --                  |
| <b>B. Secretariat-wide operating costs<sup>d</sup></b>                         | <b>1 607 266</b>  | <b>1 607 250</b>  | <b>3 214 516</b>  | <b>2 449 461</b>    |
| <b>Programme expenditures (A + B)</b>  | <b>23 894 646</b> | <b>23 893 030</b> | <b>47 787 676</b> | <b>36 414 210</b>   |
| C. Programme support costs (overheads) <sup>e</sup>                            | 3 106 304         | 3 106 094         | 6 212 398         | 4 733 847           |
| D. Working capital reserve <sup>f</sup>  | 31 510            | 0                 | 31 510            | 24 011              |
| <b>TOTAL (A + B + C + D)</b>   | <b>27 032 460</b> | <b>26 999 124</b> | <b>54 031 584</b> | <b>41 172 068</b>   |
| <b>Income</b>  |                   |                   |                   |                     |
| Contribution from the Host Government <sup>g</sup>                             | 1 006 480         | 1 006 480         | 2 012 961         | 1 533 876           |
| Unspent balances or contributions from previous financial periods (carry-over) | 1 000 000         | 1 000 000         | 2 000 000         | 1 524 000           |
| Indicative contributions   | 25 025 980        | 24 992 644        | 50 018 623        | 38 114 192          |
| <b>TOTAL INCOME</b>  | <b>27 032 460</b> | <b>26 999 124</b> | <b>54 031 584</b> | <b>41 172 068</b>   |

<sup>a</sup> The exchange rate used (USD 1 = EUR 0.762 ) represents the average rate for the period January–March 2007.

<sup>b</sup> Programmes: EDM, Executive Direction and Management; RDA, Reporting, Data and Analysis; FTS, Financial and Technical Support; ATS, Adaptation, Technology and Science; SDM, Sustainable Development Mechanisms; LA, Legal Affairs; DES, Office of the Deputy Executive Secretary; CAS, Conference Affairs Services; IS, Information Services; and AS, Administrative Services.

<sup>c</sup> AS is funded by overheads.

<sup>d</sup> Secretariat-wide operating costs are managed by AS.

<sup>e</sup> Standard 13 per cent applied by the United Nations for administrative support.

<sup>f</sup> In accordance with financial procedures (decision 15/CP.1, annex I, para. 14), the working capital reserve will be brought up to USD 2,303,578 in 2008 and maintained at that level in 2009.

<sup>g</sup> Equivalent to EUR 766,938, based on the average exchange rate for the period January–March 2007.

**Table 2. Secretariat-wide staffing from the core budget in the biennium 2008–2009**

|  | 2008                     | 2009                     |
|--|--------------------------|--------------------------|
| <b>Professional category and above<sup>a</sup></b> |                          |                          |
| ASG  | 1                        | 1                        |
| D-2  | 3                        | 3                        |
| D-1  | 6                        | 6                        |
| P-5  | 12                       | 12                       |
| P-4  | 24                       | 24                       |
| P-3  | 32                       | 32                       |
| P-2  | 10                       | 10                       |
| <b>Total Professional category and above</b>       | <b>88</b>                | <b>88</b>                |
| <b>Total General Service category</b>              | <b>52.5</b>              | <b>53.5</b>              |
| <b>TOTAL</b>                                       | <b>140.5<sup>b</sup></b> | <b>141.5<sup>b</sup></b> |

<sup>a</sup> Assistant Secretary-General (ASG); Director (D); Professional (P).

<sup>b</sup> Two D-1 positions and one P-3 position are to be frozen.

**Table 3. Resource requirements for the conference services contingency in the biennium 2008–2009**  
(thousands of United States dollars)

| Object of expenditure                  | 2008           | 2009           | Total 2008–2009 |
|--|----------------|----------------|-----------------|
| Interpretation <sup>a</sup>            | 1 015.3        | 1 045.8        | 2 061.1         |
| Documentation <sup>b</sup>             |                |                |                 |
| Translation                            | 1 500.2        | 1 545.2        | 3 045.4         |
| Reproduction and distribution          | 464.4          | 478.4          | 942.8           |
| Meetings services support <sup>c</sup> | 245.6          | 253.0          | 498.6           |
| <b>Subtotal</b>                        | <b>3 225.5</b> | <b>3 322.3</b> | <b>6 547.8</b>  |
| Programme support costs                | 419.3          | 431.9          | 851.2           |
| Working capital reserve                | 302.5          | 9.1            | 311.6           |
| <b>TOTAL</b>                           | <b>3 947.4</b> | <b>3 763.3</b> | <b>7 710.6</b>  |

Note: Assumptions used for calculating the conference services contingency budget include the following:

- The expected number of meetings with interpretation does not exceed 40 per session;
- The expected documentation volume is based on average output in the period 1997–2006 and on projections for the additional reporting requirements arising in 2008–2009, assuming about 1,600 pages annually for translation and revision, and a total of about 5,100 pages annually for reproduction and distribution; the number of copies produced per page is assumed to be about 2,000 for general and about 100 for limited distribution;
- Meetings services support includes staff normally provided by United Nations Office at Geneva conference services for the in-session coordination and support of interpretation, translation and reproduction services;
- Overall, the figures used are conservative and have been applied on the assumption that there will be no major increase in requirements during the biennium.

<sup>a</sup> Includes salaries, travel and daily subsistence allowance for interpreters.

<sup>b</sup> Includes all costs relating to the processing of pre-, in- and post-session documentation; translation costs include revision and typing of documents.

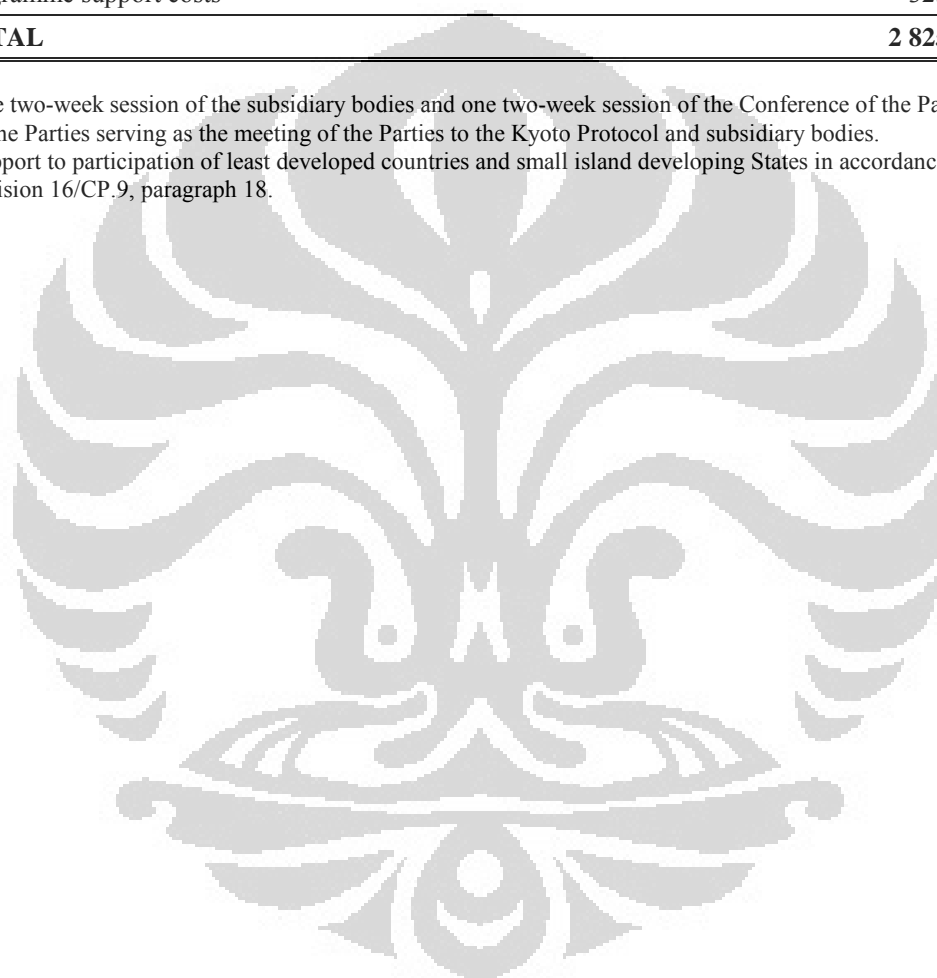
<sup>c</sup> Includes salaries, travel and daily subsistence allowance for meetings services support staff and costs for shipment and telecommunications.

**Table 4. Resource requirements for the Trust Fund for Participation in the UNFCCC Process in the biennium 2008–2009**  
(thousands of United States dollars)

| <b>Object of expenditure</b>  | <b>2008</b>    | <b>2009</b>    |
|---|----------------|----------------|
| Support for one delegate from each eligible Party to participate in two two-week sessions per year <sup>a</sup>   | 1 700.0        | 1 700.0        |
| Support for a second delegate from each least developed country and each small island developing State to participate in two two-week sessions per year <sup>a, b</sup> | 800.0          | 800.0          |
| <b>Subtotal</b>   | <b>2 500.0</b> | <b>2 500.0</b> |
| Programme support costs   | 325.0          | 325.0          |
| <b>TOTAL</b>  | <b>2 825.0</b> | <b>2 825.0</b> |

<sup>a</sup> One two-week session of the subsidiary bodies and one two-week session of the Conference of the Parties, Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol and subsidiary bodies.

<sup>b</sup> Support to participation of least developed countries and small island developing States in accordance with decision 16/CP.9, paragraph 18.



**Table 5. Resource requirements for the Trust Fund for Supplementary Activities in the biennium 2008–2009**

| <b>Activities to be undertaken by the secretariat</b>  | <b>Cost (USD)</b> | <b>Cost (EUR)<sup>a</sup></b> |
|--|-------------------|-------------------------------|
| <b>Convention</b>  |                   |                               |
| Greenhouse gas emissions inventory database and software support for the review process  | 1 193 168         | 909 194                       |
| Support to national communications from Parties not included in Annex I to the Convention and the Consultative Group of Experts  | 353 688           | 269 510                       |
| Support to the Least Developed Countries Expert Group in 2008–2009   | 947 196           | 721 763                       |
| Support to the implementation of the Nairobi work programme on impacts, vulnerability and adaptation to climate change, and of any further action in the context of decision 1/CP.10 | 1 712 584         | 1 304 989                     |
| Support to the implementation of the technology transfer framework and the work of the Expert Group on Technology Transfer or its successor  | 1 209 792         | 921 862                       |
| Analytical and methodological work   | 989 292           | 753 841                       |
| Update of the Handbook on the United Nations Framework Convention on Climate Change  | 217 000           | 165 354                       |
| <b>Subtotal</b>  | <b>6 622 720</b>  | <b>5 046 513</b>              |
| <b>Kyoto Protocol</b>  |                   |                               |
| Development and maintenance of the database system for the annual compilation and accounting of emissions inventories and assigned amounts under the Kyoto Protocol                  | 881 376           | 671 609                       |
| Support to operations relating to joint implementation   | 3 982 460         | 3 034 635                     |
| Support to the Compliance Committee  | 695 650           | 530 085                       |
| <b>Subtotal</b>  | <b>5 559 486</b>  | <b>4 236 328</b>              |
| <b>Convention and Kyoto Protocol</b>   |                   |                               |
| Activities to support the expert review process under the Convention and its Kyoto Protocol: training for expert teams and meetings of lead reviewers                                | 711 792           | 542 386                       |
| Support to additional mandates relating to financial cooperation   | 1 137 584         | 866 839                       |
| Support to capacity-building for developing countries  | 832 792           | 634 588                       |
| Support to the implementation of Article 6 of the Convention   | 703 000           | 535 686                       |
| Support to information outreach  | 968 376           | 737 903                       |
| Spanish/French portal on the UNFCCC website  | 150 000           | 114 300                       |
| Business continuity and disaster recovery plan implementation  | 951 584           | 725 107                       |
| <b>Subtotal</b>  | <b>5 455 128</b>  | <b>4 156 808</b>              |
| <b>Total estimated expenditures</b>  | <b>17 637 334</b> | <b>13 439 649</b>             |
| <i>Programme support costs (13 per cent)</i>   | <i>2 292 853</i>  | <i>1 747 154</i>              |
| <b>GRAND TOTAL</b>   | <b>19 930 187</b> | <b>15 186 803</b>             |

<sup>a</sup> The exchange rate used (USD 1 = EUR 0.762) represents the average rate for the period January–March 2007.

## ANNEX

**Indicative scale of contributions from Parties to the Convention  
for the biennium 2008–2009**

| <b>Party</b>             | <b>United Nations scale<br/>of assessment for<br/>2008</b> | <b>UNFCCC adjusted<br/>scale of assessment<br/>for 2008</b> | <b>UNFCCC adjusted<br/>scale of assessment<br/>for 2009</b> |
|--------------------------|--|---|---|
| Afghanistan              | 0.001  | 0.001   | 0.001   |
| Albania                  | 0.006  | 0.006   | 0.006   |
| Algeria                  | 0.085  | 0.083   | 0.083   |
| Angola                   | 0.003  | 0.003   | 0.003   |
| Antigua and Barbuda      | 0.002  | 0.002   | 0.002   |
| Argentina                | 0.325  | 0.317   | 0.317   |
| Armenia                  | 0.002  | 0.002   | 0.002   |
| Australia                | 1.787  | 1.743   | 1.743   |
| Austria                  | 0.887  | 0.865   | 0.865   |
| Azerbaijan               | 0.005  | 0.005   | 0.005   |
| Bahamas                  | 0.016  | 0.016   | 0.016   |
| Bahrain                  | 0.033  | 0.032   | 0.032   |
| Bangladesh               | 0.010  | 0.010   | 0.010   |
| Barbados                 | 0.009  | 0.009   | 0.009   |
| Belarus                  | 0.020  | 0.020   | 0.020   |
| Belgium                  | 1.102  | 1.075   | 1.075   |
| Belize                   | 0.001  | 0.001   | 0.001   |
| Benin                    | 0.001  | 0.001   | 0.001   |
| Bhutan                   | 0.001  | 0.001   | 0.001   |
| Bolivia                  | 0.006  | 0.006   | 0.006   |
| Bosnia and Herzegovina   | 0.006  | 0.006   | 0.006   |
| Botswana                 | 0.014  | 0.014   | 0.014   |
| Brazil                   | 0.876  | 0.854   | 0.854   |
| Bulgaria                 | 0.020  | 0.020   | 0.020   |
| Burkina Faso             | 0.002  | 0.002   | 0.002   |
| Burundi                  | 0.001  | 0.001   | 0.001   |
| Cambodia                 | 0.001  | 0.001   | 0.001   |
| Cameroon                 | 0.009  | 0.009   | 0.009   |
| Canada                   | 2.977  | 2.904   | 2.904   |
| Cape Verde               | 0.001  | 0.001   | 0.001   |
| Central African Republic | 0.001  | 0.001   | 0.001   |
| Chad                     | 0.001  | 0.001   | 0.001   |
| Chile                    | 0.161  | 0.157   | 0.157   |
| China                    | 2.667  | 2.602   | 2.602   |
| Colombia                 | 0.105  | 0.102   | 0.102   |
| Comoros                  | 0.001  | 0.001   | 0.001   |
| Congo                    | 0.001  | 0.001   | 0.001   |
| Cook Islands             | 0.001  | 0.001   | 0.001   |
| Costa Rica               | 0.032  | 0.031   | 0.031   |
| Côte d'Ivoire            | 0.009  | 0.009   | 0.009   |
| Croatia                  | 0.050  | 0.049   | 0.049   |
| Cuba                     | 0.054  | 0.053   | 0.053   |
| Cyprus                   | 0.044  | 0.043   | 0.043   |
| Czech Republic           | 0.281  | 0.274   | 0.274   |

| <b>Party</b>                          | <b>United Nations scale of assessment for 2008</b> | <b>UNFCCC adjusted scale of assessment for 2008</b> | <b>UNFCCC adjusted scale of assessment for 2009</b> |
|---------------------------------------|--|---|---|
| Democratic People's Republic of Korea | 0.007  | 0.007   | 0.007   |
| Democratic Republic of the Congo      | 0.003  | 0.003   | 0.003   |
| Denmark                               | 0.739  | 0.721   | 0.721   |
| Djibouti                              | 0.001  | 0.001   | 0.001   |
| Dominica                              | 0.001  | 0.001   | 0.001   |
| Dominican Republic                    | 0.024  | 0.023   | 0.023   |
| Ecuador                               | 0.021  | 0.020   | 0.020   |
| Egypt                                 | 0.088  | 0.086   | 0.086   |
| El Salvador                           | 0.020  | 0.020   | 0.020   |
| Equatorial Guinea                     | 0.002  | 0.002   | 0.002   |
| Eritrea                               | 0.001  | 0.001   | 0.001   |
| Estonia                               | 0.016  | 0.016   | 0.016   |
| Ethiopia                              | 0.003  | 0.003   | 0.003   |
| European Community                    | 2.500  | 2.500   | 2.500   |
| Fiji                                  | 0.003  | 0.003   | 0.003   |
| Finland                               | 0.564  | 0.550   | 0.550   |
| France                                | 6.301  | 6.146   | 6.146   |
| Gabon                                 | 0.008  | 0.008   | 0.008   |
| Gambia                                | 0.001  | 0.001   | 0.001   |
| Georgia                               | 0.003  | 0.003   | 0.003   |
| Germany                               | 8.577  | 8.366   | 8.366   |
| Ghana                                 | 0.004  | 0.004   | 0.004   |
| Greece                                | 0.596  | 0.581   | 0.581   |
| Grenada                               | 0.001  | 0.001   | 0.001   |
| Guatemala                             | 0.032  | 0.031   | 0.031   |
| Guinea                                | 0.001  | 0.001   | 0.001   |
| Guinea-Bissau                         | 0.001  | 0.001   | 0.001   |
| Guyana                                | 0.001  | 0.001   | 0.001   |
| Haiti                                 | 0.002  | 0.002   | 0.002   |
| Honduras                              | 0.005  | 0.005   | 0.005   |
| Hungary                               | 0.244  | 0.238   | 0.238   |
| Iceland                               | 0.037  | 0.036   | 0.036   |
| India                                 | 0.450  | 0.439   | 0.439   |
| Indonesia                             | 0.161  | 0.157   | 0.157   |
| Iran (Islamic Republic of)            | 0.180  | 0.176   | 0.176   |
| Ireland                               | 0.445  | 0.434   | 0.434   |
| Israel                                | 0.419  | 0.409   | 0.409   |
| Italy                                 | 5.079  | 4.954   | 4.954   |
| Jamaica                               | 0.010  | 0.010   | 0.010   |
| Japan                                 | 16.624   | 16.216  | 16.216  |
| Jordan                                | 0.012  | 0.012   | 0.012   |
| Kazakhstan                            | 0.029  | 0.028   | 0.028   |
| Kenya                                 | 0.010  | 0.010   | 0.010   |
| Kiribati                              | 0.001  | 0.001   | 0.001   |
| Kuwait                                | 0.182  | 0.178   | 0.178   |
| Kyrgyzstan                            | 0.001  | 0.001   | 0.001   |
| Lao People's Democratic Republic      | 0.001  | 0.001   | 0.001   |
| Latvia                                | 0.018  | 0.018   | 0.018   |
| Lebanon                               | 0.034  | 0.033   | 0.033   |

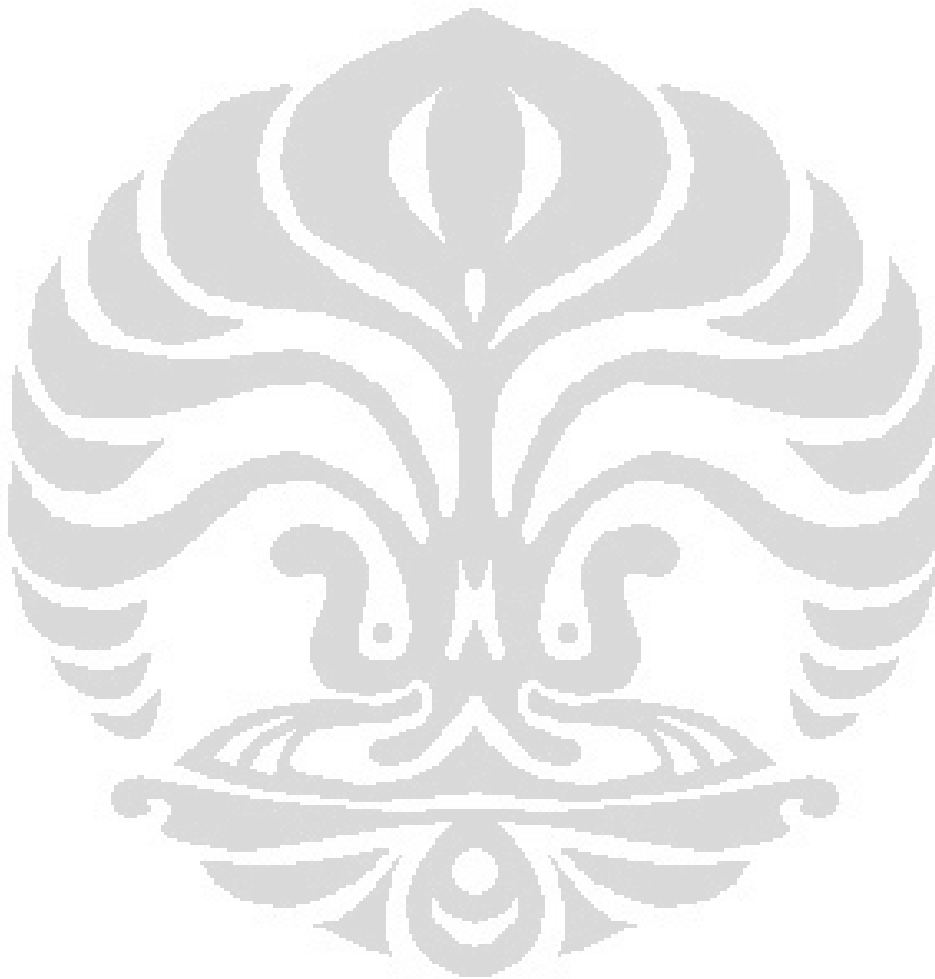


| <b>Party</b>                     | <b>United Nations scale of assessment for 2008</b> | <b>UNFCCC adjusted scale of assessment for 2008</b> | <b>UNFCCC adjusted scale of assessment for 2009</b> |
|----------------------------------|--|---|---|
| Lesotho                          | 0.001  | 0.001   | 0.001   |
| Liberia                          | 0.001  | 0.001   | 0.001   |
| Libyan Arab Jamahiriya           | 0.062  | 0.060   | 0.060   |
| Liechtenstein                    | 0.010  | 0.010   | 0.010   |
| Lithuania                        | 0.031  | 0.030   | 0.030   |
| Luxembourg                       | 0.085  | 0.083   | 0.083   |
| Madagascar                       | 0.002  | 0.002   | 0.002   |
| Malawi                           | 0.001  | 0.001   | 0.001   |
| Malaysia                         | 0.190  | 0.185   | 0.185   |
| Maldives                         | 0.001  | 0.001   | 0.001   |
| Mali                             | 0.001  | 0.001   | 0.001   |
| Malta                            | 0.017  | 0.017   | 0.017   |
| Marshall Islands                 | 0.001  | 0.001   | 0.001   |
| Mauritania                       | 0.001  | 0.001   | 0.001   |
| Mauritius                        | 0.011  | 0.011   | 0.011   |
| Mexico                           | 2.257  | 2.202   | 2.202   |
| Micronesia (Federated States of) | 0.001  | 0.001   | 0.001   |
| Moldova                          | 0.001  | 0.001   | 0.001   |
| Monaco                           | 0.003  | 0.003   | 0.003   |
| Mongolia                         | 0.001  | 0.001   | 0.001   |
| Montenegro                       | 0.001  | 0.001   | 0.001   |
| Morocco                          | 0.042  | 0.041   | 0.041   |
| Mozambique                       | 0.001  | 0.001   | 0.001   |
| Myanmar                          | 0.005  | 0.005   | 0.005   |
| Namibia                          | 0.006  | 0.006   | 0.006   |
| Nauru                            | 0.001  | 0.001   | 0.001   |
| Nepal                            | 0.003  | 0.003   | 0.003   |
| Netherlands                      | 1.873  | 1.827   | 1.827   |
| New Zealand                      | 0.256  | 0.250   | 0.250   |
| Nicaragua                        | 0.002  | 0.002   | 0.002   |
| Niger                            | 0.001  | 0.001   | 0.001   |
| Nigeria                          | 0.048  | 0.047   | 0.047   |
| Niue                             | 0.001  | 0.001   | 0.001   |
| Norway                           | 0.782  | 0.763   | 0.763   |
| Oman                             | 0.073  | 0.071   | 0.071   |
| Pakistan                         | 0.059  | 0.058   | 0.058   |
| Palau                            | 0.001  | 0.001   | 0.001   |
| Panama                           | 0.023  | 0.022   | 0.022   |
| Papua New Guinea                 | 0.002  | 0.002   | 0.002   |
| Paraguay                         | 0.005  | 0.005   | 0.005   |
| Peru                             | 0.078  | 0.076   | 0.076   |
| Philippines                      | 0.078  | 0.076   | 0.076   |
| Poland                           | 0.501  | 0.489   | 0.489   |
| Portugal                         | 0.527  | 0.514   | 0.514   |
| Qatar                            | 0.085  | 0.083   | 0.083   |
| Republic of Korea                | 2.173  | 2.120   | 2.120   |
| Romania                          | 0.070  | 0.068   | 0.068   |
| Russian Federation               | 1.200  | 1.171   | 1.171   |
| Rwanda                           | 0.001  | 0.001   | 0.001   |

