

Model ekonomi hijau sebagai strategi pembangunan kota berkelanjutan kajian konsep ekonomi rendah karbon berbasis konsumsi energi di DKI Jakarta = Green economic model as strategy for sustainable urban development study of low carbon economic concept base on energy consumption in DKI Jakarta

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Abstrak

[ABSTRAK

Perkembangan kota DKI Jakarta yang pesat di sektor ekonomi telah meningkatkan konsumsi energi dan mengakibatkan degradasi lingkungan berupa peningkatan emisi CO₂. Sektor energi merupakan penyumbang terbesar emisi CO₂ di DKI Jakarta dibandingkan dengan sektor non energi seperti limbah baik padat maupun cair. Jumlah emisi CO₂ yang dihasilkan oleh sektor energi mencapai hampir 92% dan sektor non energi 8%. (BPLHD DKI Jakarta, 2011). Masih tingginya emisi karbon di DKI Jakarta disebabkan oleh inefisiensi konsumsi energi dan aktivitas ekonomi tanpa mitigasi karbon. Hasil penelitian menunjukkan bahwa karakteristik penting dalam pembangunan kota berkelanjutan di DKI Jakarta saat ini adalah perkembangan kota yang belum mengarah pada kota rendah karbon. Hal ini tercermin dari pola peningkatan PDRB atau pertumbuhan ekonomi selalu diikuti dengan peningkatan emisi CO₂ yang tinggi, emisi CO₂ per kapita tinggi, pertumbuhan konsumsi energi tak terbarukan (BBM) yang tinggi, rasio energi terbarukan yang rendah, inefisiensi konsumsi energi ditandai dengan elastisitas energi yang tinggi, luas ruang terbuka hijau sebagai area serapan emisi CO₂ masih rendah serta pola distribusi RTH yang tidak sesuai dengan pola distribusi emisi CO₂. Pertumbuhan ekonomi (PDRB) dan konsumsi energi memiliki hubungan kausalitas dua arah dalam jangka panjang dengan α sebesar 10%. Pertumbuhan ekonomi dan emisi CO₂ juga memiliki hubungan kausalitas satu arah dalam jangka panjang dengan α sebesar 10%. Hasil pengujian juga memperlihatkan bahwa konsumsi energi dan emisi CO₂ hanya memiliki hubungan satu arah dalam jangka panjang dengan α sebesar 10%. Model ekonomi rendah karbon (ekonomi hijau) dapat mengurangi emisi CO₂ namun tetap dapat menjaga stabilitas pertumbuhan ekonomi. Upaya mitigasi CO₂ secara sistemik dalam model ekonomi rendah karbon dapat dilakukan melalui intervensi kebijakan energi hijau yang meliputi peningkatan rasio bahan bakar minyak terbarukan, konversi bahan bakar minyak ke gas alam dan peningkatan luas ruang terbuka hijau perkotaan secara simultan.;

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ABSTRACT

The development of Jakarta rapid economic sector has increased energy

consumption and resulting in environmental degradation in the form of an increase in CO₂ emissions. The energy sector is the largest contributor of CO₂ emissions in Jakarta compared to the non-energy sector such as solid or liquid waste. The amount of CO₂ emissions produced by the energy sector reached almost 92% and 8% in non-energy sector. (BPLHD Jakarta, 2011). The persistently high carbon emissions in Jakarta is caused by inefficiency in energy consumption, high emissions of CO₂ and economic activity without carbon mitigation. The results showed that an important characteristic in a sustainable urban development for Jakarta is the development of the city that is not going towards a low-carbon city concept. This is reflected in the pattern of increase in GDP or economic growth that is always followed by an increase in CO₂ emissions, CO₂ emissions per capita, the growth of non-renewable energy consumption (fuel), the low ratio of renewable energy, energy consumption inefficiencies characterized by energy elasticity, low availability of tall and wide green open space area to adsorb CO₂ emissions, and distribution pattern of green space that does not follow the pattern of distribution of CO₂ emissions. Economic growth (GDP) and energy consumption has a bidirectional causality in the long term with β by 10%. Economic growth and CO₂ emissions also have a one-way causal relationship in the long term with the β of 10%. The test results showed that energy consumption and CO₂ emissions only have a one-way relationship in the long term with β by 10%. Low-carbon economic model (green economy) can reduce CO₂ emissions while still maintaining the stability of economic growth. A systematic CO₂ mitigation efforts through low-carbon economy model can be done by intervention of green energy policy that includes an increase in the ratio of renewable fuels, conversion of fuel oil to natural gas and the increase of urban green open space area simultaneously; The development of Jakarta rapid economic sector has increased energy

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