ANALISIS NILAI EMISI DAN PERSEBARAN SUMBER GAS RUMAH KACA BERDASARKAN JEJAK KARBON DI FAKULTAS TEKNIK UNIVERSITAS DIPONEGORO

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ABSTRAK

Menghitung nilai emisi gas rumah kaca yang dihasilkan oleh suatu universitas adalah salah satu indikator dalam pembentukan *Green Campus* sebagai upaya mitigasi pemanasan global. Mitigasi dilakukan akibat dari terus meningkatnya emisi gas rumah kaca (GRK) yang disebabkan oleh banyaknya aktifitas manusia dalam pemenuhan kebutuhan. Pada penelitian ini, dilakukan perhitungan emisi GRK yang dihasilkan di kampus Universitas Diponegoro khususnya di Fakultas Teknik berdasarkan jejak karbon. Perhitungan jejak karbon dibagi ke dalam 5 sektor, yaitu sektor emisi pembakaran bahan bakar minyak, sektor emisi pembakaran bahan bakar gas, sektor emisi penggunaan listrik, sektor emisi penggunaan kertas, dan sektor emisi timbulan sampah. Pada tahun 2015, Fakultas Teknik Universitas Diponegoro menghasilkan emisi dari sektor emisi pembakaran bahan bakar minyak sebanyak 1.732,855 ton CO_2eq, emisi pembakaran bahan bakar gas sebanyak 17,577 ton CO_2eq, emisi penggunaan listrik sebanyak 626,163 ton CO_2eq, emisi penggunaan kertas sebanyak 155,808 ton CO_2eq, dan emisi timbulan sampah sebanyak 42,001 ton CO2eq dengan total emisi keseluruhan sebanyak 2.569,079 ton CO_2eq.

Kata Kunci : Emisi gas rumah kaca, jejak karbon, aktifitas kampus

Value Analysis And Source Dispersion of Greenhouse Gases Emission By Carbon Footprint At Faculty Of Engineering Diponegoro University

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ABSTRACT

Calculating the value of the greenhouse gas emissions generated by a university is one of the indicators in the formation of the Green Campus as efforts to mitigate global warming. Mitigation is as a result of continued increase of greenhouse gas emissions (GHG) emissions caused by many human activities in fulfilling the needs. In this study, the calculation of GHG emissions generated at Diponegoro University campus, especially in the Faculty of Engineering is based on the carbon footprint. The calculation of the carbon footprint is divided into five sectors, namely oil fuel combustion emissions, fuel combustion emissions sectors of gas, electricity sector use emissions, emissions sector paper usage, waste generation and emissions sector. In 2015, the Faculty of Engineering, Diponegoro University emissions from the sector emissions of burning fossil fuels as much as 1.732,855 tons CO_2eq, emissions of gaseous fuel combustion as much as 17,577 tons of CO_2eq, emissions electricity usage as much as 626,163 tons of CO_2eq, emissions paper usage as much as 155,808 tons CO_2eq, emissions and waste generation as much as 42,001 CO_2eq with a total overall emissions as much as 2.569,079 tons CO_2eq.

Keyword : Greenhouse Gases Emission, carbon footprint, college activity