Energy Crisis: Poland and the European Union

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Abstrak

Tulisan ini mengupas berbagai langkah-langkah kebijakan untuk mengatasi ketergantungan dan implikasi politisnya, serta krisis energi yang dihadapi dunia di kawasan Eropa, khususnya di Polandia.

Kata kunci: krisis energi, Uni Eropa, kerja sama, kebijakan

Introduction

Various measures of energy security indicate that the world might be heading for an energy crisis. Many of the warning signs that existed before the energy crises of 1973 and 1979 exist today, and they indicate that the current situation could even be worse. For instance, US dependence on petroleum imports has grown steadily for over a decade and has been at record levels for several years. At present, US consume 28% of the world petroleum as reported in the end of December by the Polish public TV in its program on energy diversification. The potential for an energy crisis has never been higher. Oil prices are reaching $ 100 per barrel, and they may continue to increase. This was reported by in a Russian *RTR* TV program in January, while reviewing the state of the energy in the world. The disruption of Venezuelan oil supplies has increased the US dependence on Middle Eastern oil and made the US more susceptible to supply interruption. With the crisis in Venezuela, the capacity of OPEC to meet any additional supply interruption is limited and war with Iraq has put OPEC at its limit. Any energy crisis could cause a recession, inflation, and higher unemployment.

The article is written in his private capacity

An energy crisis is a situation in which the nation suffers from a disruption of energy supplies (in our case, both gas and oil) accompanied by rapidly increasing energy prices that threaten economic and national security. The threat to economic security is represented by the possibility of declining economic growth, increasing inflation, rising unemployment, and losing immense amounts in investment. The threat to national security is represented by the inability of the government to exercise various foreign policy options, especially in regard to countries with substantial gas and oil reserves. Poland's anxiety over the threat of shutting the Russian gas and oil supply tap to Poland. (Poland is still largely dependent on Russian oil and gas). Another example is the recent disruption of Venezuelan oil supplies to the US which may limit the US policy options toward Iraq.

Looking at the two energy crises of 1973 and 1979, we find some common elements between the two. First, both events started with political turmoil in some of the oil producing countries and were associated with low oil stocks, in spite of Russia's assurances that they can fulfil their obligations. Second, the events were associated with high import concentration from a small number of suppliers with their high dependency on oil imports, and in turn they led to speculations.

To address the situation one may need to look into some factors, i.e., the Polish government oil policy, Polish –Russian gas interruptions, Polish gas and oil deposits in the North Sea, and Russian– Germany cooperation in the Nord Stream Gas Pipeline.

Polish Petroleum Industry Policy

The Polish Petroleum Industry Policy, adopted by the government on February 23, 2007, is an answer to the needs of the power industry. During the briefing, the then Minister of the Economy Mr. Piotr WoŸniak, responsible for the power security in the country, stressed that one of the goals of the Policy for the Petroleum Sector is increasing the degree of diversification of the sources of petroleum oil supplies, understood as obtaining petroleum from different regions of the world, from different suppliers, mediators and using alternative transport routes.

The Government Policy for the Petroleum Industry in Poland is a response to the changes occurring on the power carrier market in Central-Eastern Europe (namely, supply disruptions coming from Russian suppliers, change of owners in the case of several refineries, etc.).

Polish-Russian Gas Interruptions

The former Minister of Economy, Piotr WoŸniak: We Expect Gas Will Be Delivered to Poland without Disturbance. "We cannot accept an interruption of gas delivery to Poland due to Russia's giant gas supplier Gazprom's conflict with Belarusian companies and before that with Ukraine," said the Minister of Economy, Piotr WoŸniak during a press conference on August 1, 2007, devoted to Gazprom's announcements about a planned 50% reduction of gas delivery to Belarus. The conflict was resolved at the last minute after Belarus succumbed to Gazprom's demands.

Polish Gas and Petroleum Deposits in the North Sea

The purchase of 15 percent of shares in two Norwegian deposits "Skarv" and "Snadd" on February 28, 2007, by the Polish Oil and Gas Company (PGNiG), is a part of the government plan to build Poland's power security-said Piotr WoŸniak, the then Minister of Economy during the joint press conference with the then Prime Minister Mr. Jaros³aw Kaczynski, which took place in Warsaw, on March 1, 2007.