| <b>Party</b>   | <b>United Nations scale of assessment for 2008</b> | <b>UNFCCC adjusted scale of assessment for 2008</b> | <b>UNFCCC adjusted scale of assessment for 2009</b> |
|--|--|---|---|
| Saint Kitts and Nevis                                | 0.001  | 0.001   | 0.001   |
| Saint Lucia  | 0.001  | 0.001   | 0.001   |
| Saint Vincent and the Grenadines                     | 0.001  | 0.001   | 0.001   |
| Samoa  | 0.001  | 0.001   | 0.001   |
| San Marino   | 0.003  | 0.003   | 0.003   |
| Sao Tome and Principe                                | 0.001  | 0.001   | 0.001   |
| Saudi Arabia   | 0.748  | 0.730   | 0.730   |
| Senegal  | 0.004  | 0.004   | 0.004   |
| Serbia   | 0.021  | 0.020   | 0.020   |
| Seychelles   | 0.002  | 0.002   | 0.002   |
| Sierra Leone   | 0.001  | 0.001   | 0.001   |
| Singapore  | 0.347  | 0.338   | 0.338   |
| Slovakia   | 0.063  | 0.061   | 0.061   |
| Slovenia   | 0.096  | 0.094   | 0.094   |
| Solomon Islands                                      | 0.001  | 0.001   | 0.001   |
| South Africa   | 0.290  | 0.283   | 0.283   |
| Spain  | 2.968  | 2.895   | 2.895   |
| Sri Lanka  | 0.016  | 0.016   | 0.016   |
| Sudan  | 0.010  | 0.010   | 0.010   |
| Suriname   | 0.001  | 0.001   | 0.001   |
| Swaziland  | 0.002  | 0.002   | 0.002   |
| Sweden   | 1.071  | 1.045   | 1.045   |
| Switzerland  | 1.216  | 1.186   | 1.186   |
| Syrian Arab Republic                                 | 0.016  | 0.016   | 0.016   |
| Tajikistan   | 0.001  | 0.001   | 0.001   |
| Thailand   | 0.186  | 0.181   | 0.181   |
| The former Yugoslav Republic of Macedonia            | 0.005  | 0.005   | 0.005   |
| Timor-Leste  | 0.001  | 0.001   | 0.001   |
| Togo   | 0.001  | 0.001   | 0.001   |
| Tonga  | 0.001  | 0.001   | 0.001   |
| Trinidad and Tobago                                  | 0.027  | 0.026   | 0.026   |
| Tunisia  | 0.031  | 0.030   | 0.030   |
| Turkey   | 0.381  | 0.372   | 0.372   |
| Turkmenistan   | 0.006  | 0.006   | 0.006   |
| Tuvalu   | 0.001  | 0.001   | 0.001   |
| Uganda   | 0.003  | 0.003   | 0.003   |
| Ukraine  | 0.045  | 0.044   | 0.044   |
| United Arab Emirates                                 | 0.302  | 0.295   | 0.295   |
| United Kingdom of Great Britain and Northern Ireland | 6.642  | 6.479   | 6.479   |
| United Republic of Tanzania                          | 0.006  | 0.006   | 0.006   |
| United States of America                             | 22.000   | 21.460  | 21.460  |
| Uruguay  | 0.027  | 0.026   | 0.026   |
| Uzbekistan   | 0.008  | 0.008   | 0.008   |
| Vanuatu  | 0.001  | 0.001   | 0.001   |
| Venezuela (Bolivarian Republic of)                   | 0.200  | 0.195   | 0.195   |
| Viet Nam   | 0.024  | 0.023   | 0.023   |
| Yemen  | 0.007  | 0.007   | 0.007   |

| <b>Party</b> | <b>United Nations scale of assessment for 2008</b> | <b>UNFCCC adjusted scale of assessment for 2008</b> | <b>UNFCCC adjusted scale of assessment for 2009</b> |
|--------------|--|---|---|
| Zambia       | 0.001  | 0.001   | 0.001   |
| Zimbabwe     | 0.008  | 0.008   | 0.008   |
| <b>TOTAL</b> | <b>102.452</b>                                     | <b>100.000</b>                                      | <b>100.000</b>                                      |

*8<sup>th</sup> plenary meeting  
14–15 December 2007*



## Decision 14/CP.13

### **Date and venue of the fourteenth and fifteenth sessions of the Conference of the Parties and the calendar of meetings of Convention bodies**

*The Conference of the Parties,*

*Recalling* Article 7, paragraph 4, of the Convention,

*Recalling* United Nations General Assembly resolution 40/243 of 18 December 1985 on the pattern of conferences,

*Recalling* rule 22, paragraph 1, of the draft rules of procedure being applied<sup>1</sup> regarding the rotation of the office of President among the five regional groups,

#### **I. Date and venue of the fourteenth and fifteenth sessions of the Conference of the Parties**

##### **A. Date and venue of the fourteenth session of the Conference of the Parties and the fourth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol**

1. *Decides* that the fourteenth session of the Conference of the Parties and the fourth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol shall be held from 1 to 12 December 2008;
2. *Decides* to accept with appreciation the offer by the Government of Poland to host the fourteenth session of the Conference of the Parties and the fourth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol in Poznan, Poland;
3. *Requests* the Executive Secretary to continue consultations with the Government of Poland and to negotiate a Host Country Agreement for convening the sessions, with a view to concluding and signing the Host Country Agreement not later than 15 February 2008;

##### **B. Date and venue of the fifteenth session of the Conference of the Parties and the fifth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol**

4. *Decides* that the fifteenth session of the Conference of the Parties and the fifth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol shall be held from 30 November to 11 December 2009;
5. *Decides* to accept with appreciation the offer by the Government of Denmark to host the fifteenth session of the Conference of the Parties and the fifth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol in Copenhagen, Denmark, subject to confirmation by the Bureau that all logistical, technical and financial elements for hosting the sessions are available, in conformity with General Assembly resolution 40/243;
6. *Requests* the Executive Secretary to continue consultations with the Government of Denmark and to negotiate a Host Country Agreement for convening the sessions, with a view to concluding and signing the Host Country Agreement not later than the twenty-eighth sessions of the subsidiary bodies;

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<sup>1</sup> FCCC/CP/1996/2.

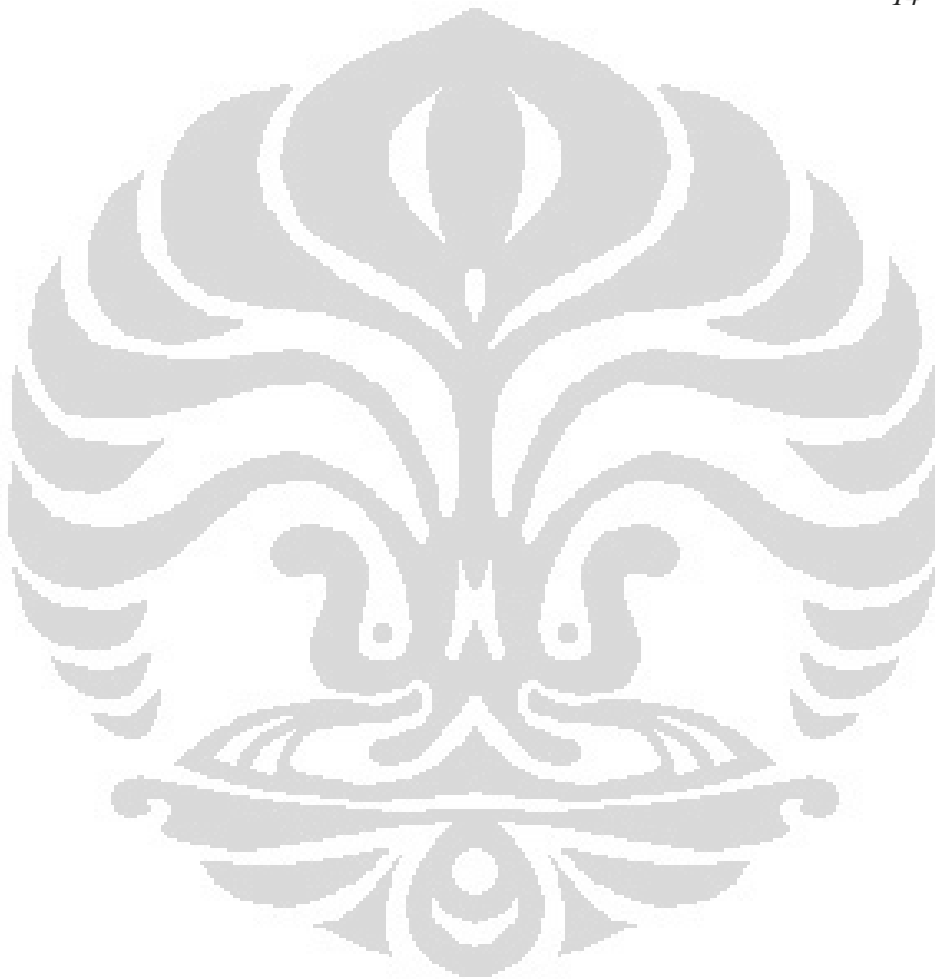
7. *Requests* the secretariat to take the necessary action to implement this decision;

## **II. Calendar of meetings of Convention bodies**

8. *Decides* to adopt the dates of 14–25 May and 26 November to 7 December for the sessional periods in 2012 as recommended by the Subsidiary Body for Implementation;

9. *Invites* the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to endorse this decision.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*



## **Resolution 1/CP.13**

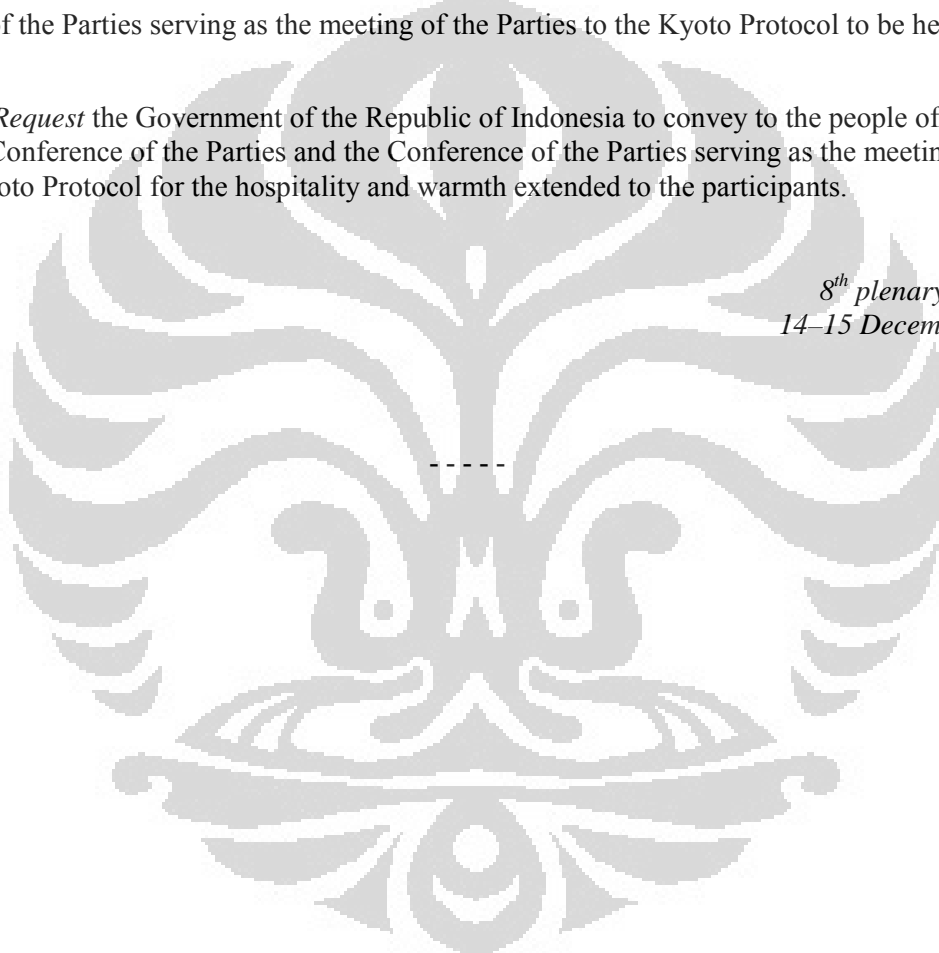
### **Expression of gratitude to the Government of the Republic of Indonesia and the people of the province of Bali**

*The Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,*

*Having met* in Bali from 3 to 15 December 2007 at the invitation of the Government of the Republic of Indonesia,

1. *Express their profound gratitude* to the Government of the Republic of Indonesia for having made it possible for the thirteenth session of the Conference of the Parties and the third session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to be held in Bali;
2. *Request* the Government of the Republic of Indonesia to convey to the people of Bali the gratitude of the Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol for the hospitality and warmth extended to the participants.

*8<sup>th</sup> plenary meeting  
14–15 December 2007*





# Framework Convention on Climate Change

Distr.: General  
15 March 2011

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## Conference of the Parties

### Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010

#### Addendum

#### Part Two: Action taken by the Conference of the Parties at its sixteenth session

#### Contents

#### Decisions adopted by the Conference of the Parties

*Decision*

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## Decision 1/CP.16

### **The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention**

*The Conference of the Parties,*

*Recalling* its decision 1/CP.13 (the Bali Action Plan) and decision 1/CP.15,

*Seeking* to secure progress in a balanced manner, with the understanding that, through this decision, not all aspects of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention are concluded, and that nothing in this decision shall prejudice prospects for, or the content of, a legally binding outcome in the future,

*Reaffirming* the commitment to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to achieve the ultimate objective of the Convention,

*Recalling* the principles, provisions and commitments set forth in the Convention, in particular its Articles 3 and 4,

*Recognizing* that climate change represents an urgent and potentially irreversible threat to human societies and the planet, and thus requires to be urgently addressed by all Parties,

*Affirming* the legitimate needs of developing country Parties for the achievement of sustained economic growth and the eradication of poverty, so as to be able to deal with climate change,

*Noting* resolution 10/4 of the United Nations Human Rights Council on human rights and climate change, which recognizes that the adverse effects of climate change have a range of direct and indirect implications for the effective enjoyment of human rights and that the effects of climate change will be felt most acutely by those segments of the population that are already vulnerable owing to geography, gender, age, indigenous or minority status, or disability,

#### **I. A shared vision for long-term cooperative action**

1. *Affirms* that climate change is one of the greatest challenges of our time and that all Parties share a vision for long-term cooperative action in order to achieve the objective of the Convention under its Article 2, including through the achievement of a global goal, on the basis of equity and in accordance with common but differentiated responsibilities and respective capabilities; this vision is to guide the policies and actions of all Parties, while taking into full consideration the different circumstances of Parties in accordance with the principles and provisions of the Convention; the vision addresses mitigation, adaptation, finance, technology development and transfer, and capacity-building in a balanced, integrated and comprehensive manner to enhance and achieve the full, effective and sustained implementation of the Convention, now, up to and beyond 2012;



2. *Further affirms* that:

(a) Scaled-up overall mitigation efforts that allow for the achievement of desired stabilization levels are necessary, with developed country Parties showing leadership by undertaking ambitious emission reductions and providing technology, capacity-building and financial resources to developing country Parties, in accordance with the relevant provisions of the Convention;

(b) Adaptation must be addressed with the same priority as mitigation and requires appropriate institutional arrangements to enhance adaptation action and support;

(c) All Parties should cooperate, consistent with the principles of the Convention, through effective mechanisms, enhanced means and appropriate enabling environments, and enhance technology development and the transfer of technologies to developing country Parties to enable action on mitigation and adaptation;

(d) Mobilization and provision of scaled-up, new, additional, adequate and predictable financial resources is necessary to address the adaptation and mitigation needs of developing countries;

(e) Capacity-building is essential to enable developing country Parties to participate fully in, and to implement effectively, their commitments under the Convention; and that the goal is to enhance the capacity of developing country Parties in all areas;

3. *Recognizes* that warming of the climate system is unequivocal and that most of the observed increase in global average temperatures since the mid-twentieth century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations, as assessed by the Intergovernmental Panel on Climate Change in its Fourth Assessment Report;

4. *Further recognizes* that deep cuts in global greenhouse gas emissions are required according to science, and as documented in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, with a view to reducing global greenhouse gas emissions so as to hold the increase in global average temperature below 2 °C above pre-industrial levels, and that Parties should take urgent action to meet this long-term goal, consistent with science and on the basis of equity; *also recognizes* the need to consider, in the context of the first review, as referred to in paragraph 138 below, strengthening the long-term global goal on the basis of the best available scientific knowledge, including in relation to a global average temperature rise of 1.5 °C;

5. *Agrees*, in the context of the long-term goal and the ultimate objective of the Convention and the Bali Action Plan, to work towards identifying a global goal for substantially reducing global emissions by 2050, and to consider it at the seventeenth session of the Conference of the Parties;

6. *Also agrees* that Parties should cooperate in achieving the peaking of global and national greenhouse gas emissions as soon as possible, recognizing that the time frame for peaking will be longer in developing countries, and bearing in mind that social and economic development and poverty eradication are the first and overriding priorities of developing countries and that a low-carbon development strategy is indispensable to sustainable development; in this context, *further agrees* to work towards identifying a time frame for global peaking of greenhouse gas emissions based on the best available scientific knowledge and equitable access to sustainable development, and to consider it at the seventeenth session of the Conference of the Parties;

7. *Recognizes* the need to engage a broad range of stakeholders at the global, regional, national and local levels, be they government, including subnational and local government, private business or civil society, including youth and persons with disability, and that

gender equality and the effective participation of women and indigenous peoples are important for effective action on all aspects of climate change;

8. *Emphasizes* that Parties should, in all climate change related actions, fully respect human rights;

9. *Confirms* that Parties, especially developing country Parties that would have to bear a disproportionate or abnormal burden under the long-term cooperative action under the Convention, should be given full consideration;

10. *Realizes* that addressing climate change requires a paradigm shift towards building a low-carbon society that offers substantial opportunities and ensures continued high growth and sustainable development, based on innovative technologies and more sustainable production and consumption and lifestyles, while ensuring a just transition of the workforce that creates decent work and quality jobs;

## II. Enhanced action on adaptation

11. *Agrees* that adaptation is a challenge faced by all Parties, and that enhanced action and international cooperation on adaptation is urgently required to enable and support the implementation of adaptation actions aimed at reducing vulnerability and building resilience in developing country Parties, taking into account the urgent and immediate needs of those developing countries that are particularly vulnerable;

12. *Affirms* that enhanced action on adaptation should be undertaken in accordance with the Convention, should follow a country-driven, gender-sensitive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional and indigenous knowledge, with a view to integrating adaptation into relevant social, economic and environmental policies and actions, where appropriate;

13. *Decides* to hereby establish the Cancun Adaptation Framework encompassing the provisions laid out below, with the objective of enhancing action on adaptation, including through international cooperation and coherent consideration of matters relating to adaptation under the Convention;

14. *Invites* all Parties to enhance action on adaptation under the Cancun Adaptation Framework, taking into account their common but differentiated responsibilities and respective capabilities, and specific national and regional development priorities, objectives and circumstances, by undertaking, inter alia, the following:

(a) Planning, prioritizing and implementing adaptation actions, including projects and programmes,<sup>1</sup> and actions identified in national and subnational adaptation plans and strategies, national adaptation programmes of action of the least developed countries, national communications, technology needs assessments and other relevant national planning documents;

(b) Impact, vulnerability and adaptation assessments, including assessments of financial needs as well as economic, social and environmental evaluation of adaptation options;

(c) Strengthening institutional capacities and enabling environments for adaptation, including for climate-resilient development and vulnerability reduction;

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<sup>1</sup> Including in the areas of water resources; health; agriculture and food security; infrastructure; socio-economic activities; terrestrial, freshwater and marine ecosystems; and coastal zones.

- (d) Building resilience of socio-economic and ecological systems, including through economic diversification and sustainable management of natural resources;
- (e) Enhancing climate change related disaster risk reduction strategies, taking into consideration the Hyogo Framework for Action,<sup>2</sup> where appropriate, early warning systems, risk assessment and management, and sharing and transfer mechanisms such as insurance, at the local, national, subregional and regional levels, as appropriate;
- (f) Measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at the national, regional and international levels;
- (g) Research, development, demonstration, diffusion, deployment and transfer of technologies, practices and processes, and capacity-building for adaptation, with a view to promoting access to technologies, in particular in developing country Parties;
- (h) Strengthening data, information and knowledge systems, education and public awareness;
- (i) Improving climate-related research and systematic observation for climate data collection, archiving, analysis and modelling in order to provide decision makers at the national and regional levels with improved climate-related data and information;
15. *Decides* to hereby establish a process to enable least developed country Parties to formulate and implement national adaptation plans, building upon their experience in preparing and implementing national adaptation programmes of action, as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs;
16. *Invites* other developing country Parties to employ the modalities formulated to support the above-mentioned national adaptation plans in the elaboration of their planning effort referred to in paragraph 14 (a) above;
17. *Requests* the Subsidiary Body for Implementation to elaborate modalities and guidelines for the provisions of paragraphs 15 and 16 above, for adoption by the Conference of the Parties at its seventeenth session;
18. *Requests* developed country Parties to provide developing country Parties, taking into account the needs of those that are particularly vulnerable, with long-term, scaled-up, predictable, new and additional finance, technology and capacity-building, consistent with relevant provisions, to implement urgent, short-, medium- and long-term adaptation actions, plans, programmes and projects at the local, national, subregional and regional levels, in and across different economic and social sectors and ecosystems, as well as to undertake the activities referred to in paragraphs 14–16 above and paragraphs 30, 32 and 33 below;
19. *Acknowledges* the need to strengthen, enhance and better utilize existing institutional arrangements and expertise under the Convention;
20. *Decides* to hereby establish an Adaptation Committee to promote the implementation of enhanced action on adaptation in a coherent manner under the Convention, inter alia, through the following functions:
- (a) Providing technical support and guidance to the Parties, respecting the country-driven approach, with a view to facilitating the implementation of adaptation activities, including those listed in paragraphs 14 and 15 above, where appropriate;
- (b) Strengthening, consolidating and enhancing the sharing of relevant information, knowledge, experience and good practices, at the local, national, regional and

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<sup>2</sup> <<http://www.unisdr.org/eng/hfa/hfa.htm>>.

international levels, taking into account, as appropriate, traditional knowledge and practices;

(c) Promoting synergy and strengthening engagement with national, regional and international organizations, centres and networks, in order to enhance the implementation of adaptation actions, in particular in developing country Parties;

(d) Providing information and recommendations, drawing on adaptation good practices, for consideration by the Conference of the Parties when providing guidance on means to incentivize the implementation of adaptation actions, including finance, technology and capacity-building and other ways to enable climate-resilient development and reduce vulnerability, including to the operating entities of the financial mechanism of the Convention, as appropriate;

(e) Considering information communicated by Parties on their monitoring and review of adaptation actions, support provided and received, possible needs and gaps and other relevant information, including information communicated under the Convention, with a view to recommending what further actions may be required, as appropriate;

21. *Invites* Parties to submit to the secretariat, by 21 February 2011, views on the composition of, and modalities and procedures for, the Adaptation Committee, including on proposed linkages with other relevant institutional arrangements;

22. *Requests* the secretariat to compile these submissions into a miscellaneous document, to be made available by the fourteenth session of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, and to prepare a synthesis report based on those submissions by the fourteenth session of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention;

23. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, taking into account the above-mentioned submissions and synthesis report, to elaborate the composition of, and modalities and procedures for, the Adaptation Committee, for adoption by the Conference of the Parties at its seventeenth session;

24. *Also requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, in elaborating the above-mentioned modalities and procedures, to define, as appropriate, linkages with other relevant institutional arrangements under and outside the Convention, including at the national and regional levels;

25. *Recognizes* the need to strengthen international cooperation and expertise in order to understand and reduce loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events;<sup>3</sup>

26. *Decides* to hereby establish a work programme in order to consider, including through workshops and expert meetings, as appropriate, approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change;

27. *Requests* the Subsidiary Body for Implementation to agree on activities to be undertaken under the above-mentioned work programme;

28. *Invites* Parties and relevant organizations to submit to the secretariat, by 21 February 2011, views and information on what elements should be included in the work programme, including the following:

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<sup>3</sup> Including sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification.

