STUDY OF THE CONTRIBUTION OF EASTERN JAVA OF CO₂ EMISSION THROUGH TRANSPORTATION AND ENERGY CONSUMPTION

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ABSTRACT

CO₂ emission produced by Eastern Java Province from transportation sector and energy consumption in industry was 8,999,000 tons CO₂ at 2007 and 4,098,760 tons CO₂ at 2005. This number of CO₂ emission increases as the number of vehicles and energy consumption from industry in East Java increases. The objective of this study is to analyze the contribution of East Java on CO₂ emission from transportation and energy consumption from medium and large scale industries.

In this study, CO₂ emission was calculated for the transportation and industrial sector using the IPCC method. Data from each sector was from year 2012 and being projected to year 2025. The calculation was done for CO₂ emission from the use of fossil fuels and convert to gas for each sector based on scenarios that drawn up.

The calculation of CO₂ emission from the transportation sector amounted to 41,550,009,80 tons CO₂ while energy consumption reached 1,063,646,64 tons CO₂ for fossil fuels at year 2025. The CO₂ emission can be reduced by applying the third scenario was 1,747,28 tons CO₂. CO₂ emission produced by transportation and industry sectoral for the third scenario was 41,548,262,52 tons CO₂ and 1,062,650,96 tons CO₂.

Keywords : CO₂ emission, Energy Consumption, Industry, Transportation
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