According to data approved by the Norwegian Petroleum Directorate, the combined size of resources of all deposits, in which PGNiG will purchase shares from Exxon Mobil, is estimated at about 35.7 billion m3 of natural gas, 18.3 million m3 petroleum and condensate (ca 15 million tons), and 5.8 million tons of Natural Gas Liquids.

An integral base project (Front End Engineering Design) is being designed, within the scope of the development plan, and in mid-2007, the deposit management plan (Plan for Development) was expected to be launched. Gas and petroleum extraction is scheduled to start in the mid-2011.

On the License area (recently discovered fields named Skarv and Snadd), Poland will co-create the extraction infrastructure. According to PGNiG estimates, the investment outlays for the development of deposits will amount to ca USD 5 billion, of which PGNiG outlays will total ca USD 600 million.

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under the North Sea. Poland is buying deposits in the North Sea in order to have a 100 percent supply security guaranteed in the price of imported gas, though the price is higher than the one from Russia. In spite of that, the purchase of the deposits was a very important decision for Poland's energy safety. Poland can now look more optimistically at the diversification of gas supplies.

Also Poland's plans to build an LNG terminal in Œwinoujœcie on Poland's Baltic Coast have not been given up. Together with the Norwegian partners Poland is ready to connect with the North Sea pipeline running through Denmark.

The purchase of three licenses for prospecting and exploitation in Norway is the first important international transaction of this kind concluded by a Polish company. The Norwegian Continental Shelf is a very prospective area and the PGNiG's access to the Norwegian deposits is a vital element of the strategic development of Polish power industry.

Russia-Germany: Nord Stream Gas Pipeline (see Footnote)

The construction of the Nord Stream gas pipeline (the northern gas pipeline, bypassing Poland) under the Baltic Sea from Russia to Germany is assessed by Poland as a threat and constitutes one of the main points of friction between Russia and Poland. "The investment poses a serious threat to Polish national security. Polish authorities have concluded that it negatively affects, inter alia, the transit and supply of natural resources through the Yamal and Druzhba-Friendship gas pipelines as well as poses an environmental threat.

The Yamal-Europe natural gas pipeline is a 4,196-kilometer- long pipeline connecting natural gas fields on the Yamal peninsula, Russia, with Germany. The pipeline includes around 3,000 kilometers in Russia, 575 kilometers in Belarus and 680 kilometers in Poland. The Druzhba-Friendship pipeline is the world's longest oil pipeline, it carries oil some 2,500 miles from southeast Russia to points in Ukraine, Hungary, Poland, and Germany. It was constructed in the USSR in 1964 to transport oil from central Russia to points west over a distance of some 4,000 km. The name "Druzhba" means "friendship", alluding to the fact that the pipeline was intended to supply oil to the energy-hungry western regions of the Soviet Union, to its fraternal socialist allies in the former Soviet bloc, and to Western Europe. Today, it is the largest principal artery for the transportation of Russian (and Kazakh) oil across Europe.

Poland was officially notified of the projected construction of the Baltic underwater gas pipeline in mid-November 2006. On the initiative of the Energy Safety Policy Team in the Ministry of Economy of Poland, an analysis of incomplete and negligently prepared documentation sent by Nord Stream AG was carried out along with its comparison with the Polish sea maps. It was found that the projected pipeline passes through the Polish exclusive economic zone, precisely through the so-called grey zone (i.e. the contentious zone of the Kingdom of Denmark and the Republic of Poland). On account of the above, on March 22, 2006, the Minister of Economy sent a letter to the Nord Stream Managing Director- Matthias Warnig and to the Chairman of Nord Stream's Shareholders' Committee- former German Chancellor Gerhard Schroeder, in which he pointed out the necessity of following the provisions of international law regulations as well as the laws of the Republic of Poland binding within its territory, by the investor.

The Minister presented his stand to countries participating in the Environmental Impact Assessment in accordance with the Espoo Convention*. The Convention provides for a notification procedure for each of the transboundary projects which might have an impact on the natural environment. The procedure ends with issuing the "Environmental Impact Assessment".