- (a) Possible development of a climate risk insurance facility to address impacts associated with severe weather events;
  - (b) Options for risk management and reduction, risk sharing and transfer mechanisms such as insurance, including options for micro-insurance, and resilience-building, including through economic diversification;
  - (c) Approaches for addressing rehabilitation measures associated with slow onset events;
  - (d) Engagement of stakeholders with relevant specialized expertise;
29. *Requests* the secretariat to compile these submissions into a miscellaneous document and to prepare a synthesis report based on those submissions, to be made available for consideration by the Subsidiary Body for Implementation at its thirty-fourth session, and with a view to making recommendations on loss and damage to the Conference of the Parties for its consideration at its eighteenth session;
30. *Invites* Parties to strengthen and, where necessary, establish regional centres and networks, in particular in developing countries, with support from developed country Parties and relevant organizations, as appropriate, and to facilitate and enhance national and regional adaptation actions, in a manner that is country-driven, encourages cooperation and coordination between regional stakeholders and improves the flow of information between the Convention process and national and regional activities;
31. *Notes* that an international centre to enhance adaptation research and coordination could also be established in a developing country;
32. *Invites* all Parties to strengthen and, where necessary, establish and/or designate national-level institutional arrangements, with a view to enhancing work on the full range of adaptation actions, from planning to implementation;
33. *Decides* that all Parties should use existing channels to provide information, as appropriate, on support provided and received for adaptation actions in developing countries and on activities undertaken, including, inter alia, progress made, experiences, lessons learned, and challenges and gaps in the delivery of support, with a view to ensuring transparency and accountability and encouraging best practices;
34. *Invites* relevant multilateral, international, regional and national organizations, the public and private sectors, civil society and other relevant stakeholders to undertake and support enhanced action on adaptation at all levels, including under the Cancun Adaptation Framework, as appropriate, in a coherent and integrated manner, building on synergies among activities and processes, and to make information available on the progress made;
35. *Requests* the secretariat to support the implementation of the Cancun Adaptation Framework, including related institutional arrangements under the Convention, in accordance with its mandate and subject to the availability of resources;

### **III. Enhanced action on mitigation**

#### **A. Nationally appropriate mitigation commitments or actions by developed country Parties**

*Emphasizing* the need for deep cuts in global greenhouse gas emissions and early and urgent undertakings to accelerate and enhance the implementation of the Convention by all Parties, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities,

*Acknowledging* that the largest share of historical global emissions of greenhouse gases originated in developed countries and that, owing to this historical responsibility, developed country Parties must take the lead in combating climate change and the adverse effects thereof,

36. *Takes note* of quantified economy-wide emission reduction targets to be implemented by Parties included in Annex I to the Convention as communicated by them and contained in document FCCC/SB/2011/INF.1<sup>4</sup> (to be issued);

37. *Urges* developed country Parties to increase the ambition of their economy-wide emission reduction targets, with a view to reducing their aggregate anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol to a level consistent with the Fourth Assessment Report of the Intergovernmental Panel on Climate Change;

38. *Requests* the secretariat to organize workshops to clarify the assumptions and the conditions related to the attainment of these targets, including the use of carbon credits from the market-based mechanisms and land use, land-use change and forestry activities, and options and ways to increase their level of ambition;

39. *Also requests* the secretariat to prepare a technical paper based on Parties' submissions with the aim of facilitating understanding of the assumptions and conditions related to the attainment of their emission reduction targets and a comparison of the level of emission reduction efforts;

40. *Decides*, building on existing reporting and review guidelines, processes and experiences, to enhance reporting in the national communications of Parties included in Annex I to the Convention on mitigation targets and on the provision of financial, technological and capacity-building support to developing country Parties as follows:

(a) Developed countries should submit annual greenhouse gas inventories and inventory reports and biennial reports on their progress in achieving emission reductions, including information on mitigation actions to achieve their quantified economy-wide emission targets and emission reductions achieved, projected emissions and the provision of financial, technology and capacity-building support to developing country Parties;

(b) Developed countries shall submit supplementary information on the achievement of quantified economy-wide emission reductions;

(c) Developed countries shall improve the reporting of information on the provision of financial, technology and capacity-building support to developing country Parties;

41. *Also decides* to enhance the guidelines for the reporting of information in national communications by Parties included in Annex I to the Convention, including the development of common reporting formats and methodology for finance, in order to ensure that information provided is complete, comparable, transparent and accurate;

42. *Further decides* to enhance guidelines for the review of information in national communications with respect to the following:

(a) Progress made in achieving emission reductions;

(b) Provision of financial, technology and capacity-building support to developing country Parties;

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<sup>4</sup> Parties' communications to the secretariat that are included in the information document are considered communications under the Convention.

43. *Decides* that developed countries should establish national arrangements for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol;
44. *Also decides* to establish a process for international assessment of emissions and removals related to quantified economy-wide emission reduction targets under the Subsidiary Body for Implementation, taking into account national circumstances, in a rigorous, robust and transparent manner, with a view to promoting comparability and building confidence;
45. *Further decides* that developed countries should develop low-carbon development strategies or plans;
46. *Decides* on the following work programme for the development of modalities and guidelines described above, building on existing reporting and review guidelines, processes and experiences:
- (a) The revision of guidelines, as necessary, on the reporting of national communications, including the biennial report:
    - (i) The provision of financing, through enhanced common reporting formats, methodologies for finance and tracking of climate-related support;
    - (ii) Supplementary information on achievement of quantified economy-wide emission reduction targets;
    - (iii) Information on national inventory arrangements;
  - (b) The revision of guidelines for the review of national communications, including the biennial report, annual greenhouse gas inventories and national inventory systems;
  - (c) The establishment of guidelines for national inventory arrangements;
  - (d) Modalities and procedures for international assessment and review of emissions and removals related to quantified economy-wide emission reduction targets in accordance with paragraph 44 above, including the role of land use, land-use change and forestry, and carbon credits from market-based mechanisms, taking into account international experience;
47. *Invites* Parties to submit views on the items mentioned in paragraph 46 above, including with respect to the initial scheduling of the processes described in this section, by 28 March 2011;

## **B. Nationally appropriate mitigation actions by developing country Parties**

*Recognizing* that developing country Parties are already contributing and will continue to contribute to a global mitigation effort in accordance with the principles and provisions of the Convention, and could enhance their mitigation actions, depending on provision of finance, technology and capacity-building support by developed country Parties,

*Reaffirming* that social and economic development and poverty eradication are the first and overriding priorities of developing country Parties, and that the share of global emissions originating in developing countries will grow to meet their social and development needs,

48. *Agrees* that developing country Parties will take nationally appropriate mitigation actions in the context of sustainable development, supported and enabled by technology,

financing and capacity-building, aimed at achieving a deviation in emissions relative to 'business as usual' emissions in 2020;

49. *Takes note* of nationally appropriate mitigation actions to be implemented by Parties not included in Annex I to the Convention as communicated by them and contained in document FCCC/AWGLCA/2011/INF.1<sup>5</sup> (to be issued);

50. *Invites* developing countries that wish to voluntarily inform the Conference of the Parties of their intention to implement nationally appropriate mitigation actions in association with this decision to submit information on those actions to the secretariat;

51. *Requests* the secretariat to organize workshops to understand the diversity of mitigation actions submitted, underlying assumptions and any support needed for the implementation of these actions, noting different national circumstances and the respective capabilities of developing country Parties;

52. *Decides* that, in accordance with Article 4, paragraph 3, of the Convention, developed country Parties shall provide enhanced financial, technological and capacity-building support for the preparation and implementation of nationally appropriate mitigation actions of developing country Parties and for enhanced reporting by these Parties;

53. *Also decides* to set up a registry to record nationally appropriate mitigation actions seeking international support and to facilitate matching of finance, technology and capacity-building support for these actions;

54. *Invites* developing country Parties to submit to the secretariat information on nationally appropriate mitigation actions for which they are seeking support, along with estimated costs and emission reductions, and the anticipated time frame for implementation;

55. *Also invites* developed country Parties to submit to the secretariat information on support available and provided for nationally appropriate mitigation actions;

56. *Requests* the secretariat to record and regularly update in the registry the information provided by Parties on:

- (a) Nationally appropriate mitigation actions seeking international support;
- (b) Support available from developed country Parties for these actions;
- (c) Support provided for nationally appropriate mitigation actions;

57. *Agrees* to develop modalities for the facilitation of support through the registry referred to in paragraph 53 above, including any functional relationship with the financial mechanism;

58. *Decides* to recognize nationally appropriate mitigation actions of developing countries in a separate section of the registry;

59. *Requests* the secretariat to record, and regularly update, in a separate section of the registry, information submitted by Parties on the following:

- (a) Mitigation actions contained in document FCCC/AWGLCA/2011/INF.1;
- (b) Additional mitigation actions submitted in association with paragraph 50 above;

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<sup>5</sup> Parties' communications to the secretariat that are included in the information document are considered communications under the Convention.



(c) Once support has been provided, internationally supported mitigation actions and associated support;

60. *Decides* to enhance reporting in national communications, including inventories, from Parties not included in Annex I to the Convention on mitigation actions and their effects, and support received, with additional flexibility to be given to the least developed country Parties and small island developing States:

(a) The content and frequency of national communications from Parties not included in Annex I to the Convention will not be more onerous than that for Parties included in Annex I to the Convention;

(b) Parties not included in Annex I to the Convention should submit their national communications to the Conference of the Parties, in accordance with Article 12, paragraph 1, of the Convention, every four years or in accordance with any further decisions on frequency by the Conference of the Parties, taking into account a differentiated timetable and the prompt provision of financial resources to cover the agreed full costs incurred by Parties not included in Annex I to the Convention in preparing their national communications;

(c) Developing countries, consistent with their capabilities and the level of support provided for reporting, should also submit biennial update reports containing updates of national greenhouse gas inventories, including a national inventory report and information on mitigation actions, needs and support received;

61. *Also decides* that internationally supported mitigation actions will be measured, reported and verified domestically and will be subject to international measurement, reporting and verification in accordance with guidelines to be developed under the Convention;

62. *Further decides* that domestically supported mitigation actions will be measured, reported and verified domestically in accordance with general guidelines to be developed under the Convention;

63. *Decides* to conduct international consultations and analysis of biennial reports under the Subsidiary Body for Implementation, in a manner that is non-intrusive, non-punitive and respectful of national sovereignty; the international consultations and analysis will aim to increase transparency of mitigation actions and their effects, through analysis by technical experts in consultation with the Party concerned and through a facilitative sharing of views, and will result in a summary report;

64. *Also decides* that information considered should include the national greenhouse gas inventory report, information on mitigation actions, including a description, analysis of the impacts and associated methodologies and assumptions, progress in implementation and information on domestic measurement, reporting and verification, and support received; discussion about the appropriateness of such domestic policies and measures is not part of the process; discussions should be intended to provide transparency of information related to unsupported actions;

65. *Encourages* developing countries to develop low-carbon development strategies or plans in the context of sustainable development;

66. *Agrees* on a work programme for the development of modalities and guidelines for: facilitation of support to nationally appropriate mitigation actions through a registry; measurement, reporting and verification of supported actions and corresponding support; biennial reports as part of national communications from Parties not included in Annex I to the Convention; domestic verification of mitigation actions undertaken with domestic resources; and international consultations and analysis;

67. *Invites* Parties to submit views on the items mentioned in paragraph 66 above, including with respect to the initial scheduling of the processes described in this section, by 28 March 2011;

**C. Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries**

*Affirming* that, in the context of the provision of adequate and predictable support to developing country Parties, Parties should collectively aim to slow, halt and reverse forest cover and carbon loss, in accordance with national circumstances, consistent with the ultimate objective of the Convention, as stated in Article 2,

*Also affirming* the need to promote broad country participation in all phases described in paragraph 73 below, including through the provision of support that takes into account existing capacities,

68. *Encourages* all Parties to find effective ways to reduce the human pressure on forests that results in greenhouse gas emissions, including actions to address drivers of deforestation;

69. *Affirms* that the implementation of the activities referred to in paragraph 70 below should be carried out in accordance with appendix I to this decision, and that the safeguards referred to in paragraph 2 of appendix I to this decision should be promoted and supported;

70. *Encourages* developing country Parties to contribute to mitigation actions in the forest sector by undertaking the following activities, as deemed appropriate by each Party and in accordance with their respective capabilities and national circumstances:

- (a) Reducing emissions from deforestation;
- (b) Reducing emissions from forest degradation;
- (c) Conservation of forest carbon stocks;
- (d) Sustainable management of forests;
- (e) Enhancement of forest carbon stocks;

71. *Requests* developing country Parties aiming to undertake the activities referred to in paragraph 70 above, in the context of the provision of adequate and predictable support, including financial resources and technical and technological support to developing country Parties, in accordance with national circumstances and respective capabilities, to develop the following elements:

- (a) A national strategy or action plan;
- (b) A national forest reference emission level and/or forest reference level<sup>6</sup> or, if appropriate, as an interim measure, subnational forest reference emission levels and/or forest reference levels, in accordance with national circumstances, and with provisions contained in decision 4/CP.15, and with any further elaboration of those provisions adopted by the Conference of the Parties;

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<sup>6</sup> In accordance with national circumstances, national forest reference emission levels and/or forest reference levels could be a combination of subnational forest reference emissions levels and/or forest reference levels.

(c) A robust and transparent national forest monitoring system for the monitoring and reporting of the activities referred to in paragraph 70 above, with, if appropriate, subnational monitoring and reporting as an interim measure,<sup>7</sup> in accordance with national circumstances, and with the provisions contained in decision 4/CP.15, and with any further elaboration of those provisions agreed by the Conference of the Parties;

(d) A system for providing information on how the safeguards referred to in appendix I to this decision are being addressed and respected throughout the implementation of the activities referred to in paragraph 70 above, while respecting sovereignty;

72. *Also requests* developing country Parties, when developing and implementing their national strategies or action plans, to address, inter alia, the drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations and the safeguards identified in paragraph 2 of appendix I to this decision, ensuring the full and effective participation of relevant stakeholders, inter alia indigenous peoples and local communities;

73. *Decides* that the activities undertaken by Parties referred to in paragraph 70 above should be implemented in phases, beginning with the development of national strategies or action plans, policies and measures, and capacity-building, followed by the implementation of national policies and measures and national strategies or action plans that could involve further capacity-building, technology development and transfer and results-based demonstration activities, and evolving into results-based actions that should be fully measured, reported and verified;

74. *Recognizes* that the implementation of the activities referred to in paragraph 70 above, including the choice of a starting phase as referred to in paragraph 73 above, depends on the specific national circumstances, capacities and capabilities of each developing country Party and the level of support received;

75. *Requests* the Subsidiary Body for Scientific and Technological Advice to develop a work programme on the matters referred to in appendix II to this decision;

76. *Urges* Parties, in particular developed country Parties, to support, through multilateral and bilateral channels, the development of national strategies or action plans, policies and measures and capacity-building, followed by the implementation of national policies and measures and national strategies or action plans that could involve further capacity-building, technology development and transfer and results-based demonstration activities, including consideration of the safeguards referred to in paragraph 2 of appendix I to this decision, taking into account the relevant provisions on finance including those relating to reporting on support;

77. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to explore financing options for the full implementation of the results-based actions<sup>8</sup> referred to in paragraph 73 above and to report on progress made, including any recommendations for draft decisions on this matter, to the Conference of the Parties at its seventeenth session;

78. *Also requests* Parties to ensure coordination of the activities referred to in paragraph 70 above, including of the related support, particularly at the national level;

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<sup>7</sup> Including monitoring and reporting of emissions displacement at the national level, if appropriate, and reporting on how displacement of emissions is being addressed, and on the means to integrate subnational monitoring systems into a national monitoring system.

<sup>8</sup> These actions require national monitoring systems.

79. *Invites* relevant international organizations and stakeholders to contribute to the activities referred to in paragraphs 70 and 78 above;

**D. Various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries**

*Acknowledging* the need to maintain consistency with the principles of the Convention,

*Emphasizing* the importance of contributing to sustainable development, including through technology transfer and other co-benefits,

*Recognizing* the importance of enhancing sustainable lifestyles and patterns of production and consumption,

*Aware of* the need to provide incentives in support of low-emission development strategies,

80. *Decides* to consider the establishment, at the seventeenth session of the Conference of the Parties, of one or more market-based mechanisms to enhance the cost-effectiveness of, and to promote, mitigation actions, taking into account the following:

- (a) Ensuring voluntary participation of Parties, supported by the promotion of fair and equitable access for all Parties;
- (b) Complementing other means of support for nationally appropriate mitigation actions by developing country Parties;
- (c) Stimulating mitigation across broad segments of the economy;
- (d) Safeguarding environmental integrity;
- (e) Ensuring a net decrease and/or avoidance of global greenhouse gas emissions;
- (f) Assisting developed country Parties to meet part of their mitigation targets, while ensuring that the use of such a mechanism or mechanisms is supplemental to domestic mitigation efforts;
- (g) Ensuring good governance and robust market functioning and regulation;

81. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to elaborate the mechanism or mechanisms referred to in paragraph 80 above, with a view to recommending a draft decision or decisions to the Conference of the Parties for consideration at its seventeenth session;

82. *Invites* Parties and accredited observer organizations to submit to the secretariat, by 21 February 2011, their views on the matters referred to in paragraph 81 above;

83. *Undertakes*, in developing and implementing the mechanism or mechanisms referred to in paragraph 80 above, to maintain and build upon existing mechanisms, including those established under the Kyoto Protocol;

84. *Decides* to consider the establishment, at the seventeenth session of the Conference of the Parties, of one or more non-market-based mechanisms to enhance the cost-effectiveness of, and to promote, mitigation actions;

85. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to elaborate the mechanism or mechanisms referred to in paragraph 84 above, with a view to recommending a draft decision or decisions to the Conference of the Parties for consideration at its seventeenth session;

86. *Invites* Parties and accredited observer organizations to submit to the secretariat, by 21 February 2011, their views on the matters referred to in paragraph 85 above;

87. *Also invites* Parties and accredited observer organizations to submit to the secretariat, by 21 February 2011, information on the evaluation of various approaches in enhancing the cost-effectiveness of, and promoting, mitigation actions, including activities implemented jointly under Article 4, paragraph 2(a), of the Convention and any other relevant activities, for synthesis by the secretariat;

## **E. Economic and social consequences of response measures**

*Reaffirming* the importance of the objective of the Convention, and the relevant principles and provisions of the Convention related to economic and social consequences of response measures, in particular its Articles 2, 3 and 4,

*Recognizing* that the implementation of response measures to mitigate climate change taken by a Party may result in negative economic and social consequences for other Parties, and the need to take into consideration in the implementation of the commitments of the Convention the situation of Parties, particularly developing country Parties, with economies that are vulnerable to the adverse impact of the implementation of measures to respond to climate change, referred to in Article 4, paragraphs 8, 9 and 10, of the Convention,

*Affirming* that responses to climate change should be coordinated with social and economic development in an integrated manner, with a view to avoiding adverse impacts on the latter, taking fully into account the legitimate priority needs of developing country Parties for the achievement of sustained economic growth and the eradication of poverty, and the consequences for vulnerable groups, in particular women and children,

*Recognizing* the importance of avoiding or minimizing negative impacts of response measures on social and economic sectors, promoting a just transition of the workforce, the creation of decent work and quality jobs in accordance with nationally defined development priorities and strategies, and contributing to building new capacity for both production and service-related jobs in all sectors, promoting economic growth and sustainable development,

*Taking note* of relevant provisions of the United Nations Declaration on the Rights of Indigenous Peoples,

88. *Urges* Parties, in the implementation of measures to mitigate climate change, to take into consideration the economic and social impacts of response measures and the needs of Parties, in particular developing country Parties, impacted by response measures, consistent with relevant provisions of the Convention;

89. *Also urges* developed country Parties to strive to implement policies and measures to respond to climate change in such a way as to avoid negative social and economic consequences for developing country Parties, taking into account Article 3 of the Convention, and to assist these Parties to address such consequences by providing support, including financial resources, transfer of technology and capacity-building, in accordance with Article 4 of the Convention, to build up the resilience of societies and economies negatively affected by response measures;

90. *Reaffirms* that the Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change; measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade;

91. *Agrees* that information relating to response measures should be considered in a structured manner in order to enhance the implementation of Article 4, paragraph 1(g) and (h), of the Convention, recognizing the needs of developing country Parties identified in Article 4, paragraphs 8, 9 and 10;

92. *Decides* that Parties should cooperate fully to enhance understanding of the economic and social consequences of response measures, taking into account the need for information from those affected, and evidence of actual impacts, and of both positive and negative effects; and *further decides* to consider how existing channels, such as national communications, including the possible submission of supplementary information, as considered by the Subsidiary Body for Implementation, could be improved and built upon;

93. *Further decides* to provide a forum on the impact of the implementation of response measures, and to that end requests the Chairs of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation to convene such a forum at the thirty-fourth and thirty-fifth sessions of these bodies, with the objective of developing a work programme under the subsidiary bodies to address these impacts, with a view to adopting, at the seventeenth session of the Conference of the Parties, modalities for the operationalization of the work programme and a possible forum on response measures;

94. *Invites* Parties and relevant intergovernmental organizations to submit to the secretariat, by 28 March 2011, their views on the issues referred to in paragraph 93 above for consideration by the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation at their thirty-fourth sessions;

## **IV. Finance, technology and capacity-building**

### **A. Finance**

95. *Takes note* of the collective commitment by developed countries to provide new and additional resources, including forestry and investments through international institutions, approaching USD 30 billion for the period 2010–2012, with a balanced allocation between adaptation and mitigation; funding for adaptation will be prioritized for the most vulnerable developing countries, such as the least developed countries, small island developing States and Africa;

