

ABSTRAK

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Program Studi : Teknik Lingkungan

Judul : Studi Potensi Daur Ulang Sampah di Universitas Agung
Podomoro Dalam Rangka Menuju Kampus Berkelanjutan

Pertumbuhan penduduk menyebabkan meningkatnya jumlah timbulan sampah. Besaran timbulan dan komposisi sampah akan berbeda tergantung dari pola konsumtif masyarakatnya. Penelitian ini dilakukan di Universitas Agung Podomoro yang bertujuan untuk mengetahui jumlah timbulan sampah, komposisi sampah, potensi daur ulang sampah serta menghitung jumlah gas metana (CH_4) dari sampah yang dapat dikurangi. Partisipasi masyarakat dalam pengelolaan sampah juga disurvei untuk mengetahui rekomendasi strategi yang tepat dilakukan oleh kampus UAP. Penelitian ini menggunakan pendekatan kuantitatif. Metode pengukuran sampling mengacu pada SNI 19-3964-1994 sedangkan uji statistik yang digunakan untuk analisis partisipasi masyarakat kampus adalah distribusi frekuensi dan *chi-square*. Hasil penelitian menunjukkan bahwa rata-rata timbulan sampah di kampus UAP sebesar 52,63 kg/hari atau 0,08 kg/orang/hari dengan total sampah selama 14 hari pengukuran sebesar 736,87 kg. Komposisi sampah di kampus UAP terdiri dari 32,29% sampah mudah mengurai dan 67,71% sampah sulit mengurai (didominasi oleh sampah plastik kemasan). Potensi daur ulang sampah di kampus UAP sebesar 61,01% di mana sebesar 22,28% untuk pengomposan dan 38,73% sampah *recyclable*. Sedangkan jumlah emisi gas metana (CH_4) yang dapat diturunkan jika sampah di kampus UAP dikelola sebesar 1,148 kg CH_4 /hari. Rekomendasi strategi pengelolaan sampah di kampus UAP juga disarankan.

Kata kunci: *timbulan sampah, potensi daur ulang, dan kampus berkelanjutan*

ABSTRACT

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Population growth causes an increase in the amount of waste generation. The amount of waste generation and composition will differ depending on the consumptive pattern of the community. This research was conducted at Universitas Agung Podomoro (UAP) which aims to determine the amount of waste generation, composition of waste, recycling potential and calculate the amount of methane gas (CH₄) that can be reduced. The campus community's participation in waste management at UAP was also surveyed to formulate recommendations for the waste management at UAP. This research used quantitative approach. The sampling measurement referred to SNI 19-3964-1994 while the statistical test used for the analysis of campus community participation was frequency distribution and chi-square. The results showed that the average solid waste generation at the UAP is 52.63 kg/day or 0.08 kg/person/day with a total waste of 736.87 kg in 14 days. The composition of waste at UAP consisted of 32.29% biodegradable and 67.71% difficult to decompose waste (dominated by plastic packaging waste). The recycling potential was 61.01% in which 22.28% was for composting and 38.73% for recyclable waste. The amount of methane (CH₄) emissions that can be reduced if the waste at UAP could be properly managed was 1,148 kg CH₄/day. Recommendations for solid waste management at UAP were also suggested.

Keywords: *waste generation, recycling potential, and sustainable campus*