Nord Stream AG replied with a letter dated April 12, 2006, that it would carry out further analyses (concerning international and Polish procedures) and inform the Polish party on its results forthwith.

The projected route of the Nord Stream gas pipeline passes through the exclusive economic zones of 5 countries (the Russian Federation, Finland, Sweden, Denmark and Germany) and through the Polish, at this moment contentious with Denmark, zone. In the event of the investment passing through at least two exclusive economic zones, the investor is obliged to carry out the "Environmental Impact Assessment" procedure specified in the 1991 Espoo Convention.

For countries participating in the procedure, the Convention provides for two statuses: status of the party

* The Espoo Convention, the Convention on Environmental Impact Assessment in a Transboundary Context is a UNECE /United Nations Economic Commission for Europe/ convention signed in Espoo, Finland, in 1991 that entered into force in 1997. It was instrumental in the creation of the Strategic Environmental Assessment.

of origin (the Kingdom of Denmark, the Kingdom of the Netherlands, the Republic of Finland, the Federal Republic of Germany and the Russian Federation) and status of the affected party (the Republic of Lithuania, the Republic of Poland, the Republic of Latvia, the Republic of Estonia, the Kingdom of Denmark, the Kingdom of Sweden, the Republic of Finland, the Federal Republic of Germany, the Russian Federation). "Party of origin" means the Contracting Party or Parties to the Convention under whose jurisdiction a proposed activity is envisaged to take place, while "Affected Party" means the Contracting Party or Parties to the Convention likely to be affected by the transboundary impact of a proposed activity.

Russia's Perspective

In view of the American companies' attempts to build a pipeline under the Caspian Sea to pro-American Georgia and Turkey for the flow of Turkmen and Kazakh oil, the Russians have outstripped their rivals and signed in 2007 an agreement with Kazakhstan and Turkmenistan to transport oil and gas round and above the Caspian Sea and to join the Russian pipeline. The Russians called it "Oil-Gas Diplomacy Victory." The other important Russian south line has been agreed upon with an Italian oil company to go under the Black Sea to Bulgaria and Greece and onto Southern Europe, avoiding the Strait of Bosporus. This is called the southern pipeline.

Russia's Eastern expansion of oil lines is also constructed in the direction of Vladivostok for Japan with a branch pipe to China. And that is not all. Also in 2007, a Russian deep-sea exploration vessel lowered a bathyscaphe to the bottom of the center of the Arctic Ocean, claiming the continental shelf—the size of Europe—together with its gigantic deposits of oil and gas.

In this way, the Russians have outstripped the American companies and circumvented any undependable transit pro-American countries, reaching Western Europe from the north and the south, using underwater pipelines. Such tactics have infuriated such countries as Poland, Ukraine, Georgia, and Moldavia. So far, it looks like Moscow has won the battle for Central Asian oil and gas. Yet Poland is still strongly lobbying for Central Asian oil and gas to be pumped via Georgia and Ukraine to Poland and to Western Europe, going around any Russian territory.

EU-Indonesia Perspective

Indonesia admires Europe's pioneering role in the efforts to find solutions to today's urgent issues: global warming, infectious diseases, energy security, poverty, terrorism, millennium development goals, and conflicts. These are also issues that are critically important to Indonesia. With these similarities and shared visions, it is only natural that Indonesia and the European Union move ever closer together.

The trade value between Indonesia and the European Union totalled more than USD 18 billion last year, with an estimated growth rate of 15%. We have started negotiations on a Voluntary Partnership Agreement to establish a credible certification of Indonesia's timber export, which supports Indonesia and Europe's strong commitment to combat illegal logging and guarantee the legality of timber exports.

We have concluded negotiations on the Partnership and Cooperation Agreement (PCA) between the European Community and Indonesia, which will substantially elevate our bilateral relations. We look forward to initiating and signing the PCA, in the near future.

"We also called for rapid progress in the ongoing negotiation of an ASEAN-EU Free Trade Agreement, which I am optimistic, will pave the way for enhanced trade and investment between our two regions. Furthermore, Indonesia and the European Union will also work closely to ensure the success of the Conference of the Parties to the UNFCCC in Bali in December 2007," declared Susilo Bambang Yudhoyono, President of the Republic of Indonesia, at a banquet in honor of the President of the European Commission in Jakarta on November 23, 2007.