96. *Invites*, in order to enhance transparency, developed country Parties to submit to the secretariat for compilation into an information document, by May 2011, 2012 and 2013, information on the resources provided to fulfil the commitment referred to in paragraph 95 above, including ways in which developing country Parties access these resources;

97. *Decides* that, in accordance with the relevant provisions of the Convention, scaled-up, new and additional, predictable and adequate funding shall be provided to developing country Parties, taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change;

98. *Recognizes* that developed country Parties commit, in the context of meaningful mitigation actions and transparency on implementation, to a goal of mobilizing jointly USD 100 billion per year by 2020 to address the needs of developing countries;
99. *Agrees* that, in accordance with paragraph 1(e) of the Bali Action Plan, funds provided to developing country Parties may come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources;
100. *Decides* that a significant share of new multilateral funding for adaptation should flow through the Green Climate Fund, referred to in paragraph 102 below;
101. *Takes note* of the relevant reports on the financing needs and options for the mobilization of resources to address the needs of developing country Parties with regard to climate change adaptation and mitigation, including the report of the High-level Advisory Group on Climate Change Financing;
102. *Decides* to establish a Green Climate Fund, to be designated as an operating entity of the financial mechanism of the Convention under Article 11, with arrangements to be concluded between the Conference of the Parties and the Green Climate Fund to ensure that it is accountable to and functions under the guidance of the Conference of the Parties, to support projects, programmes, policies and other activities in developing country Parties using thematic funding windows;
103. *Also decides* that the Fund shall be governed by a Board of 24 members, comprising an equal number of members from developing and developed country Parties; representation from developing country Parties shall include representatives of relevant United Nations regional groupings and representatives of small island developing States and the least developed countries; each Board member shall have an alternate member; with alternate members entitled to participate in the meetings of the board only through the principal member, without the right to vote, unless they are serving as the member; during the absence of the member from all or part of a meeting of the Board, his or her alternate shall serve as the member;
104. *Further decides* that the Green Climate Fund shall have a trustee; the trustee for the Green Climate Fund shall have the administrative competence to manage the financial assets of the Green Climate Fund, maintain appropriate financial records and prepare financial statements and other reports required by the Board of the Green Climate Fund, in accordance with internationally accepted fiduciary standards;
105. *Decides* that the trustee shall administer the assets of the Green Climate Fund only for the purpose of, and in accordance with, the relevant decisions of the Green Climate Fund Board; the trustee shall hold the assets of the Green Climate Fund separate and apart from the assets of the trustee, but may commingle them for administrative and investment purposes with other assets maintained by the trustee; and the trustee shall establish and maintain separate records and accounts to identify the assets of the Green Climate Fund;
106. *Decides* that the trustee shall be accountable to the Green Climate Fund Board for the performance of its fiduciary responsibilities;
107. *Invites* the World Bank to serve as the interim trustee for the Green Climate Fund, subject to a review three years after operationalization of the Fund;
108. *Decides* that the operation of the Fund shall be supported by an independent secretariat;
109. *Also decides* that the Green Climate Fund shall be designed by a Transitional Committee in accordance with the terms of reference contained in appendix III to this decision; the Transitional Committee shall have 40 members, with 15 members from developed country Parties and 25 members from developing country Parties as follows:

- (a) Seven members from Africa;
- (b) Seven members from Asia;
- (c) Seven members from Group of Latin America and the Caribbean;
- (d) Two members from small island developing States;
- (e) Two members from the least developed countries;

110. *Invites* the Executive Secretary of the secretariat, in consultation with the President of the Conference of the Parties, to convene the initial meeting of the Transitional Committee, with members having the necessary experience and skills, notably in the area of finance and climate change; the meetings of the Transitional Committee will be open to observers;

111. *Requests* the secretariat, in consultation with the President of the Conference of the Parties, to make arrangements enabling relevant United Nations agencies, international financial institutions and multilateral development banks, along with the secretariat and the Global Environment Facility, to second staff to support the work of the Transitional Committee for the design phase of the Green Climate Fund;

112. *Decides* to establish a Standing Committee under the Conference of the Parties to assist the Conference of the Parties in exercising its functions with respect to the financial mechanism of the Convention in terms of improving coherence and coordination in the delivery of climate change financing, rationalization of the financial mechanism, mobilization of financial resources and measurement, reporting and verification of support provided to developing country Parties; Parties agree to further define the roles and functions of this Standing Committee;

## **B. Technology development and transfer**

*Recalling* the commitments under the Convention, in particular Article 4, paragraphs 1, 3, 5, 7, 8 and 9,

*Confirming* the importance of promoting and enhancing national and international cooperative action on the development and transfer of environmentally sound technologies to developing country Parties to support action on mitigation and adaptation now, up to and beyond 2012, in order to achieve the ultimate objective of the Convention,

*Recognizing* that an early and rapid reduction in emissions and the urgent need to adapt to the adverse impacts of climate change require large-scale diffusion and transfer of, or access to, environmentally sound technologies,

*Stressing* the need for effective mechanisms, enhanced means, appropriate enabling environments and the removal of obstacles to the scaling up of the development and transfer of technology to developing country Parties,

113. *Decides* that the objective of enhanced action on technology development and transfer is to support action on mitigation and adaptation in order to achieve the full implementation of the Convention;

114. *Also decides* that, in pursuit of this objective, technology needs must be nationally determined, based on national circumstances and priorities;

115. *Further decides* to accelerate action consistent with international obligations, at different stages of the technology cycle, including research and development, demonstration, deployment, diffusion and transfer of technology (hereinafter referred in



this decision as technology development and transfer) in support of action on mitigation and adaptation;

116. *Encourages* Parties, in the context of Article 4, paragraphs 1(c) and 5, of the Convention and consistent with their respective capabilities and national circumstances and priorities, to undertake domestic actions identified through country-driven approaches, to engage in bilateral and multilateral cooperative activities on technology development and transfer and to increase private and public research, development and demonstration in relation to technologies for mitigation and adaptation;

117. *Decides* to establish a Technology Mechanism to facilitate the implementation of actions for achieving the objective referred to in paragraphs 113–115 above, under the guidance of and accountable to the Conference of the Parties, which will consist of the following components:

(a) A Technology Executive Committee, to undertake the functions contained in paragraph 121 below;

(b) A Climate Technology Centre and Network, to undertake the functions contained in paragraph 123 below;

118. *Also decides* that the Technology Executive Committee and the Climate Technology Centre and Network, consistent with their respective functions, should facilitate the effective implementation of the Technology Mechanism, under the guidance of the Conference of the Parties;

119. *Further decides* that the Technology Executive Committee shall further implement the framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention adopted by decision 4/CP.7 and enhanced by decision 3/CP.13;

120. *Decides* that priority areas that could be considered under the Convention may include:

(a) Development and enhancement of the endogenous capacities and technologies of developing country Parties, including cooperative research, development and demonstration programmes;

(b) Deployment and diffusion of environmentally sound technologies and know-how in developing country Parties;

(c) Increased public and private investment in technology development, deployment, diffusion and transfer;

(d) Deployment of soft and hard technologies for the implementation of adaptation and mitigation actions;

(e) Improved climate change observation systems and related information management;

(f) Strengthening of national systems of innovation and technology innovation centres;

(g) Development and implementation of national technology plans for mitigation and adaptation;

121. *Also decides* that the functions of the Technology Executive Committee shall be to:

(a) Provide an overview of technological needs and analysis of policy and technical issues related to the development and transfer of technologies for mitigation and adaptation;

(b) Consider and recommend actions to promote technology development and transfer, in order to accelerate action on mitigation and adaptation;

(c) Recommend guidance on policies and programme priorities related to technology development and transfer with special consideration given to the least developed country Parties;

(d) Promote and facilitate collaboration on the development and transfer of technologies for mitigation and adaptation between governments, the private sector, non-profit organizations and academic and research communities;

(e) Recommend actions to address the barriers to technology development and transfer in order to enable enhanced action on mitigation and adaptation;

(f) Seek cooperation with relevant international technology initiatives, stakeholders and organizations, and promote coherence and cooperation across technology activities, including activities under and outside of the Convention;

(g) Catalyse the development and use of technology road maps or action plans at the international, regional and national levels through cooperation between relevant stakeholders, particularly governments and relevant organizations or bodies, including the development of best practice guidelines as facilitative tools for action on mitigation and adaptation;

122. *Further decides* that the Technology Executive Committee shall have the mandate and composition as contained in appendix IV to this decision;

123. *Decides* that the Climate Technology Centre shall facilitate a network of national, regional, sectoral and international technology networks, organizations and initiatives with a view to engaging the participants of the Network effectively in the following functions:

(a) At the request of a developing country Party:

(i) Providing advice and support related to the identification of technology needs and the implementation of environmentally sound technologies, practices and processes;

(ii) Facilitating the provision of information, training and support for programmes to build or strengthen capacity of developing countries to identify technology options, make technology choices and operate, maintain and adapt technology;

(iii) Facilitating prompt action on the deployment of existing technology in developing country Parties based on identified needs;

(b) Stimulating and encouraging, through collaboration with the private sector, public institutions, academia and research institutions, the development and transfer of existing and emerging environmentally sound technologies, as well as opportunities for North–South, South–South and triangular technology cooperation;

(c) Facilitating a network of national, regional, sectoral and international technology centres, networks, organization and initiatives with a view to:

(i) Enhancing cooperation with national, regional and international technology centres and relevant national institutions;

(ii) Facilitating international partnerships among public and private stakeholders to accelerate the innovation and diffusion of environmentally sound technologies to developing country Parties;

- (iii) Providing, at the request of a developing country Party, in-country technical assistance and training to support identified technology actions in developing country Parties;
  - (iv) Stimulating the establishment of twinning centre arrangements to promote North–South, South–South and triangular partnerships, with a view to encouraging cooperative research and development;
  - (v) Identifying, disseminating and assisting with developing analytical tools, policies and best practices for country-driven planning to support the dissemination of environmentally sound technologies;
- (d) Performing other such activities as may be necessary to carry out its functions;

124. *Also decides* to terminate the mandate of the Expert Group on Technology Transfer at the conclusion of the sixteenth session of the Conference of the Parties;

125. *Further decides* that the Technology Executive Committee shall convene its first meeting as soon as practicable following the election of its members and shall elaborate its modalities and procedures taking into account the need to achieve coherence and maintain interactions with other relevant institutional arrangements under and outside of the Convention, for consideration by the Conference of the Parties at its seventeenth session;

126. *Decides* that the Technology Executive Committee and the Climate Technology Centre and Network shall report, on an interim basis<sup>9</sup> and without prejudice to the relationship between the Technology Executive Committee and the Climate Technology Centre and Network as referred to in paragraph 128 (a) below to the Conference of the Parties, through the subsidiary bodies, on their respective activities and the performance of their respective functions;

127. *Also decides* that the Climate Technology Centre and Network and the Technology Executive Committee shall relate so as to promote coherence and synergy;

**Work programme for the Ad Hoc Working Group on Long-term Cooperative Action under the Convention in 2011 on technology development and transfer**

128. *Underlines* the importance of continued dialogue among Parties in 2011 through the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, including on the following matters, with a view to the Conference of the Parties taking a decision at its seventeenth session, in order to make the Technology Mechanism fully operational in 2012:

- (a) The relationship between the Technology Executive Committee and the Climate Technology Centre and Network, and their reporting lines;
- (b) The governance structure of and terms of reference for the Climate Technology Centre and Network and how the Climate Technology Centre will relate to the Network, drawing upon the results of the workshop referred to in paragraph 129 below;
- (c) The procedure for calls for proposals and the criteria to be used to evaluate and select the host of the Climate Technology Centre and Network;
- (d) The potential links between the Technology Mechanism and the financial mechanism;
- (e) Consideration of additional functions for the Technology Executive Committee and the Climate Technology Centre and Network;

<sup>9</sup> Until there is a decision on the issues contained in paragraph 128 (a) below.

129. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to convene an expert workshop, in conjunction with one of its sessions in 2011, on the matters contained in paragraph 128 above, drawing upon the preliminary work undertaken by the Expert Group on Technology Transfer, and to report on the results of this workshop at that session;

### C. Capacity-building

*Reaffirming* that capacity-building is essential to enable developing country Parties to participate fully in addressing the challenges of climate change, and to implement effectively their commitments under the Convention,

*Recalling* the provisions related to capacity-building for developing country Parties contained in relevant decisions adopted by the Conference of the Parties, especially decision 2/CP.7,

*Taking into account* that the scope of capacity-building and related needs as contained in the annex to decision 2/CP.7 and the key factors identified in decision 2/CP.10 remain valid,

*Acknowledging* that capacity-building is cross-cutting in nature and an integral part of enhanced action on mitigation, adaptation, technology development and transfer, and access to financial resources,

*Also acknowledging* that, in addition, there may be specific capacity-building activities that require support to enable developing countries to undertake the enhanced implementation of the Convention,

*Reaffirming* that capacity-building should be a continuous, progressive and iterative process that is participatory, country-driven and consistent with national priorities and circumstances,

130. *Decides* that capacity-building support to developing country Parties should be enhanced with a view to strengthening endogenous capacities at the subnational, national or regional levels, as appropriate, taking into account gender aspects, to contribute to the achievement of the full, effective and sustained implementation of the Convention, by, inter alia:

- (a) Strengthening relevant institutions at various levels, including focal points and national coordinating bodies and organizations;
- (b) Strengthening networks for the generation, sharing and management of information and knowledge, including through North–South, South–South and triangular cooperation;
- (c) Strengthening climate change communication, education, training and public awareness at all levels;
- (d) Strengthening integrated approaches and the participation of various stakeholders in relevant social, economic and environmental policies and actions;
- (e) Supporting existing and emerging capacity-building needs identified in the areas of mitigation, adaptation, technology development and transfer, and access to financial resources;

131. *Also decides* that financial resources for enhanced action on capacity-building in developing country Parties should be provided by Parties included in Annex II to the Convention and other Parties in a position to do so through the current and any future

operating entities of the financial mechanism, as well as through various bilateral, regional and other multilateral channels, as appropriate;

132. *Encourages* developed country Parties to continue to report through their national communications, in accordance with the “Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications”, on the support they have provided for capacity-building in developing country Parties;

133. *Invites* developed country Parties in a position to do so to provide information, through annual submissions to the secretariat and other appropriate channels, on the support they have provided for capacity-building in developing country Parties;

134. *Encourages* developing country Parties to continue to report through their national communications, in accordance with the “Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention”, on progress made in enhancing their capacity to address climate change, including on the use of the support received;

135. *Invites* developing country Parties in a position to do so to provide information, through annual submissions to the secretariat and other appropriate channels, on progress made in enhancing their capacity to address climate change, including on the use of the support received;

136. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to consider ways to further enhance the monitoring and review of the effectiveness of capacity-building, for consideration by the Conference of the Parties at its seventeenth session;

137. *Also requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to further elaborate the modalities regarding institutional arrangements for capacity-building, for consideration by the Conference of the Parties at its seventeenth session;

## V. Review

138. *Decides* to periodically review the adequacy of the long-term global goal referred to in paragraph 4 above, in the light of the ultimate objective of the Convention, and overall progress towards achieving it, in accordance with the relevant principles and provisions of the Convention;

139. Also decides that:

(a) This review should be guided by the principles of equity, and common but differentiated responsibilities and respective capabilities and take into account, inter alia:

(i) The best available scientific knowledge, including the assessment reports of the Intergovernmental Panel on Climate Change;

(ii) Observed impacts of climate change;

(iii) An assessment of the overall aggregated effect of the steps taken by Parties in order to achieve the ultimate objective of the Convention;

(iv) Consideration of strengthening the long-term global goal, referencing various matters presented by the science, including in relation to temperature rises of 1.5 °C;

(b) The first review should start in 2013 and should be concluded by 2015;

(c) The Conference of the Parties shall take appropriate action based on the review;

140. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to further define the scope of this review and develop its modalities, including the required inputs, with a view to their adoption by the Conference of the Parties at its seventeenth session;

## VI. Other matters

### **Parties included in Annex I to the Convention undergoing the process of transition to a market economy**

*Recalling* Article 4, paragraph 6, of the Convention and relevant decisions of the Conference of the Parties, especially decisions 3/CP.7 and 3/CP.13 relating to Parties included in Annex I to the Convention undergoing the process of transition to a market economy,

*Noting* that Parties included in Annex I to the Convention undergoing the process of transition to a market economy are not included in Annex II to the Convention and as such are not subject to the provisions of Article 4, paragraphs 3 and 4, of the Convention,

*Recalling* that Article 4, paragraph 6, of the Convention provides that a certain degree of flexibility shall be allowed by the Conference of the Parties to Parties included in Annex I to the Convention undergoing the process of transition to a market economy,

*Taking note* of the submissions from Parties contained in document FCCC/AWGLCA/2010/MISC.6/Add.2,

141. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to continue consideration of these issues with a view to promoting access by Parties included in Annex I to the Convention undergoing the process of transition to a market economy to technology, capacity-building and finance in order to enhance their ability to develop low-emission economies;

### **Parties included in Annex I to the Convention whose special circumstances are recognized by the Conference of the Parties**

*Recalling* decision 26/CP.7 that amended the list in Annex II to the Convention by deleting the name of Turkey,

*Recalling* decision 26/CP.7 that invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Parties included in Annex I to the Convention,

*Recognizing* that Turkey is in a situation different from that of other Parties included in Annex I to the Convention,

*Noting* that Turkey is not included in Annex II to the Convention and as such is not subject to the commitments of Article 4, paragraphs 3–5, of the Convention and that Turkey is eligible for support under Article 4, paragraph 5, of the Convention,

*Taking note* of the submission from Turkey contained in document FCCC/AWGLCA/2010/MISC.8,

142. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to continue consideration of these issues with a view to promoting access by Turkey to finance, technology and capacity-building in order to enhance its ability to better implement the Convention;

## VII. Extension of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention

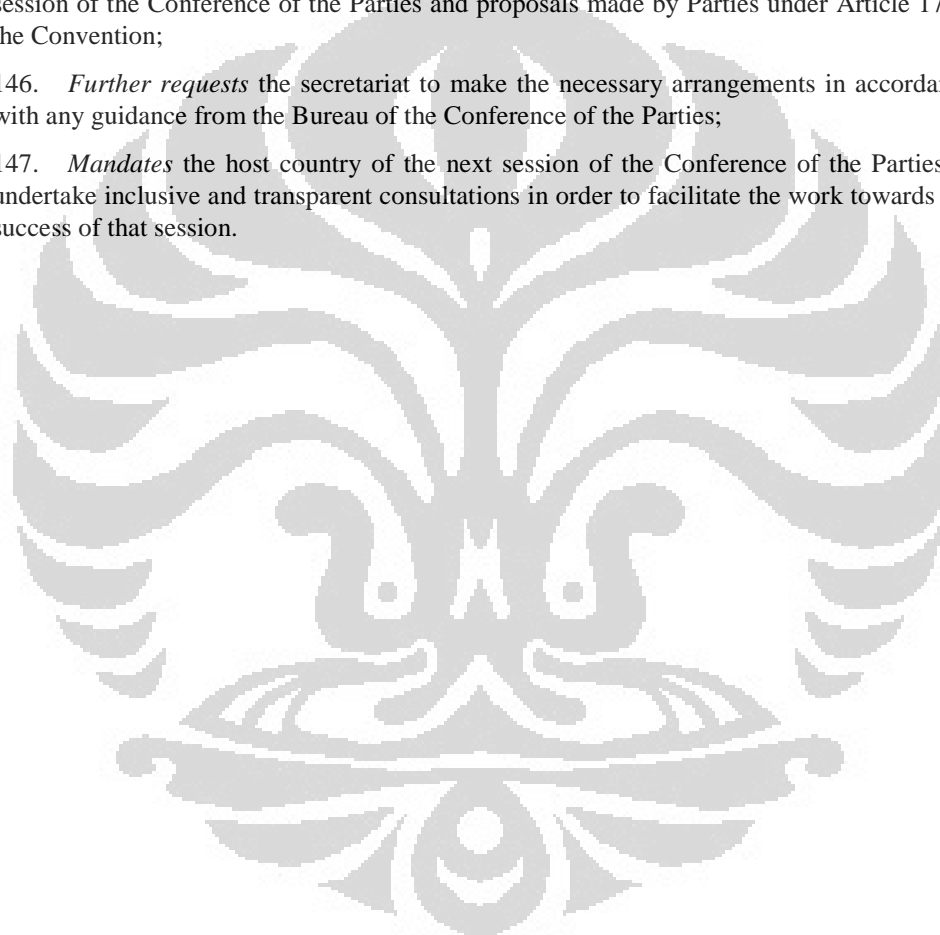
143. *Decides* to extend the Ad Hoc Working Group on Long-term Cooperative Action under the Convention for one year, in order for it to continue its work with a view to carrying out the undertakings contained in this decision and present the results to the Conference of the Parties for consideration at its seventeenth session;

144. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to continue its work drawing on the documents under its consideration;

145. *Also requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to continue discussing legal options with the aim of completing an agreed outcome based on decision 1/CP.13 (Bali Action Plan), the work done at the sixteenth session of the Conference of the Parties and proposals made by Parties under Article 17 of the Convention;

146. *Further requests* the secretariat to make the necessary arrangements in accordance with any guidance from the Bureau of the Conference of the Parties;

147. *Mandates* the host country of the next session of the Conference of the Parties to undertake inclusive and transparent consultations in order to facilitate the work towards the success of that session.



## Appendix I

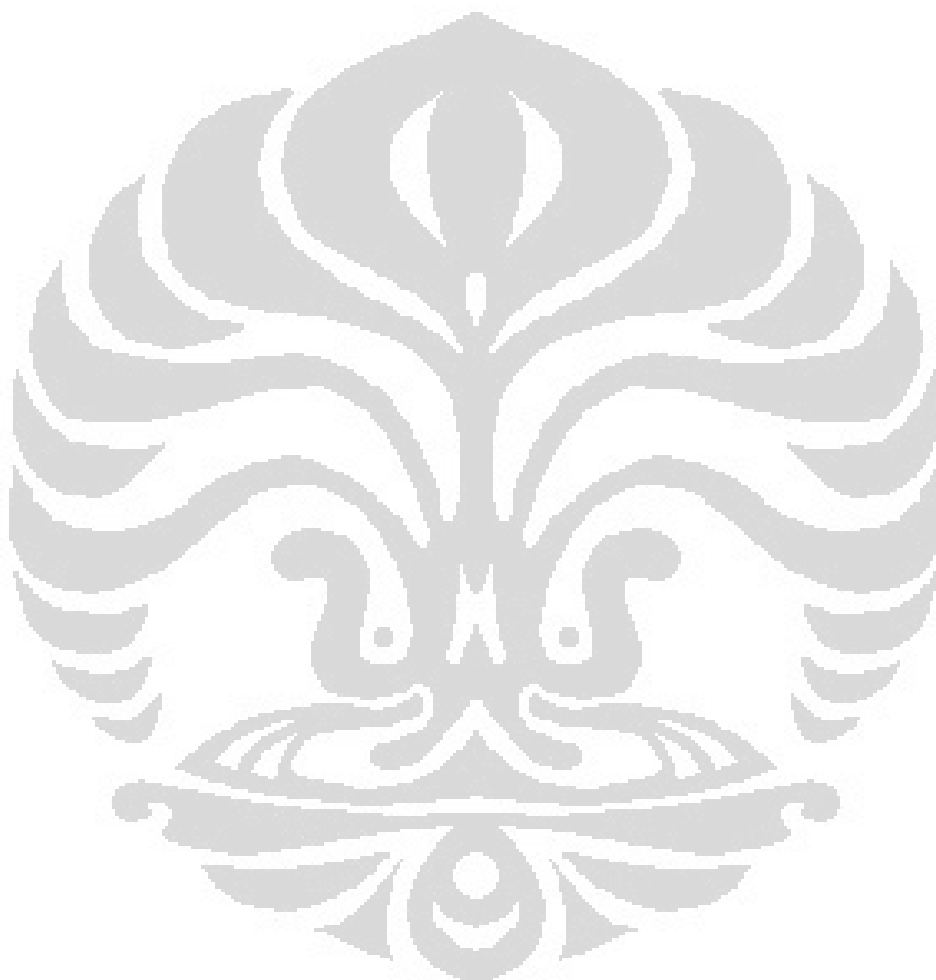
### **Guidance and safeguards for policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries**

1. The activities referred to in paragraph 70 of this decision should:
  - (a) Contribute to the achievement of the objective set out in Article 2 of the Convention;
  - (b) Contribute to the fulfilment of the commitments set out in Article 4, paragraph 3, of the Convention;
  - (c) Be country-driven and be considered options available to Parties;
  - (d) Be consistent with the objective of environmental integrity and take into account the multiple functions of forests and other ecosystems;
  - (e) Be undertaken in accordance with national development priorities, objectives and circumstances and capabilities and should respect sovereignty;
  - (f) Be consistent with Parties' national sustainable development needs and goals;
  - (g) Be implemented in the context of sustainable development and reducing poverty, while responding to climate change;
  - (h) Be consistent with the adaptation needs of the country;
  - (i) Be supported by adequate and predictable financial and technology support, including support for capacity-building;
  - (j) Be results-based;
  - (k) Promote sustainable management of forests;
2. When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:
  - (a) That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;
  - (b) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;
  - (c) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples;
  - (d) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of this decision;
  - (e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the



protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits;<sup>1</sup>

- (f) Actions to address the risks of reversals;
- (g) Actions to reduce displacement of emissions.



