Kajian Pengelolaan Lingkungan Industri Semen Berkelanjutan (Studi pada Industri Semen PT. X di Kabupaten Rembang) = Study Of Sustainable Cement Industry Environmental Management (Study on PT. X Cement Industry in Rembang Regency)

Muhammad Barin Elyasa, author

Abstrak

Tren produksi semen secara global maupun dalam negeri mengalami kenaikan setiap tahunnya. Faktanya industri semen berperan menyumbang emisi karbon global sebesar 5% Selain pencemaran udara. Tujuan penelitian ini adalah untuk menganalisis aspek sosial ekonomi (tingkat kesehatan, penerapan keselamatan kerja dan upah karyawan), menganalisis dampak lingkungan (global warming potential dan abiotic depletion) dan menyusun konsep pengelolaan lingkungan industri semen. Tingkat kesehatan, penerapan keselamatan kerja dan upah karyawan dianalisis dengan metode statistik deskriptif, sedangkan global warming potential dan abiotic depletion dianalisis menggunakan metode Life Cycle Assessment (LCA). Hasil penelitian menunjukkan Upah pekerja yang diberikan tergolong cukup sesuai dengan beban kerja yang diberikan; tingkat kesehatan pekerja tergolong sehat; penerapan Kesehatan dan Keselamatan Kerja (K3) tergolong baik dan Dampak lingkungan berupa Global Warming Potential (GWP) dan penurunan abiotik (Fossil Fuel) sebesar 965,55 kg CO2 eq/Ton semen dan 2.467,10 MJ setiap ton semen. Kesimpulannya adalah perlu adanya upaya melakukan kegiatan efisiensi energi dengan menutup false air yang pada unit kiln dan menggunakan bahan bakar alternatif.

.....The trend of cement production globally and domestically has increased every year. The fact is that the cement industry plays a role in contributing to global carbon emissions by 5% besides air pollution. The purpose of this study was to analyze socio-economic aspects (level of health, application of work safety and employee wages), analyze environmental impacts (global warming potential and abiotic depletion) and develop environmental management concepts for the cement industry. The level of health, implementation of work safety and employee wages were analyzed using descriptive statistical methods, while global warming potential and abiotic depletion were analyzed using the Life Cycle Assessment (LCA) method. The results of the study show that the wages given to workers are classified as sufficient in accordance with the workload given; the level of workers' health is classified as healthy; the implementation of Occupational Health and Safety (K3) is classified as good and the environmental impacts are in the form of Global Warming Potential (GWP) and reduction of abiotic (Fossil Fuel) of 965.55 kg CO2 eq/tonne of cement and 2,467.10 MJ per tonne of cement. The conclusion is that efforts are needed to carry out energy efficiency activities by closing the false water in the kiln unit and using alternative fuels.