

ANALISIS KINERJA INDUSTRI SEMEN BERBASIS GREEN SUPPLY CHAIN MANAGEMENT

Almaash Putridewi

ABSTRAK

Pertumbuhan ekonomi menyebabkan meningkatnya jumlah industri yang berdampak pada meningkatnya jumlah limbah B3 hasil industri maupun limbah cair domestik. Selain limbah B3, berbagai aktivitas industri juga menghasilkan emisi Gas Rumah Kaca. Pada sektor *Industrial Processes and Product Use* (IPPU), industri mineral mengeluarkan emisi terbanyak yang sebagian besar dihasilkan dari produksi semen. Menanggapi hal tersebut, pemerintah berupaya menerapkan regulasi, kerjasama dan penilaian melalui berbagai mekanisme diantaranya PROPER. Salah satu pabrik semen yang turut merespon hal tersebut dan berupaya untuk menjadi perusahaan yang lebih ramah lingkungan adalah PT Semen Gresik. Meskipun telah mendapatkan peringkat Biru dalam penilaian PROPER, PT Semen Gresik belum memiliki sistem pengukuran kinerja yang memfokuskan tolak ukurnya pada *Green Supply Chain Management* sehingga tidak mengetahui bagian kinerja mana dari GSCM perusahaan yang membutuhkan perbaikan. Penelitian ini bertujuan untuk memberikan informasi kepada perusahaan mengenai kondisi kinerja terkini pengelolaan rantai pasok ramah lingkungan melewati rancangan model sistem pengukuran kinerja *Green Supply Operation Reference* (Green SCOR) dan *Analytical Hierarchy Process* (AHP), serta melakukan penilaian kinerja GSCM perusahaan yang selanjutnya digunakan untuk merumuskan rekomendasi perbaikan indikator kinerja yang dinilai kurang baik. Hasil penelitian ini teridentifikasi 18 indikator kinerja dari 5 proses yang sesuai digunakan dalam pengukuran kinerja GSCM PT Semen Gresik. Secara keseluruhan kinerja GSCM perusahaan mendapatkan nilai 77 yang masuk dalam kategori “Good”, namun terdapat lima indikator yang memiliki nilai kinerja kurang baik dan dibutuhkan rekomendasi perbaikan.

Kata Kunci: Industri Semen, Emisi Gas Rumah Kaca, *Green Supply Chain Management* (GSCM), *Analytical Hierarchy Process* (AHP), *Green Supply Chain Operation Reference* (Green SCOR)

CEMENT INDUSTRY PERFORMANCE ANALYSIS BASED ON GREEN SUPPLY CHAIN MANAGEMENT

Almaash Putridewi

ABSTRACT

Economic growth causes an increase in the number of industries which has an impact on increasing the amount of hazardous waste produced by both industry and domestic liquid waste. Besides hazardous waste, various industrial activities also produce Greenhouse Gas emissions. In the Industrial Processes and Product Use (IPPU) sector, the mineral industry emits the most emissions, mostly from cement production. In response to this, the government seeks to implement regulations, cooperation and assessments through various mechanisms including PROPER. One of the cement factories that responds to this and strives to become a more environmentally friendly company is PT Semen Gresik. Although it has received a Blue rating in the PROPER assessment, PT Semen Gresik does not yet have a performance measurement system that focuses its benchmarks on Green Supply Chain Management so it does not know which part of the company's GSCM performance that needs improvement. This study aims to provide information to the company regarding the current performance condition of Green Supply Chain Management through the design of the Green Supply Operation Reference (Green SCOR) and Analytical Hierarchy Process (AHP) performance measurement system models, as well as to assess the company's GSCM performance which is then used to formulate recommendations for improvement of performance indicators that are considered deficient. The results of this study identified 18 performance indicators from 5 processes that were suitable for measuring the performance of PT Semen Gresik's GSCM. Overall, the company's GSCM performance got a score of 77 which was included in the "Good" category, but there were five indicators that had poor performance scores and recommendations for improvement were needed.

Keywords: Cement Industry, Greenhouse Gas Emissions, Green Supply Chain Management (GSCM), Analytical Hierarchy Process (AHP), Green Supply Chain Operation Reference (Green SCOR)