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<sup>1</sup> Taking into account the need for sustainable livelihoods of indigenous peoples and local communities and their interdependence on forests in most countries, reflected in the United Nations Declaration on the Rights of Indigenous Peoples, as well as the International Mother Earth Day.

## Appendix II

### **Work programme of the Subsidiary Body for Scientific and Technological Advice on policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries**

In the development of its work programme, the Subsidiary Body for Scientific and Technological Advice is requested to:

- (a) Identify land use, land-use change and forestry activities in developing countries, in particular those that are linked to the drivers of deforestation and forest degradation, identify the associated methodological issues to estimate emissions and removals resulting from these activities, and assess the potential contribution of these activities to the mitigation of climate change, and report on the findings and outcomes of this work to the Conference of the Parties (COP) at its eighteenth session on the outcomes of the work referred to in this paragraph;
- (b) Develop modalities relating to paragraphs 71 (b) and (c) and guidance relating to paragraph 71 (d) of this decision, for consideration by the COP at its seventeenth session;
- (c) Develop, as necessary, modalities for measuring, reporting and verifying anthropogenic forest-related emissions by sources and removals by sinks, forest carbon stocks, and forest carbon stock and forest-area changes resulting from the implementation of the activities referred to in paragraph 70 of this decision, consistent with any guidance on measuring, reporting and verifying nationally appropriate mitigation actions by developing country Parties agreed by the COP, taking into account methodological guidance in accordance with decision 4/CP.15, for consideration by the COP at its seventeenth session.

## Appendix III

### Terms of reference for the design of the Green Climate Fund

1. The Transitional Committee shall develop and recommend to the Conference of the Parties for its approval at its seventeenth session operational documents that address, inter alia:

(a) The legal and institutional arrangements for the establishment and operationalization of the Green Climate Fund;

(b) The rules of procedure of the Green Climate Fund Board and other governance issues related to the Board;

(c) Methods to manage the large scale of financial resources from a number of sources and deliver through a variety of financial instruments, funding windows and access modalities, including direct access, with the objective of achieving a balanced allocation between adaptation and mitigation;

(d) The financial instruments that the Fund can use to achieve its priorities;

(e) Methods to enhance complementarity between the Fund's activities and those of other bilateral, regional and multilateral funding mechanisms and institutions;

(f) The role of the Fund's secretariat and the procedure for selecting and/or establishing the secretariat;

(g) A mechanism to ensure periodic independent evaluation of the Fund's performance;

(h) Mechanisms to ensure financial accountability and to evaluate the performance of activities supported by the Fund, in order to ensure the application of environmental and social safeguards as well as internationally accepted fiduciary standards and sound financial management to the Fund's activities;

(i) Mechanisms to ensure the provision of appropriate expert and technical advice, including from relevant thematic bodies established under the Convention;

(j) Mechanisms to ensure stakeholder input and participation.

2. In the conduct of its work, the Transitional Committee shall:

(a) Convene its first meeting by March 2011;

(b) Encourage input from all Parties and from relevant international organizations and observers;

(c) Take into account the findings contained in relevant reports.

## Appendix IV

### Composition and mandate of the Technology Executive Committee

1. The Technology Executive Committee shall comprise 20 expert members, elected by the Conference of the Parties (COP), serving in their personal capacity and nominated by Parties with the aim of achieving a fair and balanced representation, as follows:
  - (a) Nine members from Parties included in Annex I to the Convention (Annex I Parties);
  - (b) Three members from each of the three regions of the Parties not included in Annex I to the Convention (non-Annex I Parties), namely Africa, Asia and the Pacific, and Latin America and the Caribbean, one member from a small island developing State and one member from a least developed country Party.
2. Decisions will be taken according to the rule of consensus.
3. Parties are encouraged to nominate senior experts to the Technology Executive Committee, with a view to achieving, within the membership, an appropriate balance of technical, legal, policy, social development and financial expertise relevant to the development and transfer of technology for adaptation and mitigation, taking into account the need to achieve gender balance in accordance with decision 36/CP.7.
4. Members shall serve for a term of two years and shall be eligible to serve a maximum of two consecutive terms of office. The following rules shall apply:
  - (a) Half of the members shall be elected initially for a term of three years and half of the members shall be elected for a term of two years;
  - (b) Thereafter, the COP shall elect every year a member for a term of two years;
  - (c) The members shall remain in office until their successors are elected.
5. The Technology Executive Committee shall elect annually a chair and a vice-chair from among its members for a term of one year each, with one being a member from an Annex I Party and the other being a member from a non-Annex I Party. The positions of chair and vice-chair shall alternate annually between a member from an Annex I Party and a member from a non-Annex I Party.
6. If the chair is temporarily unable to fulfil the obligations of the office, the vice-chair shall serve as chair. In the absence of the chair and vice-chair at a particular meeting, any other member designated by the Technology Executive Committee shall temporarily serve as the chair of that meeting.
7. If the chair or vice-chair is unable to complete the term of office, the Technology Executive Committee shall elect a replacement to complete the term of office, taking into account paragraph 5 above.
8. If a member of the Technology Executive Committee resigns or is otherwise unable to complete the assigned term of office or to perform the functions of that office, the Technology Executive Committee may decide, bearing in mind the proximity of the next session of the COP, to appoint another member from the same constituency to replace said member for the remainder of that member's mandate, in which case the appointment shall count as one term.
9. The Technology Executive Committee, in performing its functions, should draw upon outside expertise, including the UNFCCC roster of experts and the Climate

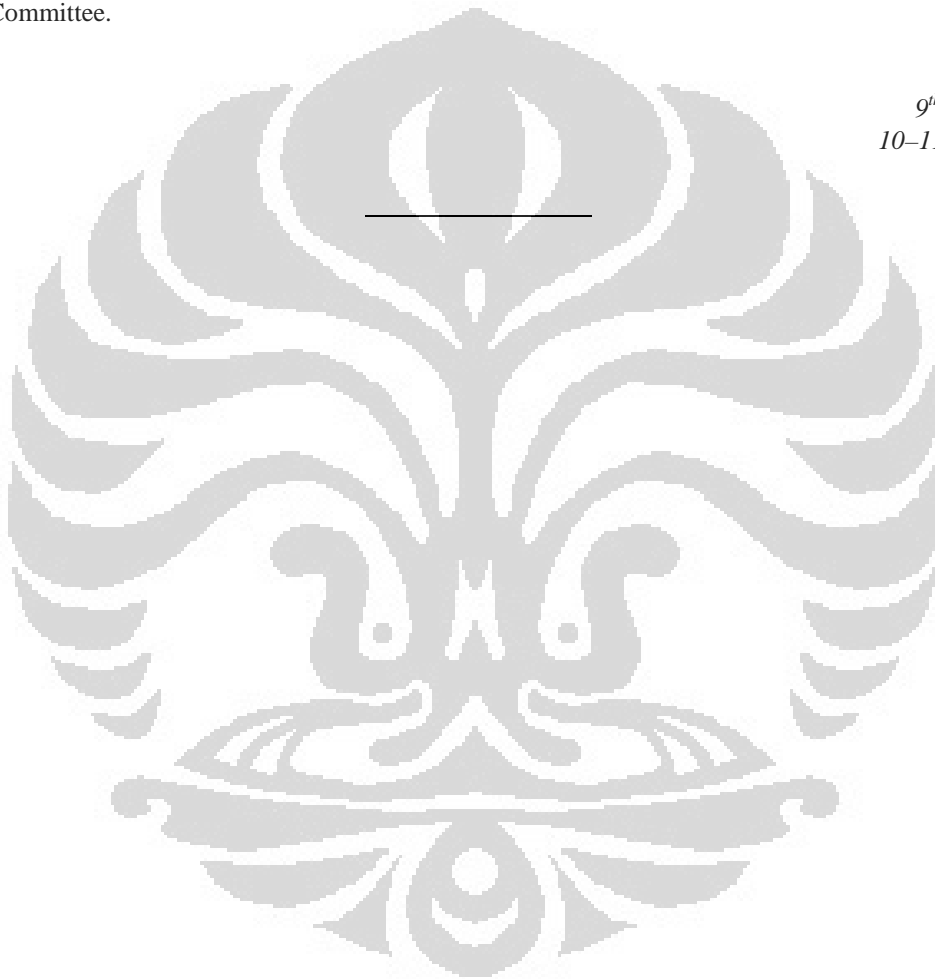
Technology Centre and Network, to provide advice, including as expert advisers at its meetings.

10. The Technology Executive Committee should seek input from intergovernmental and international organizations and the private sector and may seek input from civil society in undertaking its work. It may invite advisers drawn from relevant intergovernmental and international organizations as well as the private sector and civil society to participate in its meetings as expert advisers on specific issues as they arise.

11. The meetings of the Technology Executive Committee shall be open to attendance by accredited observer organizations, except where otherwise decided by the Technology Executive Committee.

12. The secretariat shall support and facilitate the work of the Technology Executive Committee.

*9<sup>th</sup> plenary meeting  
10–11 December 2010*



Advance unedited version

**Draft decision -/CP.17**

**Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action**

**Proposal by the President**

*The Conference of the Parties,*

*Recognizing* that climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires to be urgently addressed by all Parties, and acknowledging that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions,

*Noting with grave concern* the significant gap between the aggregate effect of Parties' mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with having a likely chance of holding the increase in global average temperature below 2 °C or 1.5 °C above pre-industrial levels,

*Recognizing* that fulfilling the ultimate objective of the Convention will require strengthening the multilateral, rules-based regime under the Convention,

*Noting* decision X/CMP.7 [Title],

*Also noting* decision X/CP.17 [Title],

1. *Decides* to extend the Ad Hoc Working Group on Long-term Cooperative Action under the Convention for one year in order for it to continue its work and reach the agreed outcome pursuant to decision 1/CP.13 (Bali Action Plan) through decisions adopted by the sixteenth, seventeenth and eighteenth sessions of the Conference of the Parties, at which time the Ad Hoc Working Group on Long-term Cooperative Action under the Convention shall be terminated;
2. *Also decides* to launch a process to develop a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties, through a subsidiary body under the Convention hereby established and to be known as the Ad Hoc Working Group on the Durban Platform for Enhanced Action;
3. *Further decides* that the Ad Hoc Working Group on the Durban Platform for Enhanced Action; shall start its work as a matter of urgency in the first half of 2012 and shall report to future sessions of the Conference of the Parties on the progress of its work;
4. *Decides* that the Ad Hoc Working Group on the Durban Platform for Enhanced Action shall complete its work as early as possible but no later than 2015 in order to adopt this protocol, legal instrument or agreed outcome with legal force at the twenty-first session

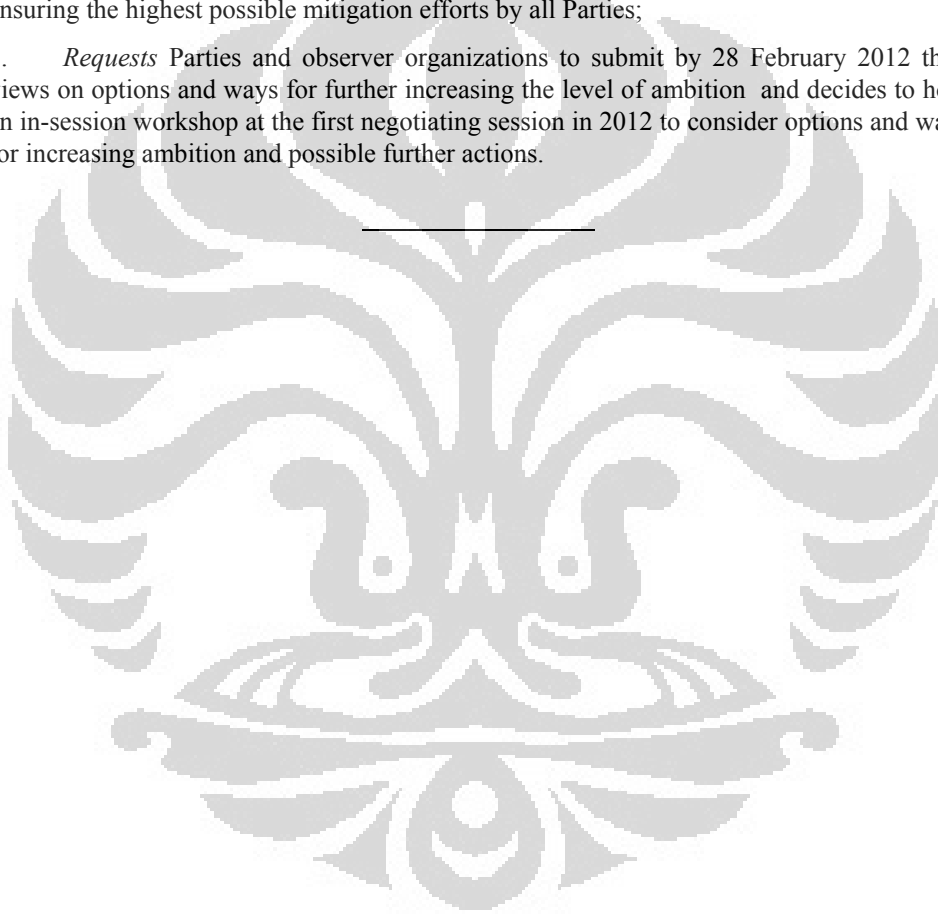
of the Conference of the Parties and for it to come into effect and be implemented from 2020;

5. *Also decides* that the Ad Hoc Working Group on the Durban Platform for Enhanced Action shall plan its work in the first half of 2012, including, inter alia, on mitigation, adaptation, finance, technology development and transfer, transparency of action, and support and capacity-building, drawing upon submissions from Parties and relevant technical, social and economic information and expertise;

6. *Further decides* that the process shall raise the level of ambition and shall be informed, inter alia, by the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, the outcomes of the 2013–2015 review and the work of the subsidiary bodies;

7. *Decides* to launch a workplan on enhancing mitigation ambition to identify and to explore options for a range of actions that can close the ambition gap with a view to ensuring the highest possible mitigation efforts by all Parties;

8. *Requests* Parties and observer organizations to submit by 28 February 2012 their views on options and ways for further increasing the level of ambition and decides to hold an in-session workshop at the first negotiating session in 2012 to consider options and ways for increasing ambition and possible further actions.



## Green Climate Fund – report of the Transitional Committee

### Draft decision -/CP.17

*The Conference of the Parties,*

*Recalling* its decision 1/CP.16,

1. *Welcomes* the report of the Transitional Committee (FCCC/CP/2011/6 and Add.1), taking note with appreciation of the work of the Transitional Committee in responding to its mandate given in decision 1/CP.16, paragraph 109;
2. *Approves* the governing instrument for the Green Climate Fund annexed to this decision;
3. *Decides* to designate the Green Climate Fund as an operating entity of the Financial Mechanism of the Convention, in accordance with Article 11 of the Convention, with arrangements to be concluded between the Conference of the Parties and the Fund at the eighteenth session of the Conference of the Parties to ensure that it is accountable to and functions under the guidance of the Conference of the Parties to support projects, programmes, policies and other activities in developing country Parties;
4. *Notes* that the Green Climate Fund will be guided by the principles and provisions of the Convention;
5. *Decides* to provide guidance to the Board of the Green Climate Fund, including on matters related to policies, programme priorities and eligibility criteria and matters related thereto, taking into account the Board's annual reports to the Conference of the Parties on its activities;
6. *Requests* the Board to operationalize the Fund in an expedited manner;
7. *Also requests* the Board to develop a transparent no-objection procedure to be conducted through national designated authorities referred to in paragraph 46 of the governing instrument, in order to ensure consistency with national climate strategies and plans and a country driven approach and to provide for effective direct and indirect public and private sector financing by the Green Climate Fund. *Further requests* the Board to determine this procedure prior to approval of funding proposals by the Fund;
8. *Further requests* the Board to balance the allocation of the Green Climate Fund resources between adaptation and mitigation activities;
9. *Stresses* the need to secure funding for the Green Climate Fund, taking into account paragraphs 29 and 30 of the governing instrument, to facilitate its expeditious operationalization, and requests the Board to establish necessary policies and procedures, which will enable an early and adequate replenishment process;
10. *Invites* Parties, through their regional groupings and constituencies, to submit their nominations for the members of the Board to the interim secretariat by 31 March 2012, in accordance with paragraph 11 of the governing instrument for the Green Climate Fund, with the twelve seats for developing country Parties to be distributed as follows:
  - (a) Three members and alternate members from Asia-Pacific;
  - (b) Three members and alternate members from Africa;



- (c) Three members and alternate members from Latin America and the Caribbean;
- (d) One member and alternate member from Small Island Developing States;
- (e) One member and alternate member from Least Developed Country Parties; and
- (f) One member from developing country Parties not included in the regional groups and constituencies above; and one alternate member to rotate between developing country Parties included in the groups and constituencies listed above;

11. *Decides* that the Green Climate Fund be conferred juridical personality and legal capacity and shall enjoy such privileges and immunities related to the discharge and fulfilment of its functions, in accordance with paragraphs 7 and 8 of the governing instrument;

12. *Invites* Parties, in line with the objectives set forth in paragraph 11 above, to submit to the Board expressions of interest for hosting the Green Climate Fund by 15 April 2012, based on the following criteria:

(a) The ability to confer and/or recognize juridical personality and legal capacity to the Fund for the protection of its interests and the exercise of its functions, to give effect to paragraphs 7 and 8 of the governing instrument, including but not limited to the ability to contract, acquire and dispose of immovable and movable property, and institute legal proceedings;

(b) The ability to provide privileges and immunities to the Fund as are necessary for the fulfilment of its purposes, and to the officials of the Fund as are necessary for the independent exercise of their official functions in connection with the Fund;

(c) Financial arrangements, administrative and logistical support to the Fund;

(d) Any other information that the host country wishes to provide;

13. *Requests* the Board, following the receipt of expressions of interest, to conduct an open and transparent process for the selection of the host country, and decide on a host country for endorsement by the Conference of the Parties at its eighteenth session, in accordance with paragraph 22 of the governing instrument;

14. *Requests* the Board and the host country of the Green Climate Fund to develop, in accordance with paragraphs 7 and 8 of the governing instrument, the legal and administrative arrangements for hosting the Fund and to ensure that juridical personality and legal capacity are conferred to the Fund, and privileges and immunities as are necessary are granted to the Fund and its officials in an expedited manner;

15. *Also requests* the Board to establish the independent secretariat of the Green Climate Fund in the host country in an expedited manner as soon as possible, in accordance with paragraph 19 of the governing instrument;

16. *Invites* the Board to select the trustee of the Green Climate Fund through an open, transparent and competitive bidding process in a timely manner to ensure there is no discontinuity in trustee services;

17. *Requests* the Board to initiate a process to collaborate with the Adaptation Committee and the Technology Executive Committee, as well as other relevant thematic bodies under the Convention, to define linkages between the Fund and these bodies, as appropriate;

18. *Recognizing* the need to facilitate the immediate functioning of the Green Climate Fund and ensure its independence, requests the UNFCCC secretariat jointly with the Global Environment Facility secretariat to take the necessary administrative steps to set up the interim secretariat of the Green Climate Fund as an autonomous unit within the UNFCCC secretariat premises without undue delay after the seventeenth session of the Conference of the Parties so that the interim secretariat can provide technical, administrative and logistical support to the Board until the independent secretariat of the Green Climate Fund is established;

19. *Decides* that the interim arrangements should terminate no later than the nineteenth session of the Conference of the Parties;
20. *Decides* that the interim secretariat shall be fully accountable to the Board and shall function under its guidance and authority, and that its head shall report to the Board;
21. *Urges* the Board to move promptly to appoint the head of the interim secretariat;
22. *Decides* that the criteria for the selection of the head of the interim secretariat shall include, inter alia, expertise in the design or management of funds, relevant administrative and management experience, experience in or working with developing countries, and policy expertise;
23. *Requests* the interim secretariat to make arrangements for convening the first Board meeting by 30 April 2012;
24. *Welcomes* the offers of Switzerland and the Republic of Korea to host the first and second meetings of the Board respectively, and invites Parties to host subsequent meetings;
25. *Invites* Parties to make financial contributions for the start-up of the Green Climate Fund, including administrative costs of the Board and its interim secretariat;
26. *Welcomes* the generous offers of the Republic of Korea, Germany and Denmark to contribute to the start-up cost of the Green Climate Fund.



## **Annex**

### **Governing instrument for the Green Climate Fund**

The Green Climate Fund (hereinafter the “Fund”) is hereby established and will operate in accordance with the following provisions:

#### **I. Objectives and guiding principles**

1. Given the urgency and seriousness of climate change, the purpose of the Fund is to make a significant and ambitious contribution to the global efforts towards attaining the goals set by the international community to combat climate change.
2. The Fund will contribute to the achievement of the ultimate objective of the United Nations Framework Convention on Climate Change (UNFCCC). In the context of sustainable development, the Fund will promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change, taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change.
3. The Fund will be guided by the principles and provisions of the Convention. The Fund will operate in a transparent and accountable manner guided by efficiency and effectiveness. The Fund will play a key role in channelling new, additional, adequate and predictable financial resources to developing countries and will catalyse climate finance, both public and private, and at the international and national levels. The Fund will pursue a country-driven approach and promote and strengthen engagement at the country level through effective involvement of relevant institutions and stakeholders. The Fund will be scalable and flexible and will be a continuously learning institution guided by processes for monitoring and evaluation. The Fund will strive to maximize the impact of its funding for adaptation and mitigation, and seek a balance between the two, while promoting environmental, social, economic and development co-benefits and taking a gender-sensitive approach.

#### **II. Governance and institutional arrangements**

##### **A. Relationship to the Conference of the Parties**

4. The Fund will be designated as an operating entity of the financial mechanism under Article 11 of the Convention and will be accountable to and function under the guidance of the Conference of the Parties (COP).
5. The Fund will be governed and supervised by a Board that will have full responsibility for funding decisions.
6. Arrangements will be concluded between the COP and the Fund, consistent with Article 11 of the Convention, to ensure that the Fund is accountable to and functions under the guidance of the COP. In order to ensure accountability to the COP, pursuant to Article 11, paragraph 3, the Board will:
  - (a) Receive guidance from the COP, including on matters related to policies, programme priorities and eligibility criteria and matters related thereto;
  - (b) Take appropriate action in response to the guidance received;
  - (c) Submit annual reports to the COP for its consideration and receive further guidance.

## **B. Legal status**

7. In order to operate effectively internationally, the Fund will possess juridical personality and will have such legal capacity as is necessary for the exercise of its functions and the protection of its interests.

