Potensi sampah TPA Sumur Batu sebagai bahan baku refuse derived fuel (RDF) = The potential of solid waste in TPA Sumur Batu as refuse derived fuel (RDF)

Christian Pratama D., author

Abstrak

Berdasarkan hasil pengamatan selama delapan hari penelitian pula, diketahui bahwa timbulan sampah yang masuk ke TPA Sumur Batu adalah sebesar 266,88 ton/hari. Dengan komposisi sampah yang masuk ke TPA Sumur Batu yang berupa material mudah terbakar combustible material adalah sampah plastik, karet, kertas, kayu, dan tekstil yang masing-masing berjumlah 11,41 , 4,44 , 5,48 , 5,03 , dan 5,58 dari total keseluruhan sampah yang masuk ke TPA Sumur Batu. Dengan jumlah yang cukup besar tersebut, salah satu upaya untuk mengurangi jumlah sampah seperti jenis diatas dapat dilakukan dengan mengubah material sampah tersebut menjadi bahan baku Refuse Derived Fuel RDF.
Potensi sampah dari tiap-tiap material tersebut ditinjau dari beberapa parameter penelitian. Parameter yang digunakan antara lain berupa kadar air, kadar volatil, kadar abu, serta nilai kalor. Berdasarkan hasil penelitian diperoleh bahwa kadar air sampah yang dapat dijadikan sebagai bahan baku RDF sebesar 41,81 , kadar volatil sebesar 81,21 , dan kadar abu sebesar 12,09, serta nilai kalor sebesar 2.365,27 ndash; 3.967,12 kCal/kg.
.....Based on the eight day of observation, the generation of solid waste that enter TPA Sumur Batu was as many as 266,88 tones day. With solid waste composition that enter TPA Sumur Batu consists of combustible materials which is plastic, rubber, paper, wood, and textile each with 11,41 , 4,44 , 5,48 , 5,03 , and 5,58 from the total amount of solid waste generation.With such a considerable amount of solid waste, one of the efforts that could be done to reduce the amount of solid waste varieties as mentioned above is convert the waste materials into Refuse Derived Fuels RDF.
Waste potential from each materials reviewed by several research parameters.Parameters used in this research are water content, volatile content, ash content, and calorific value. Based on the research results obtained that the water content amount of solid waste which can be used as Refuse Derived Fuel RDF raw material is 41,81 , the volatile content amount is 81,21 , the ash content amount is 12,09 , and the calorific value is as much as 2.365,27 ndash 3.967,12 kCal kg.