EU Energy Policy

Energy is a vital part of European lives. But the days of secure, cheap energy are over, and Europe is already facing the consequences of climate change, increasing import dependence and higher energy prices. In order to ensure a sustainable, secure and competitive energy supply, a common European response is needed to tackle the climate changes.

Energy is the main factor in climate change, accounting for some 80% of EU's greenhouse gas emissions. It has been estimated that, without real efforts to reduce emissions, there is a real chance that global temperatures will rise by several degrees, dramatically altering the world's landscape. The EU is committed to reducing greenhouse gas emissions, but its present energy practice will

result in increasing them by 5% by 2030. The EU's current energy and transport policies are not sustainable. Acting now to tackle climate change is essential.

It is essential to ensure the security of energy supply. Rising, volatile prices, blackouts and difficulties in supply have all illustrated the risks of being overly dependent on oil and gas. With global need on the up, this pattern is set to continue. The International Energy Agency expects worldwide demand for oil alone to increase by well over a third by 2030. The question is how to meet this. If energy trends and policies remain as they are, the EU's reliance on imports will jump from half to almost two-thirds in 2030. Eighty-four percent of gas would have to be imported, as would 93% of oil. But from where and how these supplies would come is unclear. Add to this the fact that several EU member states are essentially dependent on one single gas supplier and the factor in the lack of a crisis support structure between countries, the EU's growing vulnerability is evident.

Making the EU economy more competitive is imperative. The EU's increasing dependency on imports threatens not only its security of supply but it also implies higher prices. If, for example, the price of oil rises to USD 100/barrel in today's money by 2030, the EU-27 energy import bill will be around 50% (€170 billion) higher. While Europeans would have to pay a lot more for their energy, few additional jobs in the EU would be created this way. In contrast, boosting investment in energy efficiency, renewable energy and new technologies has wide-reaching benefits and would contribute to the EU's strategy for growth and jobs. Such an initiative would cut import spending, provide many long term employment opportunities, and improve the EU's economy as a whole.

Conclusion

If we take the map of Poland, we can clearly see that one pipeline being built by the Russian-German concern is under the Baltic Sea north of Poland; while the other southern line is under the Black Sea to Bulgaria, avoiding Poland, and not only Poland, in the south. Russia's policy, as it can be seen, is to avoid as many transit countries as possible by using underwater routes.

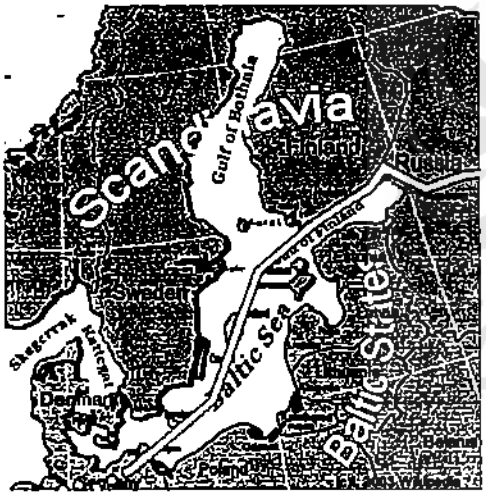
In line with the Polish program to diversify its energy sources and thus prevent an energy crisis in the country, Poland is actively seeking alternative sources of energy. Among others, it is planning to build nuclear power plants together with its

neighbour Lithuania. The government is seeking other sources for its gas and oil supplies, from such places as: North African countries and, especially, the Middle East. In view of this and the rapid development of Polish economy, the need for energy is constantly rising.

I would not be a surprise if Poland would seek LPG imports from Indonesia in return for developing coal mines, steel mills and shipyards in Indonesia, as Poland did in the 1960s. Clearly, Indonesia-Poland cooperation in the energy sector, would, in return, strengthen the already excellent bilateral undertakings in many fields.