8. The Fund will enjoy such privileges and immunities as are necessary for the fulfilment of its purposes. The officials of the Fund will similarly enjoy such privileges and immunities as are necessary for the independent exercise of their official functions in connection with the Fund.

## **C. Rules of procedure of the Board**

### **1. Composition**

9. The Board will have 24 members, composed of an equal number of members from developing and developed country Parties. Representation from developing country Parties will include representatives of relevant United Nations regional groupings and representatives from small island developing States (SIDS) and the least developed countries (LDCs).

10. Each Board member will have an alternate member, with alternate members entitled to participate in the meetings of the Board only through the principal member, without the right to vote, unless they are serving as the member. During the absence of the member from all or part of a meeting of the Board, his or her alternate will serve as the member.

### **2. Selection of Board members**

11. The members of the Board and their alternates will be selected by their respective constituency or regional group within a constituency. Members of the Board will have the necessary experience and skills, notably in the areas of climate change and development finance, with due consideration given to gender balance.

### **3. Term of membership**

12. Members and alternate members will serve for a term of three years and be eligible to serve additional terms as determined by their constituency.

### **4. Chairmanship**

13. Two Co-Chairs of the Board will be elected by the Board members from within their membership to serve for a period of one year, with one being a member from a developed country Party and the other being a member from a developing country Party.

### **5. Decision-making**

14. Decisions of the Board will be taken by consensus of the Board members. The Board will develop procedures for adopting decisions in the event that all efforts at reaching consensus have been exhausted.

### **6. Quorum**

15. A two-thirds majority of Board members must be present at a meeting to constitute a quorum.

### **7. Observers**

16. The Board will make arrangements, including developing and operating accreditation processes, to allow for effective participation by accredited observers in its meetings. The Board will invite, to participate as active observers: two civil society representatives, one each from developing and developed countries, and two private sector representatives, one each from developing and developed countries.

## **8. Additional rules of procedure**

17. Additional rules of procedures will be developed by the Board.

## **D. Role and functions of the Board**

18. The Board of the Fund will:

- (a) Oversee the operation of all relevant components of the Fund;
- (b) Approve operational modalities, access modalities and funding structures;
- (c) Approve specific operational policies and guidelines, including for programming, project cycle, administration, and financial management;
- (d) Approve funding in line with the Fund's principles, criteria, modalities, policies and programmes;
- (e) Develop environmental and social safeguards and fiduciary principles and standards that are internationally accepted;
- (f) Develop criteria and application processes for the accreditation of implementing entities of the Fund and accredit implementing entities and withdraw such accreditation;
- (g) Establish subcommittees and panels and define their terms of reference, as appropriate;
- (h) Establish additional thematic windows and/or substructures to address specific activities, as appropriate;
- (i) Establish a framework for the monitoring and evaluation of performance and the financial accountability of activities supported by the Fund and any necessary external audits;
- (j) Review and approve the administrative budget of the Fund and arrange for performance reviews and audits;
- (k) Appoint the Executive Director of the secretariat,
- (l) Appoint the head of the evaluation unit and the heads of all accountability units;
- (m) Receive guidance and take action in response to any guidance from the COP and prepare annual reports to the COP on its activities;
- (n) Develop working and coordination arrangements with other relevant bodies under the Convention and other relevant international institutions;
- (o) Select, appoint and enter into legal and administrative arrangements with the trustee;
- (p) Exercise such other functions as may be appropriate to fulfil the objectives of the Fund.

## **E. Secretariat**

### **1. Establishment of the secretariat**

19. The Fund will establish a secretariat, which will be fully independent. The secretariat will service and be accountable to the Board. It will have effective management capabilities to execute the day-to-day operations of the Fund.

20. The secretariat will be headed by an Executive Director with the necessary experiences and skills, who will be appointed by and be accountable to the Board. The Board will approve the job description and qualifications for the Executive Director. The Executive Director will be selected through a merit-based, open and transparent process.

21. The secretariat will be staffed with professional staff with relevant experience. The staff selection will be managed by the Executive Director and will be open, transparent and based on merit, taking into account geographical and gender balance.

22. The selection of the host country of the Fund will be an open and transparent process. The selection of the host country will be endorsed by the COP.

## **2. Functions**

23. The secretariat will be responsible for the day-to-day operations of the Fund, providing administrative, legal and financial expertise. In particular, the secretariat will:

- (a) Organize and execute all administrative duties;
- (b) Report information on the Fund's activities;
- (c) Liaise with members, implementing entities, and cooperating bilateral and multilateral institutions and agencies;
- (d) Prepare performance reports on the implementation of activities under the Fund;
- (e) Develop the work programme and annual administrative budget of the secretariat and trustee and submit them for approval by the Board;
- (f) Operationalize the project and programme cycle processes;
- (g) Prepare financial agreements related to the specific financing instrument to be concluded with an implementing entity;
- (h) Monitor the financial risks of the outstanding portfolio;
- (i) Work with the trustee to support the Board to enable it to carry out its responsibilities;
- (j) Carry out monitoring and evaluation functions;
- (k) Support the Board in arranging replenishment processes;
- (l) Establish and run effective knowledge management practices;
- (m) Perform any other functions assigned by the Board.

## **F. Trustee**

24. The Fund will have a trustee with administrative competence to manage the financial assets of the Fund. The trustee will maintain appropriate financial records and will prepare financial statements and other reports required by the Board, in accordance with internationally accepted fiduciary standards.

25. The trustee will administer the assets of the Fund only for the purpose of, and in accordance with, the relevant decisions of the Board. The trustee will hold the assets of the Fund separate and apart from the assets of the trustee, but may commingle them for administrative and investment purposes with other assets maintained by the trustee. The trustee will establish and maintain separate records and accounts in order to identify the assets of the Fund.

26. The World Bank will serve as interim trustee for the Fund, subject to a review three years after the operationalization of the Fund.

27. The trustee will be accountable to the Board for the performance of its responsibilities as trustee for the Fund.

## **III. Administrative costs**

28. The Fund will finance the operating costs of the Board, secretariat and trustee.

## **IV. Financial inputs**

29. The Fund will receive financial inputs from developed country Parties to the Convention.
30. The Fund may also receive financial inputs from a variety of other sources, public and private, including alternative sources.

## **V. Operational modalities**

31. The Fund will provide simplified and improved access to funding, including direct access, basing its activities on a country-driven approach and will encourage the involvement of relevant stakeholders, including vulnerable groups and addressing gender aspects.

32. The Board will steer the Fund's operations so that they evolve with the Fund's scale and maturity and will exercise flexibility to allow the Fund to evolve over time and become the main global fund for climate change finance.

### **A. Complementarity and coherence**

33. The Fund shall operate in the context of appropriate arrangements between itself and other existing funds under the Convention, and between itself and other funds, entities, and channels of climate change financing outside the Fund.

34. The Board will develop methods to enhance complementarity between the activities of the Fund and the activities of other relevant bilateral, regional and global funding mechanisms and institutions, to better mobilize the full range of financial and technical capacities. The Fund will promote coherence in programming at the national level through appropriate mechanisms. The Fund will also initiate discussions on coherence in climate finance delivery with other relevant multilateral entities.

### **B. Eligibility**

35. All developing country Parties to the Convention are eligible to receive resources from the Fund. The Fund will finance agreed full and agreed incremental costs for activities to enable and support enhanced action on adaptation, mitigation (including REDD-plus),<sup>1</sup> technology development and transfer (including carbon capture and storage), capacity-building and the preparation of national reports by developing countries.

36. The Fund will support developing countries in pursuing project-based and programmatic approaches in accordance with climate change strategies and plans, such as low-emission development strategies or plans, nationally appropriate mitigation actions (NAMAs), national adaptation plans of action (NAPAs), national adaptation plans (NAPs) and other related activities.

### **C. Funding windows and fund structure**

37. The Fund will have thematic funding windows. Initially the Fund will have windows for adaptation and mitigation. An integrated approach to funding mitigation and adaptation will be used to allow for cross-cutting projects and programmes.

38. The Board shall also ensure adequate resources for capacity-building and technology development and transfer. The Fund will also provide resources for innovative and replicable approaches.

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<sup>1</sup> Reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

39. The Board will consider the need for additional windows. The Board will have the authority to add, modify and remove additional windows and substructures or facilities as appropriate.

#### **1. Readiness and preparatory support**

40. The Fund will provide resources for readiness and preparatory activities and technical assistance, such as the preparation or strengthening of low-emission development strategies or plans, NAMAs, NAPs, NAPAs and for in-country institutional strengthening, including the strengthening of capacities for country coordination and to meet fiduciary principles and standards and environmental and social safeguards, in order to enable countries to directly access the Fund.

#### **2. Private sector**

41. The Fund will have a private sector facility that enables it to directly and indirectly finance private sector mitigation and adaptation activities at the national, regional and international levels.

42. The operation of the facility will be consistent with a country-driven approach.

43. The facility will promote the participation of private sector actors in developing countries, in particular local actors, including small and medium-sized enterprises and local financial intermediaries. The facility will also support activities to enable private sector involvement in SIDS and LDCs.

44. The Board will develop the necessary arrangements, including access modalities, to operationalize the facility.

### **D. Access modalities and accreditation**

45. Access to Fund resources will be through national, regional and international implementing entities accredited by the Board. Recipient countries will determine the mode of access and both modalities can be used simultaneously.

46. Recipient countries may designate a national authority. This national designated authority will recommend to the Board funding proposals in the context of national climate strategies and plans, including through consultation processes. The national designated authorities will be consulted on other funding proposals for consideration prior to submission to the Fund to ensure consistency with national climate strategies and plans.

#### **1. Direct access**

47. Recipient countries will nominate competent subnational, national and regional implementing entities for accreditation to receive funding. The Board will consider additional modalities that further enhance direct access, including through funding entities with a view to enhancing country ownership of projects and programmes.

#### **2. International access**

48. Recipient countries will also be able to access the Fund through accredited international entities, including United Nations agencies, multilateral development banks, international financial institutions and regional institutions.

#### **3. Accreditation**

49. The Board will develop, manage and oversee an accreditation process for all implementing entities based on specific accreditation criteria that reflect the Fund's fiduciary principles and standards and environmental and social safeguards.

### **E. Allocation**

50. The Board will balance the allocation of resources between adaptation and mitigation activities under the Fund and ensure appropriate allocation of resources for other activities.



51. A results-based approach will be an important criterion for allocating resources.

52. In allocating resources for adaptation, the Board will take into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, including LDCs, SIDS and Africa, using minimum allocation floors for these countries as appropriate. The Board will aim for appropriate geographical balance.

## **F. Programming and approval processes**

53. The Fund will have a streamlined programming and approval process to enable timely disbursement. The Board will develop simplified processes for the approval of proposals for certain activities, in particular small-scale activities.

## **VI. Financial instruments**

54. The Fund will provide financing in the form of grants and concessional lending, and through other modalities, instruments or facilities as may be approved by the Board. Financing will be tailored to cover the identifiable additional costs of the investment necessary to make the project viable. The Fund will seek to catalyse additional public and private finance through its activities at the national and international levels.

55. The Fund may employ results-based financing approaches, including, in particular for incentivizing mitigation actions, payment for verified results, where appropriate.

56. Financial management practices and financing agreements will be in keeping with the Fund's fiduciary principles and standards and environmental and social safeguards to be adopted by the Board. The Board will develop an appropriate risk management policy for funding and financial instruments.

## **VII. Monitoring**

57. The programmes and projects, as well as other activities, funded by the Fund will be regularly monitored for impact, efficiency and effectiveness in line with rules and procedures established by the Board. The use of participatory monitoring involving stakeholders will be encouraged.

58. A results measurement framework with guidelines and appropriate performance indicators will be approved by the Board. Performance against these indicators will be reviewed periodically in order to support the continuous improvement of the Fund's impact, effectiveness and operational performance.

## **VIII. Evaluation**

59. There will be periodic independent evaluations of the performance of the Fund in order to provide an objective assessment of the results of the Fund, including its funded activities and its effectiveness and efficiency. The purpose of these independent evaluations is to inform decision-making by the Board and to identify and disseminate lessons learned. The results of the periodic evaluations will be published.

60. To this end, the Board will establish an operationally independent evaluation unit as part of the core structure of the Fund. The head of the unit will be selected by, and will report to, the Board. The frequency and types of evaluation to be conducted will be specified by the unit in agreement with the Board.

61. Reports of the Fund's independent evaluation unit will be provided to the COP for purposes of periodic reviews of the financial mechanism of the Convention.

62. The COP may commission an independent assessment of the overall performance of the Fund, including Board performance.

## **IX. Fiduciary standards**

63. The Board will agree on, adopt, and ensure the application of best practice fiduciary principles and standards to the Fund's entities, the trustee's function related to the Fund, and to all operations, projects and programmes financed by the Fund, including the implementing entities.

64. The Fund will support the strengthening of capacities in recipient countries, where needed, to be able to meet the Fund's fiduciary principles and standards, based on modalities that will be established by the Board.

## **X. Environmental and social safeguards**

65. The Board will agree on and adopt best practice environmental and social safeguards, which shall be applied to all programmes and projects financed using the resources of the Fund.

66. The Fund will support the strengthening of capacities in recipient countries, where needed, to enable them to meet the Fund's environmental and social safeguards, based on modalities that shall be developed by the Board.

## **XI. Accountability mechanisms**

67. The Fund's operations will be subject to an information disclosure policy that will be developed by the Board.

68. The Board will establish an independent integrity unit, to work with the secretariat and report to the Board, to investigate allegations of fraud and corruption in coordination with relevant counterpart authorities.

69. The Board will establish an independent redress mechanism that will report to the Board. The mechanism will receive complaints related to the operation of the Fund and will evaluate and make recommendations.

## **XII. Expert and technical advice**

70. In carrying out its functions the Board will develop mechanisms to draw on appropriate expert and technical advice, including from the relevant thematic bodies established under the Convention, as appropriate.

## **XIII. Stakeholder input and participation**

71. The Board will develop mechanisms to promote the input and participation of stakeholders, including private-sector actors, civil society organizations, vulnerable groups, women and indigenous peoples, in the design, development and implementation of the strategies and activities to be financed by the Fund.

## **XIV. Termination of the Fund**

72. Termination of the Fund will be approved by the COP based on a recommendation of the Board.

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## Draft decision -/CP.17

### Technology Executive Committee – modalities and procedures

*The Conference of the Parties,*

*Recalling* the relevant provisions of the Convention, in particular Article 4, paragraphs 1, 3, 5, 7, 8 and 9,

*Also recalling* its decision 1/CP.16 on the establishment of a Technology Mechanism, comprising a Technology Executive Committee and a Climate Technology Centre and Network, with the objective of enhancing action on technology development and transfer to support action on mitigation and adaptation in order to achieve the full implementation of the Convention,

*Further recalling* that the Technology Executive Committee shall report, on an interim basis, to the Conference of the Parties, through the subsidiary bodies, on its activities and the performance of its functions,

1. *Welcomes* the report on modalities and procedures of the Technology Executive Committee,<sup>1</sup> for consideration by the Conference of the Parties at its seventeenth session, as requested by decision 1/CP.16;
2. *Adopts* the modalities of the Technology Executive Committee as contained in annex I to this decision;
3. *Also adopts* the rules of procedure of the Technology Executive Committee as contained in annex II to this decision;
4. *Notes* that the modalities elaborated by the Technology Executive Committee, which are based on the functions of the Technology Executive Committee as decided by decision 1/CP.16, include the following six key elements:
  - (a) Analysis and synthesis;
  - (b) Policy recommendations;
  - (c) Facilitation and catalysing;
  - (d) Linkage with other institutional arrangements;
  - (e) Engagement of stakeholders;
  - (f) Information and knowledge sharing;
5. *Stresses* the importance of engaging a broad range of stakeholders at the international, regional, national and subnational levels, including public institutions, the business community, academia and non-governmental organizations, in conducting its work, and that its work may require the establishment of institutional interfaces and communication channels at different levels, which would allow the Technology Executive Committee to mobilize and leverage a wider range of expertise and resources;

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<sup>1</sup> FCCC/CP/2011/8.

6. *Requests* the Technology Executive Committee to further elaborate its modalities on linkages with other relevant institutional arrangements under and outside the Convention, in the light of the agreed outcome of the seventeenth session of the Conference of the Parties, and to provide such modalities for consideration by the subsidiary bodies at their thirty-sixth sessions, with a view to recommending the modalities for adoption by the Conference of the Parties at its eighteenth session;

## **B. Activities and performance of the Technology Executive Committee for 2011**

7. *Welcomes* the elected members of the Technology Executive Committee<sup>2</sup> and the election of Mr. Gabriel Blanco (Argentina) as Chair and Mr. Antonio Pflüger (Germany) as Vice-Chair of the Technology Executive Committee for 2012 and acknowledges that Mr. Blanco and Mr. Pflüger acted as Co-Chairs of the first meeting of the Technology Executive Committee in 2011;

8. *Welcomes with appreciation* the report of the Technology Executive Committee on its activities and performance for 2011,<sup>3</sup> including on the outcomes of the group's first meeting, and the timely delivery of its report on modalities and procedures,<sup>4</sup> for consideration by the Conference of the Parties at its seventeenth session, as requested by decision 1/CP.16;

9. *Acknowledges* the late nomination of the members of the Technology Executive Committee for 2011 and agrees, on an exceptional basis and without setting a precedent, that the term of office of the members of the Technology Executive Committee currently in office will end immediately before the first meeting of the Technology Executive Committee in 2014 for those members serving for a term of two years and immediately before the first meeting of the Technology Executive Committee in 2015 for those members serving for a term of three years, as recommended by the Technology Executive Committee at its first meeting;<sup>5</sup>

10. *Also acknowledges* that the Technology Executive Committee expects to develop its rolling workplan for 2012–2013 during its next meeting, in February 2012, and requests that it make such workplan available in its report to the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation<sup>6</sup> at their thirty-sixth sessions;

11. *Encourages* Parties and relevant organizations in a position to do so to supplement the financial resources made available through the UNFCCC core budget for the implementation of the activities of the Technology Executive Committee.

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<sup>2</sup> FCCC/SB/2011/2, annex.

<sup>3</sup> FCCC/SB/2011/2.

<sup>4</sup> FCCC/CP/2011/8.

<sup>5</sup> FCCC/CP/2011/8, paragraph 13.

<sup>6</sup> In accordance with decision 1/CP.16, paragraph 126.

## Annex I

### Modalities of the Technology Executive Committee

#### A. Definitions

1. For the purpose of the modalities and procedures of the Technology Executive Committee:

- (a) The “Convention” means the United Nations Framework Convention on Climate Change (UNFCCC);
- (b) The “COP” means the Conference of the Parties to the Convention;
- (c) “Parties” means Parties to the Convention;
- (d) “Stakeholders” means the entities who have a role in the implementation of the functions of the TEC, or who may affect or be affected by the recommendations and actions of the TEC;
- (e) “National communications” means national communications submitted by Parties in accordance with Articles 4 and 12 of the Convention;
- (f) “TEC” means the Technology Executive Committee;
- (g) “Technology needs assessments” means the technology needs assessments conducted under the framework for meaningful and effective actions to enhance the implementation of Article 4, paragraph 5, of the Convention adopted by decision 4/CP.7 and enhanced by decision 3/CP.13;
- (h) “National adaptation programmes of action” means national adaptation programmes of action referred to in decision 5/CP.7, paragraph 11(c);
- (i) “Nationally appropriate mitigation actions” means nationally appropriate mitigation actions referred to in decision 1/CP.16, chapter III B;
- (j) “National adaptation plans” means national adaptation plans referred to in decision 1/CP.16, paragraph 15;
- (k) “CTCN” means the Climate Technology Centre and Network referred to in decision 1/CP.16, paragraph 117(b);
- (l) “Observers” means the observers to the meetings of the TEC referred to in paragraphs 47 and 49 of the rules of procedure of the TEC;
- (m) “Expert advisers” means the expert advisers to the meetings of the TEC referred to in paragraph 44 of the rules of procedure of the TEC;
- (n) “TT:CLEAR” means the technology transfer information clearing house developed under the technology transfer framework;
- (o) “IPCC” means the Intergovernmental Panel on Climate Change.

#### B. Analysis and synthesis

2. For performing the functions as contained in decision 1/CP.16, paragraph 121(a), with regard to analysis and synthesis, the modalities will include, inter alia, the following:

(a) Producing periodic technology outlooks; collating, collecting and synthesizing a range of information on technology research and development and other technology-related activities from various sources, including, but not limited to, national communications, nationally determined technology needs and technology needs assessments, national adaptation programmes of action, nationally appropriate mitigation actions, national adaptation plans, and technology road maps and action plans; and examining the policy implications and opportunities for advancing technology development and transfer;

(b) Producing a series of technical papers on specific policies and technical issues, including those arising from technology needs assessments;

(c) Conducting a regular overview of existing technology development, transfer initiatives, activities and programmes with a view to identifying key achievements and gaps, good practices and lessons learned.

3. The TEC should aim to produce concise documents including executive summaries that can be useful for high-level policymakers, wherever possible.

4. The TEC should draw upon the best available expertise, liaise with existing organizations and institutions, and produce analysis that is broad-based, in order to ensure the credibility and legitimacy of its recommendations.

5. The TEC should also seek collaboration and, where appropriate, co-produce specific analysis and synthesis reports with relevant expert organizations. As a general option, the TEC could create institutional interfaces to seek inputs from relevant stakeholders in carrying out this function, which could include workshops, dialogues, ad hoc working groups and a designated website. It should also take advantage of possible institutional interfaces established with other constituted bodies under the Convention.

### **C. Policy recommendations**

6. For performing the functions as contained in decision 1/CP.16, paragraph 121(b), (c) and (e), with regard to policy recommendations, the modalities will include, inter alia, the following:

(a) Recommending to the COP, or other relevant bodies under the Convention, actions to promote technology development and transfer and to address barriers;

(b) Recommending guidance on policies and programme priorities related to technology development and transfer, with special consideration given to the least developed country Parties;

7. The TEC may engage stakeholders in formulating the TEC recommendations for action. The stakeholders may include Parties, the COP, other relevant bodies/entities, including the CTCN, operating entities of the financial mechanism of the Convention as well as a range of individual entities that will be affected by the implementation of the recommendations.

8. The TEC could establish working groups or panels composed of relevant experts on certain matters, which could include the members of the TEC, outside experts or both, to advise the TEC in formulating its policy recommendations consistent with the rules of procedure of the TEC.

## **D. Facilitation and catalysing**

9. For performing the functions as contained in decision 1/CP.16, paragraph 121(d), (f) and (g), with regard to facilitating and catalysing actions, the modalities will include, inter alia, the following:

(a) Promoting and collaborating with relevant organizations, resources permitting, in organizing workshops and forums to increase the opportunities for sharing experience with experts in developing and implementing technology road maps and action plans as well as other technology-related activities;

(b) Establishing an inventory of existing collaboration activities and a regular review process, with a view to identifying key achievements and gaps, good practices and lessons learned;

(c) Making recommendations on actions to promote collaboration;

(d) Making recommendations on best practices and relevant tools to develop technology road maps and action plans;

(e) Establishing an inventory of technology road maps and action plans;

(f) Making recommendations on concrete actions, such as an international process for the development of technology road maps and action plans as well as support required to enhance the development of these items, and in particular capacity-building programmes that may be appropriate.

10. The TEC should identify stakeholders for each technology area, taking into consideration that the CTCN, intergovernmental organizations and other technology actors at the national level would be important partners in undertaking the function of developing technology road maps, while general technology cooperation would be an area where international organizations, the private sector, non-governmental organizations and research communities could have an important role to play.

11. The TEC should establish a procedure to involve stakeholders with regard to providing information on cooperative activities including experiences shared, lessons learned and opportunities for collaboration in facilitating and catalysing specific issues on the development and transfer of technologies. The TEC could consider establishing a permanent or issue-based interface with relevant organizations with expertise on climate technologies for the sake of efficiency and effectiveness.

