

PENILAIAN DAMPAK LINGKUNGAN PADA INDUSTRI NATA DE COCO SKALA MENENGAH

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INTISARI

Nata de coco merupakan salah satu produk olahan air kelapa yang cukup populer. Dalam proses produksi, *nata de coco* juga menghasilkan berbagai jenis limbah, baik padat maupun cair. Penelitian ini bertujuan untuk melakukan penilaian dampak lingkungan pada industri *nata de coco* skala menengah.

Penelitian ini dilakukan pada industri *nata de coco* skala menengah di DIY selama 1 bulan dari bulan Oktober - November 2018. Penelitian dampak lingkungan dilakukan dengan metode LCA yang terdiri dari 4 tahap, yaitu menentukan tujuan serta ruang lingkup, analisis inventori, analisis dampak, dan menginterpretasikan hasil. Data yang diambil berupa data daur hidup inventori, data produksi, dan data jumlah limbah yang dihasilkan.

Hasil penelitian menunjukkan bahwa dampak lingkungan paling besar ditimbulkan dari proses produksi *nata de coco* ialah gas rumah kaca (GRK). Potensi emisi GRK paling tinggi disebabkan karena adanya penggunaan energi listrik yang besar. Usulan perbaikan untuk mengurangi dampak lingkungan yaitu mengganti lampu penerangan yang digunakan, pembuatan biogas dan pupuk organik dari limbah kulit nata, penerapan *Good Manufacturing Practices* (GMP), penggunaan kembali air yang digunakan dalam proses sortir *nata de coco* sebagai pemberat proses *press*.

Kata kunci: *Nata de coco, Kinerja Lingkungan, Life Cycle Assessment.*

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THE ENVIRONMENTAL IMPACT ASSESSMENT IN THE MEDIUM SCALE NATA DE COCO INDUSTRY

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ABSTRACT

Nata the coco is a food produced by bacteria fermentation of coconut water. It became very popular because of its health benefit. In the production process, nata de coco also made various types of waste, such as solid and liquid waste. This research is aimed to conduct an environmental impact assessment on the medium scale nata de coco industry.

This research is conducted at a medium scale nata de coco industry. The data were collected within 1 month time, which is from October to November 2018. Environmental impact assessment is conducted by using the LCA method, it consisted of four stages, such as determining objectives and scope, inventory analysis, impact analysis, and interpreting results. The data are life cycle inventory, production outcome, and the amount of waste.

The result of the study shows that the biggest environmental impact was greenhouse gas (GHG). The biggest potential of GHG emissions is due to the large use of electricity. Based on the results of the application of LCA, recommendations can be made, such as replacing the lighting used, making biogas and organic fertilizers from the waste, implementing Good Manufacturing Practices (GMP), and reusing water used in the sorting process of nata de coco in the press process.

Keywords : *Nata de Coco, Environmental Performance, Life Cycle Assessment.*

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