All in all, the proposed EU energy policy to be achieved by 2020, besides seeking a common policy for all EU countries, boils down to the reduction of greenhouse gases by 30% from developed countries; the improvement of energy efficiency by 20%; and raising the share of renewable energy to 20%; as well as increasing the level of bio fuels in transport fuel to 10%. □

Footnote—Maps



Map of Nord Stream (former names: North Transgas and North European Gas Pipeline) is a planned natural gas pipeline from Russia to Germany. Construction of the Russian onshore section began in December 2005 and is slated for completion in 2010. The offshore section of pipeline is being ordered and will be operated by Nord Stream AG, a joint company owned by Russia's Gazprom (51% of shares), BASF and E.ON (both 20%), and N.V. Nederlandse Gasunie (9%). It will run from Vyborg compressor station at Portovaya Bay along the bottom of the Baltic Sea to Greifswald in Germany. The length is 1200 km. The plan is to build two parallel gas pipeline legs each with capacity of 27.5 billion cubic meter (bcm) per year. The first gas delivery is scheduled for the spring of 2011.It will cost more than 4 billion euro.

General Map

1. The Yamal-Europe natural gas pipeline is a 4,196-kilometer-long pipeline connecting natural gas fields on the Yamal peninsula, Russia, with Germany. The pipeline includes around 3,000 kilometers in Russia, 575 kilometers in Belarus and 680 kilometers in Poland. The gas system in Germany connected to the Yamal-Europe pipeline through the JAGAL pipeline is about 1695 kilometers in total length. The construction of the second leg of the pipeline is currently under discussion.

   The Russian and Belarusian sections of the pipeline are owned and operated by Gazprom. The Polish section of the pipeline project is owned and operated by EuRoPol Gaz S.A., which is a joint venture of the Polish PGNiG, Russian Gazprom (both 48% of shares) and Polish Gas-Trading S.A. (4% of shares).

2. Blue Stream is a major trans-Black Sea gas pipeline that carries natural gas from Russia into Turkey. The pipeline has been constructed by the Blue Stream Pipeline B.V., the Netherlands based joint venture of Russian Gazprom and Italian ENI. According to Gazprom the pipeline was built with the intent of diversifying Russian gas delivery routes to Turkey and avoiding third countries.

   The Blue Stream pipeline has been officially inaugurated at the Durusu gas metering station in November 2005. By 2010, Blue Stream is expected to be operating at full capacity, delivering 16 billion cubic meters of gas per year. Total length of the pipeline is 1213 km.

   The total cost of the Blue Stream pipeline came to $3.2 billion, including $1.7 billion spent on building its underwater segment.

3. Trans-Caspian gas pipeline

   One of the political goals of the Blue Stream project was to block the path of rival countries aiming to use the territory of Turkey to bring gas from the Middle East and Caspian area to Europe. In November 1999, the presidents of Turkmenistan, Turkey, Azerbaijan, and Georgia signed a four-party inter-governmental agreement on building a rival Trans-Caspian gas pipeline. Within a few months, major oil companies-General Electric, Bechtel, Royal Dutch Shell-had established a joint venture to work on the competing project. By spring 2000, however, an argument had arisen among the Trans-Caspian participant nations over allocating quotas for Azerbaijan's use of the pipeline; as a result, all construction work was halted. Thus, Blue Stream won the battle for the Caspian. However, at the end of 2006, the first section of original Trans-Caspian pipeline—South Caucasus Pipeline from Baku to Erzurum—was opened.

4. The memorandum of understanding of construction South Stream was signed in Rome in June 2007 by Italian energy company Eni and Russian Gazprom

   The pipeline is planned to carry 30 billion cubic meters (bcm) of gas annually. The project will be jointly financed, owned, and operated by Gazprom and ENI with minority stakes offered to transit countries. The deliveries are scheduled to start by 2013. The pipeline is expected to cost nearly EUR 7 billion.

   The South Stream would start from the Beregovaya compressor station at the Russia's Black Sea coast, and would run to Bulgaria's Varna. From there, the southwestern route would continue through Greece and the Ionian Sea to southern Italy. The northwestern route would run through Romania, Hungary, and Slovenia to northern Italy with a branch to Austria. Alternative route of the northern branch involves Serbia and Croatia.

   The project would partly replace the planned extension of Blue Stream from Turkey through Bulgaria and Romania to Hungary. South Stream is also likely to dash hopes of Gazprom joining the Nabucco Pipeline project.

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