## **E. Linkage with other institutional arrangements**

12. The TEC acknowledged the need to achieve coherence and maintain interactions with other relevant institutional arrangements under and outside of the Convention as requested by decision 1/CP.16, paragraph 125. Without prejudicing the outcome of the negotiations between Parties on the TEC's possible relationships and linkages with the CTCN, the financial mechanism and other institutional arrangements under the Convention being negotiated under the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, the TEC agreed to reconsider its modalities on these matters at its first meeting to be held in 2012, in the light of an expected agreed outcome in this regard at the seventeenth session of the COP.

## **F. Engagement of stakeholders**

13. The TEC should engage a broad range of stakeholders at the international, regional and national levels, including public institutions, the business community, academia and non-governmental organizations, in conducting its work. Stakeholder engagement would be issue-based and would be channelled through work programmes, and may require the establishment of institutional interfaces and communication channels at different levels, which would allow the TEC to mobilize and leverage a wider range of expertise and resources.

14. The TEC could engage relevant stakeholders through, inter alia, the following:

- (a) Offering participation in the TEC meetings as observers or expert advisers, where applicable;
- (b) Engaging stakeholders through other models that the TEC may consider establishing, such as consultative groups, stakeholder forums, technical task forces, etc.

## **G. Information and knowledge sharing**

15. The TEC should disseminate its outputs and facilitate knowledge sharing through a well-functioning information platform that responds to the information and knowledge service requirements of its potential users, including Parties and a wide range of technology actors, experts and stakeholders.

16. The platform would be a tool used to promote the collaboration between various actors and to seek cooperation with relevant international organizations and initiatives. It would support the efforts of the TEC in the following ways: exploring opportunities for information sharing, establishing links with existing knowledge platforms and implementing joint initiatives and programmes.

17. The TEC should consider upgrading TT:CLEAR with an expanded and more strategic focus, tailored to the functions of the TEC, and building on existing technology information networks.



## Annex II

### Rules of procedure of the Technology Executive Committee

#### A. Scope

1. These rules of procedure shall apply to the Technology Executive Committee (TEC) in accordance with decision 1/CP.16, paragraph 125, and appendix IV to that decision on the composition and mandate of the TEC, as well as with any other relevant decisions of the Conference of the Parties (COP).

#### B. Definitions

2. For the purpose of these rules:

- (a) “Convention” means the United Nations Framework Convention on Climate Change (UNFCCC);
- (b) “COP” means the Conference of the Parties to the Convention;
- (c) “CTCN” means the Climate Technology Centre and Network;
- (d) “Chair” means the member of the TEC elected as Chair of the TEC;
- (e) “Vice-Chair” means the member of the TEC elected as Vice-Chair of the TEC;
- (f) “Observers” means observers to the meetings of the TEC;
- (g) “Stakeholders” means the entities that have a role in the implementation of the functions of the TEC, or that may affect or be affected by the recommendations and actions of the TEC;
- (h) “Secretariat” means the secretariat referred to in Article 8 of the Convention;
- (i) “TEC” means the Technology Executive Committee.

#### C. Members

3. The COP, by its decision 1/CP.16, decided that the TEC shall have the mandate and composition as contained in appendix IV to that decision.

4. The TEC shall comprise 20 expert members, elected by the COP, serving in their personal capacity and nominated by Parties with the aim of achieving a fair and balanced representation, as follows:

- (a) Nine members from Parties included in Annex I to the Convention (Annex I Parties);
- (b) Three members from each of the three regions of the Parties not included in Annex I to the Convention (non-Annex I Parties), namely Africa, Asia and the Pacific, and Latin America and the Caribbean, one member from a small island developing State and one member from a least developed country Party.<sup>7</sup>

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<sup>7</sup> Decision 1/CP.16, appendix IV, paragraph 1.

5. Members shall serve for a term of two years and shall be eligible to serve a maximum of two consecutive terms of office. The following rules shall apply:

- (a) Half of the members shall be elected initially for a term of three years and half of the members shall be elected for a term of two years;
- (b) Thereafter, the COP shall elect every year a member for a term of two years;
- (c) The members shall remain in office until their successors are elected.<sup>8</sup>

6. The term of office of a member shall start at the first meeting of the TEC in the calendar year following his or her election and shall end immediately before the first meeting of the TEC in the calendar year in which the term ends, as applicable two or three years thereafter.

7. If a member of the TEC resigns or is otherwise unable to complete the assigned term of office or to perform the functions of that office, the TEC may decide, bearing in mind the proximity of the next session of the COP, to appoint another member from the same constituency to replace said member for the remainder of that member's mandate, in which case the appointment shall count as one term.<sup>9</sup>

8. If a member is unable to participate in two consecutive meetings of the TEC and unable to perform the functions and tasks set out by the TEC, the Chair will bring this matter to the attention of the TEC and will seek clarification from the regional group that nominated that member on the status of his or her membership.

#### **D. Chair and Vice-Chair**

9. The TEC shall elect annually a Chair and a Vice-Chair from among its members for a term of one year each, with one being a member from an Annex I Party and the other being a member from a non-Annex I Party. The positions of Chair and Vice-Chair shall alternate annually between a member from an Annex I Party and a member from a non-Annex I Party.<sup>10</sup>

10. If the Chair is temporarily unable to fulfil the obligations of the office, the Vice-Chair shall serve as Chair. In the absence of the Chair and Vice-Chair at a particular meeting, any other member designated by the TEC shall temporarily serve as the Chair of that meeting.<sup>11</sup>

11. If the Chair or Vice-Chair is unable to complete the term of office, the TEC shall elect a replacement to complete the term of office, taking into account paragraph 8 above.<sup>12</sup>

12. Consistent with decision 1/CP.16, the TEC will be chaired by a Chair and a Vice-Chair.

13. The Chair and the Vice-Chair shall collaborate in chairing meetings of the TEC and in executing the work of the TEC throughout the year so as to ensure coherence between meetings.

14. After completion of his or her term of office, the Chair will be nominated as Vice-Chair, and vice versa.

15. After the two-year cycle is complete, the TEC will nominate two new members for the roles, unless otherwise decided.

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<sup>8</sup> Decision 1/CP.16, appendix IV, paragraph 4.

<sup>9</sup> Decision 1/CP.16, appendix IV, paragraph 8.

<sup>10</sup> Decision 1/CP.16, appendix IV, paragraph 5.

<sup>11</sup> Decision 1/CP.16, appendix IV, paragraph 6.

<sup>12</sup> Decision 1/CP.16, appendix IV, paragraph 7.

16. If either the Chair or the Vice-Chair resigns or is otherwise unable to complete his or her term of office, the TEC shall elect a replacement from the appropriate constituency to complete the remainder of the term.

17. The Chair of the meeting shall, inter alia, declare the opening and closing of the meeting, ensure the observance of these rules of procedure, accord the right to speak and announce decisions. The Chair shall rule on points of order and, subject to these rules, shall have complete control of the proceedings and over the maintenance of order.

18. The Chair of the meeting shall call upon speakers in the order in which they signify their desire to speak. The secretariat shall maintain a list of speakers. The Chair may call a speaker to order if his or her remarks are not relevant to the subject under discussion.

19. During discussion of any matter, a member may at any time raise a point of order, which shall be decided on immediately by the Chair of the meeting. A member may appeal against the ruling of the Chair. The appeal shall stand unless overruled by a two-thirds majority of the members, representing a two-thirds majority of members from Annex I Parties and a two-thirds majority of members from non-Annex I Parties.

20. Proposals and amendments to proposals may be introduced and submitted to the secretariat in writing by members; such proposals and amendments shall be circulated for consideration by all members of the TEC. As a general rule, no proposal shall be discussed or put forward for a decision at any meeting unless copies have been circulated to the members not later than the day preceding the meeting. However, the Chair of the meeting may, with the agreement of the TEC, permit the discussion and consideration of proposals and amendments even though they have not been circulated or have been circulated only the same day.

21. The Chair and/or the Vice-Chair, or any member designated by the TEC, shall report on behalf of the TEC to the COP and/or other subsidiary bodies as mandated by the COP.

22. The Chair and/or the Vice-Chair, or any member designated by the TEC, shall represent the TEC at external meetings and shall report back to the TEC on those meetings.

23. The TEC may further define additional roles and responsibilities for the Chair and the Vice-Chair.

24. The Chair and the Vice-Chair in the exercise of their functions remain under the authority of the TEC.

## **E. Secretariat**

25. The secretariat shall support and facilitate the work of the TEC.<sup>13</sup>

26. The secretariat shall:

(a) Make the necessary arrangements for the meetings of the TEC, including announcing meetings, issuing invitations and making available the relevant documents;

(b) Maintain meeting records and arrange for the storage and preservation of documents of the meetings;

(c) Make documents of the meetings of the TEC available to the public, unless a specific document is deemed confidential by the TEC.

27. The secretariat shall track the implementation of decisions on actions taken by the TEC and report on the progress of these actions intersessionally and at each meeting of the TEC.

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<sup>13</sup> Decision 1/CP.16, appendix IV, paragraph 12.

28. In addition, the secretariat shall perform any other functions assigned that the TEC may require or that the COP may direct with respect to the work of the TEC.

## **F. Meetings**

29. The TEC shall meet at least twice per year as of 2012, resources permitting. Additional meetings may be organized as necessary to enable it to discharge its responsibilities.

30. The meetings of the TEC shall take place in the country of the seat of the secretariat, unless otherwise decided by the TEC and subject to the necessary arrangements being made by the secretariat in consultation with the Chair. Decisions on the location of meetings other than at the seat of the secretariat shall take into account the benefits of venue rotation, particularly venues in developing countries and those that facilitate the participation of key stakeholders of the TEC.

31. At least two thirds of the members of the TEC, representing a two-thirds majority of members from Annex I Parties and a two-thirds majority of members from non-Annex I Parties, must be present to constitute a quorum.

32. At the last Committee meeting of each calendar year, the Chair and the Vice-Chair shall propose, for the approval of the TEC, a provisional schedule of meetings for the coming calendar year.

33. If the schedule, including dates and venue, of a meeting needs to be changed owing to unforeseen circumstances, the secretariat, with the agreement of the Chair and the Vice-Chair, shall notify and seek agreement from the members on the new arrangement within two weeks of this notification, in accordance with paragraph 0 below. Once agreed, the secretariat shall post such information on the UNFCCC website at least eight weeks prior to the meeting in question. Where it is essential to facilitate the work of the TEC, the Chair and the Vice-Chair may decide to shorten the notification period.

34. Members are requested to confirm their attendance at meetings of the TEC as early as possible and at least four weeks prior to a meeting for members eligible for funding for their participation to enable sufficient time for the secretariat to make the necessary travel arrangements.

## **G. Agenda and documentation for meetings**

35. The Chair shall, in consultation with the Vice-Chair and assisted by the secretariat, prepare the provisional agenda for each meeting as well as a draft report on the meeting.

36. The provisional agenda for each meeting shall be transmitted to members of the TEC at least four weeks in advance of the meeting.

37. Members may propose additions or changes to the provisional agenda, in writing, to the secretariat within one week of receiving the provisional agenda, and these additions or changes shall be included in a revised provisional agenda by the secretariat in agreement with the Chair and the Vice-Chair.

38. The secretariat shall indicate the administrative and financial implications of all substantive items on the proposed agenda.

39. The secretariat shall transmit the provisional annotated agenda and any supporting documentation to the members at least two weeks prior to the meeting. Documents may be transmitted after that date with the approval of the Chair and the Vice-Chair.

40. Documents for a meeting, unless it has been decided by the Chair and the Vice-Chair that the documentation should be restricted for internal use by its members, shall be published on the UNFCCC website at least three weeks prior to that meeting.

41. The TEC shall, at the beginning of each meeting, adopt the meeting agenda.

## **H. Decision-making**

42. Decisions will be taken according to the rule of consensus.<sup>14</sup>

## **I. Working language**

43. The working language of the TEC shall be English.

## **J. Participation of expert advisers in meetings**

44. The TEC, in performing its functions, should draw upon outside expertise, including the UNFCCC roster of experts and the CTCN, to provide advice, including as expert advisers at its meetings.<sup>15</sup>

45. The TEC should seek input from intergovernmental and international organizations and the private sector and may seek input from civil society in undertaking its work. It may invite advisers drawn from relevant intergovernmental and international organizations as well as the private sector and civil society to participate in its meetings as expert advisers on specific issues as they arise.<sup>16</sup>

46. The Chair and the Vice-Chair may, in consultation with the TEC, invite representatives of intergovernmental and international organizations as well as the private sector and civil society to participate in a meeting of the TEC as expert advisers on specific issues under consideration at the meeting.

## **K. Participation of observers**

47. The meetings of the TEC shall be open to attendance by accredited observer organizations and observers from Parties, except where otherwise decided by the TEC.<sup>17</sup>

48. The meetings of the TEC that are open shall be webcast through the UNFCCC website.

49. The TEC may decide on additional procedures for the participation of observer organizations other than those accredited to the UNFCCC.

50. The TEC may, in the interests of economy and efficiency, decide to limit the physical attendance of observers at its meetings, in accordance with the procedures for the participation of observer organizations referred to in paragraphs 0 and 0 above.

51. The TEC may decide at any time that a meeting or part thereof should be closed to observers.

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<sup>14</sup> Decision 1/CP.16, appendix IV, paragraph 2.

<sup>15</sup> Decision 1/CP.16, appendix IV, paragraph 9.

<sup>16</sup> Decision 1/CP.16, appendix IV, paragraph 10.

<sup>17</sup> Decision 1/CP.16, appendix IV, paragraph 11.

52. The secretariat shall notify observers of the date and venue of the meeting that they may attend. Observers shall notify the secretariat at least three weeks in advance of the meeting of their intention to attend.

53. Observers may, with the agreement of the TEC, be invited to address the TEC on matters under consideration by the TEC. The Chair shall notify the TEC one week in advance of the meeting of the proposed interventions by observers, if any.

54. Any observer wishing to make an intervention under particular items on the agenda at a meeting shall inform the Chair through the secretariat of its interest at least two weeks in advance.

#### **L. Use of electronic means of communication**

55. The TEC shall use electronic means of communication to facilitate intersessional work and to take decisions in accordance with guidelines to be agreed by the TEC. The secretariat shall ensure that a secure and dedicated web interface is established and maintained to facilitate the work of the TEC.

#### **M. Panels and working groups**

56. The TEC may establish panels and working groups, if required, to provide, *inter alia*, expert advice to assist the TEC in its work.

57. In establishing a panel or working group, the TEC shall determine its terms of reference, which shall include a workplan, the deadline for submission of documents, the criteria for selection of panel or working group members and the necessary budgetary requirements.

#### **N. Workplan**

58. The TEC shall agree on the workplan. The secretariat shall prepare information on the financial requirements for the implementation of the workplan for consideration by the TEC. The workplan shall be kept under regular review by the TEC.

59. Newly funded activities not included in the original workplan shall be circulated by the secretariat at the request of the Chair for approval by the TEC. Such approval may also be provided through electronic means, in accordance with paragraph 55 above. Committee members may provide their response and approval within two weeks of the circulation of the information by the secretariat.

60. Funding for activities included in the original workplan and for newly funded activities not included in the workplan may be accepted from Parties and the private sector, in accordance with United Nations and UNFCCC rules and regulations.<sup>18</sup>

#### **O. Amendments to the rules of procedure**

61. These rules of procedure may be amended by the TEC by consensus and, to be effective, must be approved formally by the COP. Pending formal approval, the TEC may decide to apply the amendment provisionally.

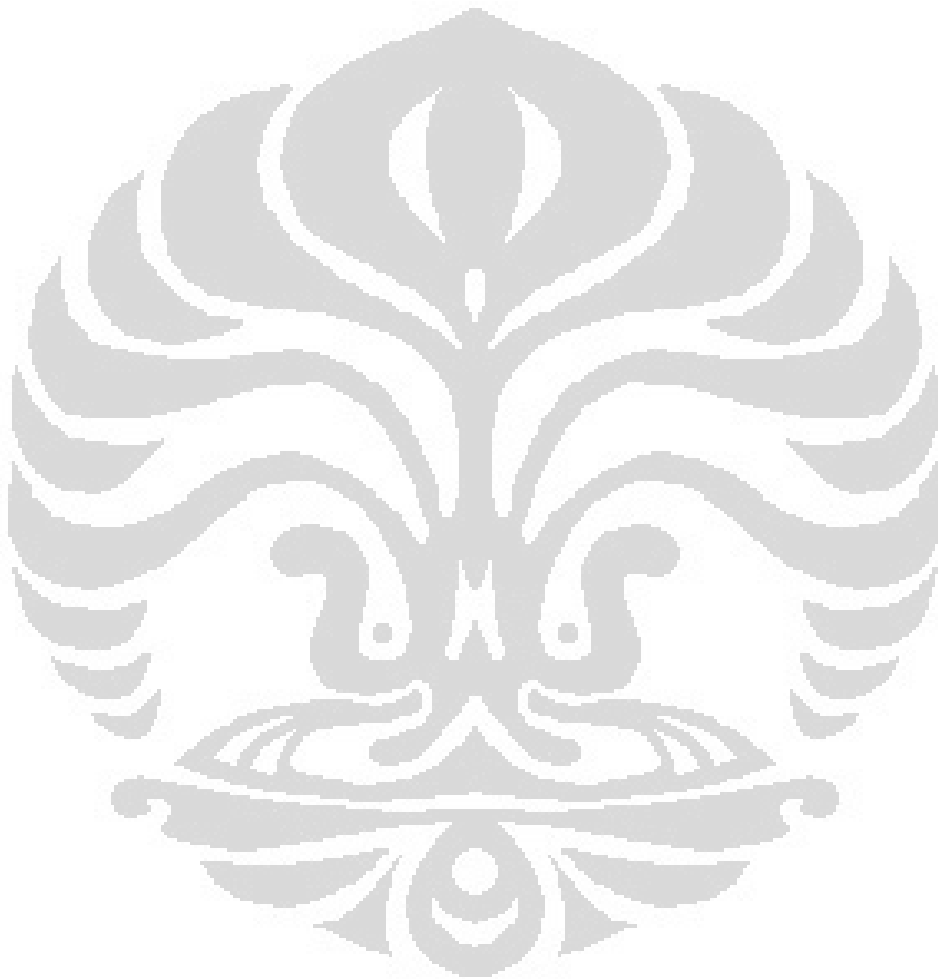
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<sup>18</sup> Financial Regulations and Rules of the United Nations, available at <<http://www.un.org/Docs/journal/asp/ws.asp?m=ST/SGB/2003/7>>.

**P. Overriding authority of the Convention**

62. In the event of any conflict between any provision of these rules and any provision of the Convention, the Convention shall take precedence.

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Advance unedited version

## Draft decision -/CMP.7

### Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its sixteenth session

*The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,*

*Recalling* Article 3, paragraph 9, of the Kyoto Protocol,

*Also recalling* Article 20, paragraph 2, and Article 21, paragraph 7, of the Kyoto Protocol,

*Further recalling* decisions 1/CMP.1, 1/CMP.5 and 1/CMP.6,

*Noting with appreciation* the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol,

*Noting also* the importance of developing a comprehensive global response to the problem of climate change,

*Recognizing* the importance of ensuring the environmental integrity of the Kyoto Protocol,

*Cognizant* of decision -/CP.17,<sup>1</sup>

*Emphasizing* the role of the Kyoto Protocol in the mitigation effort by Parties included in Annex I, the importance of ensuring continuity in mitigation action by those Parties and the need to begin the second commitment period of the Kyoto Protocol without delay,

*Aiming to ensure* that aggregate emissions of greenhouse gases by Parties included in Annex I are reduced by at least 25–40 per cent below 1990 levels by 2020, noting in this regard the relevance of the review referred to in Chapter V of decision 1/CP.16 to be concluded by 2015,

*Taking note* of the outcomes of the technical assessment of forest management reference levels referred to in paragraph 5 of decision 2/CMP.6,

1. *Decides* that the second commitment period under the Kyoto Protocol shall begin on 1 January 2013 and end either on 31 December 2017 or 31 December 2020, to be decided by the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its seventeenth session;

2. *Welcomes* the agreement achieved by the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol on its work pursuant to decisions 1/CMP.1, 1/CMP.5 and 1/CMP.6 in the areas of land use, land-use change and forestry (decision -/CMP.7),<sup>2</sup> emissions trading and the project-based mechanisms (decision -/CMP.7),<sup>3</sup> greenhouse gases, sectors and source categories, common metrics to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and

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<sup>1</sup> Draft decision proposed for adoption under agenda item 4 of the Conference of the Parties.

<sup>2</sup> Draft decision proposed for adoption under agenda item 4 of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.

<sup>3</sup> See footnote 2.



removals by sinks, and other methodological issues (decision -/CMP.7)<sup>4</sup> and the consideration of information on potential environmental, economic and social consequences, including spillover effects, of tools, policies, measures and methodologies available to Annex I Parties (decision -/CMP.7);<sup>5</sup>

3. *Takes note* of the proposed amendments to the Kyoto Protocol developed by the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol as contained in Annexes 1, 2 and 3 to this decision;

4. *Further takes note* of the quantified economy-wide emission reduction targets to be implemented by Parties included in Annex I as communicated by them and presented in Annex 1 to this decision and of the intention of these Parties to convert these targets to quantified emission limitation or reduction objectives (QELROs) for the second commitment period under the Kyoto Protocol;

5. *Invites* Parties included in Annex I listed in Annex 1 to this decision to submit information on their QELROs for the second commitment period under the Kyoto Protocol by 1 May 2012 for consideration by the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its seventeenth session;

6. *Requests* the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol to deliver the results of its work on QELROs to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its eighth session with a view to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol adopting these QELROs as amendments to Annex B of the Kyoto Protocol at that session, while ensuring coherence with the implementation of decision -/CP.17<sup>6</sup>;

7. *Requests* the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol to assess the implications of the carry-over of assigned amount units to the second commitment period on the scale of emission reductions to be achieved by Parties included in Annex I in aggregate for the second commitment period with a view to completing this work at its seventeenth session;

8. *Requests* the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol to recommend appropriate actions to be taken to address the implications referred to in paragraph 7 above and to forward these recommendations in time for consideration by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its eighth session;

9. *Requests* the Subsidiary Body for Scientific and Technological Advice to assess and address the implications of the implementation of decisions -/CMP.7<sup>7</sup> referred to in paragraph 2 above on the previous decisions on methodological issues related to the Kyoto Protocol adopted by Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol including those relating to Articles 5, 7 and 8 of the Kyoto Protocol, with a view to preparing relevant draft decisions for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its eighth session, and noting that some issues may need to be addressed at subsequent sessions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

10. *Requests* the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol to aim to deliver the results of its work pursuant to decision 1/CMP.1 in time to complete its work by the eighth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.

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<sup>4</sup> See footnote 2

<sup>5</sup> See footnote 2.

<sup>6</sup> Draft decision proposed for adoption under agenda item 4 of the Conference of the Parties.

<sup>7</sup> Draft decision proposed for adoption under agenda item 4 of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.

## Annex 1

### Proposed amendments to Annex B to the Kyoto Protocol

The following table shall replace the table in Annex B to the Protocol:

Annex B

| 1                              | 2  | 3   | 4                           | 5   | 6  |
|--------------------------------|--|---|-----------------------------|---|--|
| Party                          | Quantified emission limitation or reduction commitment (2008–2012) (percentage of base year or period) | Quantified emission limitation or reduction commitment (2013–[2017] [2020]) (percentage of base year or period) | reference year <sup>8</sup> | Quantified emission limitation or reduction commitment (2013–[2017] [2020]) (expressed as percentage of reference year <sup>8</sup> ) | Pledges for the reduction of greenhouse gas emissions by the year 2020 (percentage of reference year) <sup>9</sup> |
| Australia <sup>a</sup>         | 108  |   |                             |   |  |
| Austria                        | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Belarus <sup>c*</sup>          |  |   | 1990                        |   | -5% to -10%  |
| Belgium                        | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Bulgaria <sup>*</sup>          | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Croatia <sup>*</sup>           | 95   | <i>d</i>  | 1990                        |   | -5%  |
| Cyprus <sup>e</sup>            |  | <i>b</i>  | n/a                         | n/a   |  |
| Czech Republic <sup>*</sup>    | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Denmark                        | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Estonia <sup>*</sup>           | 92   | <i>b</i>  | n/a                         | n/a   |  |
| European Union <sup>f, g</sup> | 92   | <i>b</i>  | n/a                         | n/a   | -20% /-30% <sup>h</sup>  |
| Finland                        | 92   | <i>b</i>  | n/a                         | n/a   |  |
| France                         | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Germany                        | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Greece                         | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Hungary <sup>*</sup>           | 94   | <i>b</i>  | n/a                         | n/a   |  |
| Iceland                        | 110  | <i>i</i>  | 1990                        |   | -15% /-30%   |
| Ireland                        | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Italy                          | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Kazakhstan <sup>*</sup>        |  |   | 1992                        |   | -15%   |
| Latvia <sup>*</sup>            | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Liechtenstein                  | 92   |   | 1990                        |   | -20%/ -30%   |

<sup>8</sup> A reference year may be used by a Party on an optional basis for its own purposes to express its QELRO as a percentage of emissions of that year, that is not internationally binding under the Kyoto Protocol, in addition to the listing of its QELRO in relation to the base year in the second and third columns of this table, which are internationally legally binding.

<sup>9</sup> Further information on these pledges can be found in document FCCC/SB/2011/INF.1/Rev.1.

| 1  | 2  | 3   | 4                           | 5   | 6  |
|--|--|---|-----------------------------|---|--|
| Party  | Quantified emission limitation or reduction commitment (2008–2012) (percentage of base year or period) | Quantified emission limitation or reduction commitment (2013–[2017] [2020]) (percentage of base year or period) | reference year <sup>8</sup> | Quantified emission limitation or reduction commitment (2013–[2017] [2020]) (expressed as percentage of reference year <sup>8</sup> ) | Pledges for the reduction of greenhouse gas emissions by the year 2020 (percentage of reference year) <sup>9</sup> |
| Lithuania <sup>*</sup>                               | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Luxembourg   | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Malta <sup>k</sup>                                   |  | <i>b</i>  | n/a                         | n/a   |  |
| Monaco   | 92   |   | 1990                        |   | -30%   |
| Netherlands  | 92   | <i>b</i>  | n/a                         | n/a   |  |
| New Zealand <sup>l</sup>                             | 100  |   |                             |   |  |
| Norway   | 101  |   | 1990                        |   | -30% to -40% <sup>m</sup>  |
| Poland <sup>*</sup>                                  | 94   | <i>b</i>  | n/a                         | n/a   |  |
| Portugal   | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Romania <sup>*</sup>                                 | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Slovakia <sup>*</sup>                                | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Slovenia <sup>*</sup>                                | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Spain  | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Sweden   | 92   | <i>b</i>  | n/a                         | n/a   |  |
| Switzerland  | 92   |   | 1990                        |   | -20% to 30% <sup>n</sup>   |
| Ukraine <sup>*</sup>                                 | 100  |   | 1990                        |   | -20%   |
| United Kingdom of Great Britain and Northern Ireland | 92   | <i>b</i>  | n/a                         | n/a   |  |
| United States of America <sup>o</sup>                |  |   |                             |   |  |
| Party  | Quantified emission limitation or reduction commitment (2008–2012) (percentage of base year or period) |   |                             |   |  |
| Canada <sup>p</sup>                                  | 94   |   |                             |   |  |
| Japan <sup>q</sup>                                   | 94   |   |                             |   |  |
| Russian Federation <sup>r*</sup>                     | 100  |   |                             |   |  |

\* Countries that are undergoing the process of transition to a market economy.

Notes:

<sup>a</sup> Australia is prepared to consider submitting information on its QELRO pursuant to decision 1/CMP.7, paragraph 5, following the necessary domestic processes and taking into account decision 1/CP.17 and decisions on mitigation (-/CP.17) and the 'indaba'/mandate outcome decision (-/CP.17) and decisions -/CMP.7 (Land use, land-use change and forestry), -/CMP.7 (Emissions trading and the project-based mechanisms, -/CMP.7 (Greenhouse gases, sectors and source categories, common metrics to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks, and other methodological issues and -/CMP.7 (Consideration of information on potential environmental, economic and social consequences, including spillover effects, of tools, policies, measures and methodologies available to Annex I Parties).

<sup>b</sup> The QELROs for the European Union and its Member States for a second commitment period under the Kyoto Protocol are based on the understanding that these will be fulfilled jointly with the European Union and its Member States, in accordance with Article 4 of the Kyoto Protocol.

<sup>c</sup> Added to Annex B by an amendment adopted pursuant to decision 10/CMP.2. This amendment has not yet entered into force.

<sup>d</sup> Croatia's QELRO for a second commitment period under the Kyoto Protocol is based on the understanding that it will fulfil this QELRO jointly with the European Union and its Member States, in accordance with Article 4 of the Kyoto Protocol. As a consequence, Croatia's accession to the European Union shall not affect its participation in such joint fulfilment agreement pursuant to Article 4 or its QELRO.

<sup>e</sup> At its seventeenth session, the Conference of the Parties decided to amend Annex I to the Convention by including the name of Cyprus (decision -/CP.17). The amendment will enter into force on 1 January 2013 or on a later date.

<sup>f</sup> Upon deposit of its instrument of approval to the Kyoto Protocol on 31 May 2002, the European Community had 15 Member States.

<sup>g</sup> Upon deposit of its instrument of acceptance of the amendment to Annex B to the Kyoto Protocol on [date], the European Union had 27 Member States.

<sup>h</sup> As part of a global and comprehensive agreement for the period beyond 2012, the European Union reiterates its conditional offer to move to a 30% reduction by 2020 compared to 1990 levels, provided that other developed countries commit themselves to comparable emission reductions and developing countries contribute adequately according to their responsibilities and respective capabilities.

<sup>i</sup> Iceland's QELRO for a second commitment period under the Kyoto Protocol is based on the understanding that it will fulfil this QELRO jointly with the European Union and its Member States, in accordance with Article 4 of the Kyoto Protocol. As a consequence, future accession by Iceland to the European Union shall not affect its participation in such joint fulfilment agreement pursuant to Article 4 or its QELRO.

<sup>j</sup> Kazakhstan has submitted a proposal to amend the Kyoto Protocol to include its name in Annex B with a quantified emission limitation and reduction commitment of 100 per cent for the first commitment period. This proposal is contained in document FCCC/KP/CMP/2010/4.

<sup>k</sup> At its fifteenth session, the Conference of the Parties decided to amend Annex I to the Convention by including the name of Malta (decision 3/CP.15). The amendment entered into force on 26 October 2010.

<sup>l</sup> New Zealand is prepared to consider submitting information on its QELRO, pursuant to decision 1/CMP.7, paragraph 5, following the necessary domestic processes and taking into account decision 1/CP.17, decisions on mitigation (-/CP.17) and the 'indaba'/mandate outcome decision (-/CP.17) and decisions -/CMP.7 (Land use, land-use change and forestry), -/CMP.7 (Emissions trading and the project-based mechanisms, -/CMP.7 (Greenhouse gases, sectors and source categories, common metrics to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks, and other methodological issues and -/CMP.7 (Consideration of information on potential environmental, economic and social consequences, including spillover effects, of tools, policies, measures and methodologies available to Annex I Parties).

<sup>m</sup> As part of a global and comprehensive agreement for the period beyond 2012 where major emitting Parties agree on emission reductions in line with the 2 degrees celsius target, Norway will move to a level of 40 per cent reduction for 2020 based on 1990 levels.

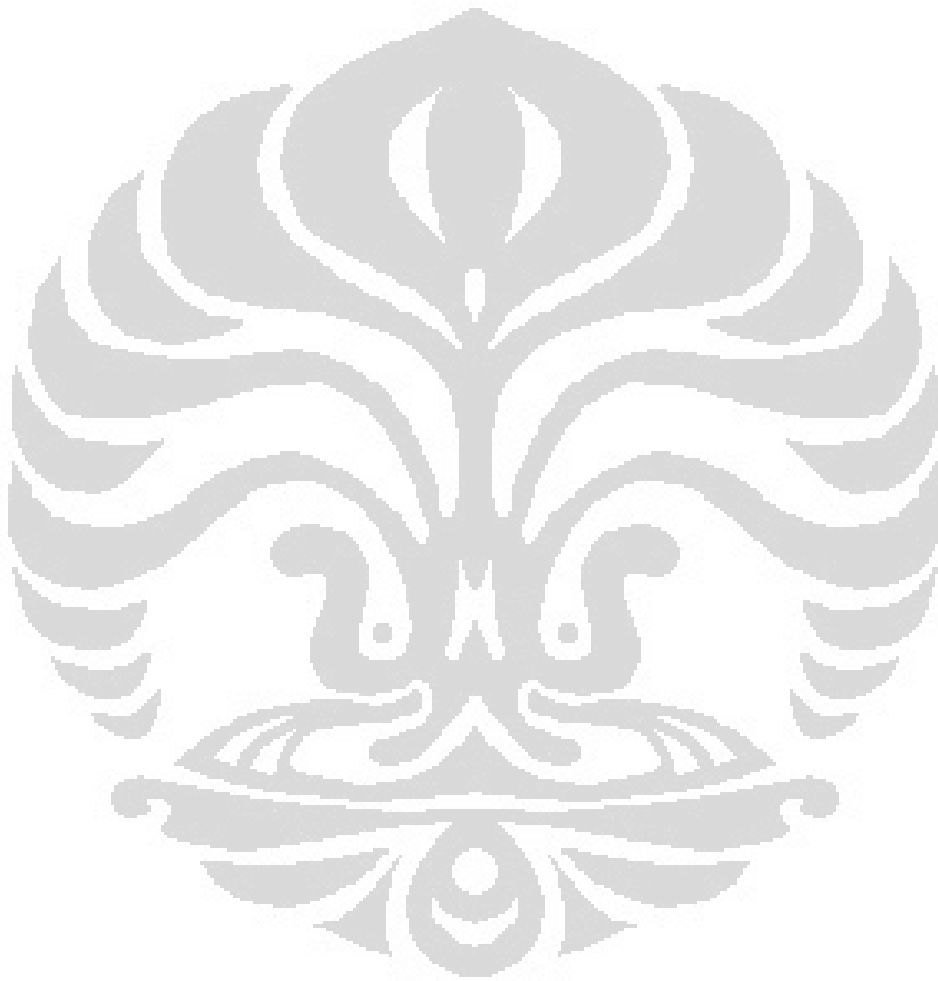
<sup>n</sup> Switzerland would consider a higher reduction target of 30 per cent by 2020 compared to 1990 levels, under the condition that other developed countries commit themselves to comparable emissions reductions and that economically more advanced developing countries contribute adequately according to their responsibilities and respective capabilities.

<sup>o</sup> Countries that have not ratified the Kyoto Protocol.

<sup>p</sup> On 8 June 2011, Canada indicated that it does not intend to participate in a second commitment period of the Kyoto Protocol.

<sup>q</sup> In a communication dated 10 December 2010, Japan indicated that it does not have any intention to be under obligation of the second commitment period of the Kyoto Protocol after 2012.

<sup>r</sup> In a communication dated 8 December 2010 that was received by the secretariat on 9 December 2010, the Russian Federation has indicated that it does not intend to assume a quantitative emission limitation or reduction commitment for the second commitment period.



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## Annex 2

### Proposed amendments to Annex A to the Kyoto Protocol

*The following table shall replace the list under the heading “Greenhouse gases” in Annex A to the Protocol:*

#### **Greenhouse gases**

Carbon dioxide (CO<sub>2</sub>)

Methane (CH<sub>4</sub>)

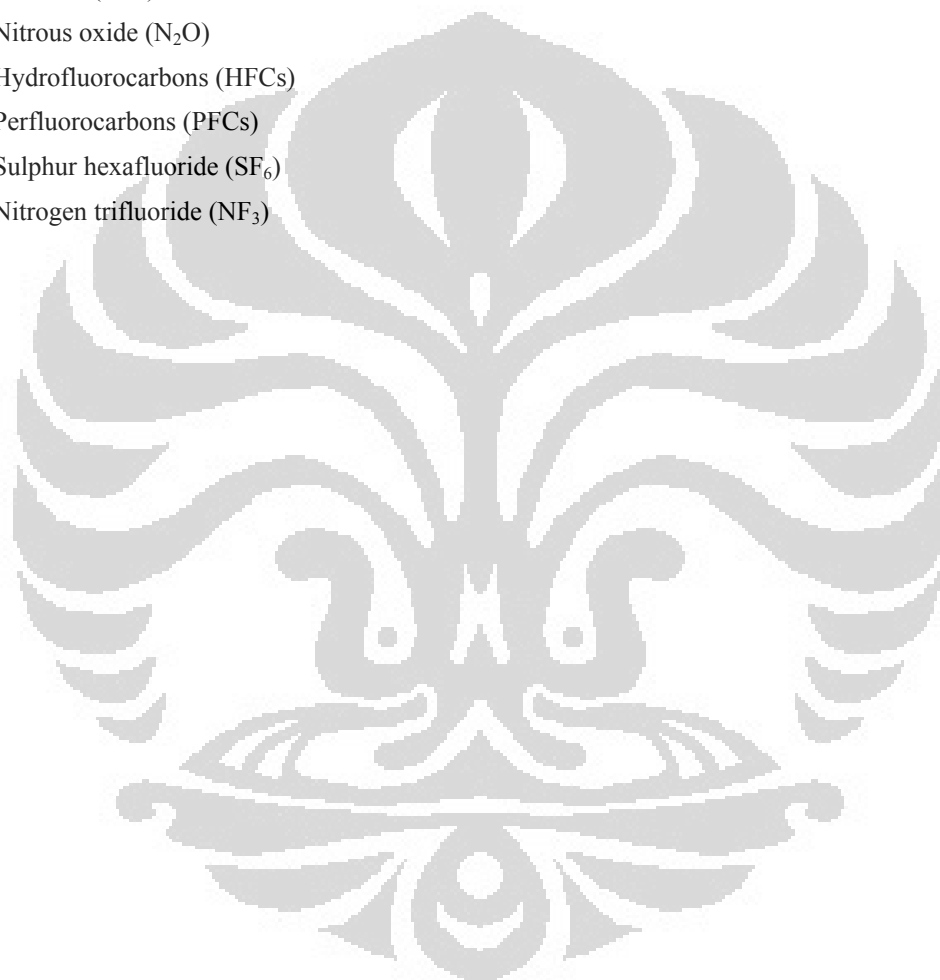
Nitrous oxide (N<sub>2</sub>O)

Hydrofluorocarbons (HFCs)

Perfluorocarbons (PFCs)

Sulphur hexafluoride (SF<sub>6</sub>)

Nitrogen trifluoride (NF<sub>3</sub>)



## Annex 3

### Proposed amendments to the Kyoto Protocol

#### A. Article 3, paragraph 1 bis

*The following paragraphs shall be inserted after paragraph 1 of Article 3 of the Protocol:*

1 bis. The Parties included in Annex I shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts, calculated pursuant to their quantified emission limitation and reduction commitments inscribed in the third column of the table contained in Annex B and in accordance with the provisions of this Article, with a view to reducing their overall emissions of such gases by at least [X] per cent below 1990 levels in the commitment period 2013 to [2017][2020].

#### B. Article 3, paragraph 7 bis

*The following paragraphs shall be inserted after paragraph 7 of Article 3 of the Protocol:*

7 bis. In the second quantified emission limitation and reduction commitment period, from 2013 to [2017][2020], the assigned amount for each Party included in Annex I shall be equal to the percentage inscribed for it in the third column of the table contained in Annex B of its aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A in 1990, or the base year or period determined in accordance with paragraph 5 above, multiplied by [five][eight]. Those Parties included in Annex I for whom land-use change and forestry constituted a net source of greenhouse gas emissions in 1990 shall include in their 1990 emissions base year or period the aggregate anthropogenic carbon dioxide equivalent emissions by sources minus removals by sinks in 1990 from land-use change for the purposes of calculating their assigned amount.

#### C. Article 3, paragraph 8

*In paragraph 8 of Article 3 of the Protocol, the words:*

paragraph 7

*shall be substituted by:*

paragraph 7 bis

#### D. Article 3, paragraphs 8 bis

*The following paragraph shall be inserted after paragraph 8 of Article 3 of the Protocol:*

8 bis. Any Party included in Annex I may use 1995 or 2000 as its base year for nitrogen trifluoride for the purposes of the calculation referred to in paragraph 7 bis above.

#### E. Article 3, paragraphs 12 bis and ter

*The following paragraph shall be inserted after paragraph 12 of Article 3 of the Protocol:*

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12 bis. Any units generated from market-based mechanisms to be established under the Convention or its instruments may be used by Parties included in Annex I to assist them in achieving compliance with their quantified emission limitation and reduction commitments under Article 3. Any such units which a Party acquires from another Party to the Convention shall be added to the assigned amount for the acquiring Party and subtracted from the quantity of units held by the transferring Party.

12 ter. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall ensure that, where units from approved activities under market-based mechanisms referred to in paragraph 12 bis above are used by Parties included in Annex I to assist them in achieving compliance with their quantified emission limitation and reduction commitments under Article 3, a share of these units is used to cover administrative expenses, as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation if these units are acquired under Article 17.

**F. Article 4, paragraph 2**

*The following words shall be added to the end of the first sentence of paragraph 2 of Article 4 of the Protocol:*

, or on the date of deposit of their instruments of acceptance of any amendments to Annex B pursuant to Article 3, paragraph 9

**G. Article 4, paragraph 3**

*In paragraph 3 of Article 4 of the Protocol, the words:*

, paragraph 7

*shall be substituted by:*

to which it relates





## **Indonesia - Australia Forest Carbon Partnership**

Recognising the depth and closeness of our relationship, the Government of the Republic of Indonesia and the Government of Australia have today agreed to establish a framework for long-term cooperation on reducing emissions from deforestation and forest degradation.

Tropical forest land in Indonesia covers more than 120 million hectares – with tens of millions of Indonesians residing in and depending on these forests for their livelihoods. Indonesia's tropical forests are some of the most biologically diverse and extensive in the world, and host around 10 per cent of the world's plant and mammal species.

Indonesia is playing a leadership role among rainforest countries in its policies on reducing emissions from deforestation and forest degradation, promoting sustainable forest management and conserving its rich biodiversity – and welcomes strong and reliable support from its international partners to achieve substantial and rapid impacts in these areas. The Indonesia - Australia Forest Carbon Partnership will give this support by providing programmes and activities to reduce greenhouse gas emissions from deforestation and forest degradation, to improve livelihoods for forest-dependent communities and to promote biodiversity conservation.

International carbon markets will be important in providing the necessary investment to significantly reduce emissions from deforestation and forest degradation over the long term. Cooperation in the framework of this new Partnership will help both Indonesia and Australia engage in emerging international markets for forest carbon emission reductions.

The Partnership will build upon, and provide clearer goals for, existing cooperation between Indonesia and Australia in three key areas:

- policy development and capacity building to support participation in international negotiations and future carbon markets;
- technical support for Indonesia to develop its national forest carbon accounting and monitoring system; and
- the further development of demonstration activities, and the provision of related enabling assistance, to trial approaches to reducing emissions from deforestation and forest degradation.

The Partnership will incorporate existing cooperation through Australia's International Forest Carbon Initiative, which is one source of external support for the Government of Indonesia's own Reducing Emissions from Deforestation and Forest Degradation in Indonesia (REDDI) initiative.

Indonesia's commitment to international leadership in addressing the challenges of climate change is firm, as reflected by its role as host and Chair of the 13<sup>th</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) in Bali in December 2007. Indonesia and Australia both strongly advocated for the decision made at the Bali Conference that reducing emissions from deforestation and forest degradation in developing countries should be part of a future international climate change framework. Our Governments' ultimate aim is to ensure that future international carbon markets provide incentives for reducing emissions from deforestation and forest degradation, and that both Indonesia and Australia have in place the policies and technical capacities needed to participate fully in these markets.

## **Areas of Indonesia - Australia Collaboration**

### **1. Policy development and capacity building**

Indonesia and Australia will cooperate on developing climate change policy, in particular on reducing emissions from deforestation and forest degradation. Recognising our different national circumstances, Indonesia and Australia will cooperate on international negotiations under the UNFCCC and Kyoto Protocol and on the development of our national policies on reducing emissions from deforestation and forest degradation.

Indonesia and Australia will continue to support efforts under the UNFCCC and the Kyoto Protocol to ensure that a future international climate change agreement incorporates efforts to reduce emissions from deforestation and forest degradation. Both countries agree that future international carbon markets provide a sound mechanism for mobilising investment on the scale necessary to support and provide incentives for developing countries to reduce emissions from deforestation and forest degradation.

The Indonesia - Australia Forest Carbon Partnership will incorporate and build on Australia's initial A\$10 million package of support for Indonesia's REDDI initiative. This includes support for the development of a national policy framework and strategies for reducing emissions from deforestation and forest degradation, and may include activities to support sustainable peatland management. Australia will continue to work closely with other donor countries within coordination structures established by the Government of Indonesia.

Indonesia is moving forward with the development of policies and enabling frameworks to establish demonstration activities and ultimately participate in international carbon markets. The Australian Government has committed to developing an Australian Emissions Trading Scheme. Indonesia and Australia will both benefit from an exchange of experience and expertise that will support their participation in future international carbon markets.

### **2. Technical support for forest carbon monitoring and measurement**

Establishing an effective and comprehensive national forest carbon accounting and monitoring system is an essential pre-requisite of participation in international carbon markets. Indonesia is developing a national Forest Resource Information System (FRIS) that will underpin Indonesia's participation in international carbon markets

and the sustainable management of its forest estate. Australia has a National Carbon Accounting System (NCAS) to account for greenhouse gas emissions from land-based sectors.

Under the Indonesia - Australia Forest Carbon Partnership, Indonesia and Australia have established a structured, multi-year program with the aim of further building Indonesia's capacity in forest carbon accounting and monitoring. This will include technical, scientific and analytical support to underpin the development of the FRIS, the provision of remote sensing data, and the sharing of experiences from the development and implementation of the NCAS.

Australia's efforts to support a globally coherent approach to carbon accounting and monitoring, including through historical data acquisition, storage and processing, will also provide direct benefits to Indonesia as it seeks to establish baselines with reference to past rates of deforestation and forest degradation.

### 3. Development of demonstration activities

Indonesia is developing the appropriate national-level policies and programmes to support the implementation of demonstration activities to reduce emissions from deforestation and forest degradation, as called for in the Bali Action Plan. This includes the development of a national carbon accounting and monitoring system. Successful demonstration activities will facilitate international agreement on market-based approaches to reducing emissions from deforestation and forest degradation in post-2012 climate change framework and also signal Indonesia's readiness to participate in international carbon markets.

The Indonesia - Australia Forest Carbon Partnership will encompass the Kalimantan Forests and Climate Partnership agreed between the Governments of Indonesia and Australia in September 2007. Both countries recognise the importance of the Kalimantan Forests and Climate Partnership as the first, large-scale demonstration activity of its kind in the world, and its role in informing international negotiations under the UNFCCC and Kyoto Protocol. Australia has committed A\$30 million to the Kalimantan Forests and Climate Partnership which will trial an innovative market-based approach to financing and implementing measures to reduce emissions from deforestation and forest degradation in Central Kalimantan.

The Indonesia - Australia Forest Carbon Partnership will support Indonesia in identifying and implementing additional incentive-based demonstration activities. Details of future activities will also be determined during this initial period of collaboration, including addressing technical and methodological issues and the potential involvement of additional partners.

For the Government of  
Australia



The Hon Kevin Rudd  
Prime Minister

For the Government of  
the Republic of Indonesia



H.E. Dr. Susilo Bambang Yudhoyono  
President

Jakarta, 13 June 2008.