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A review of Drying Technologies for Refuse Derived Fuel (RDF) and Possible Implementation for Cement Industry

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Abstract: Refused-Derived Fuel (RDF) in global energy demand plants has risen over the past decades as a sustainable secondary supply of energy resources. Food waste as a significant fraction of municipal solid waste (MSW) has a great potential for energy production especially in developing country such as Indonesia. To date, many industries focus on drying technologies development for utilization of food waste for energy conversion. Lowering moisture content of food waste is essential to improve RDF heating value (LHV) and further to avoid more steam generation in the combustor. Vaporization of the moisture in fuel consumes a portion of the available energy. The review highlights a number of drying technology application for RDF including direct and indirect steam drying. Furthermore, the review highlights the considerable opportunity for further development of dryer application for Indonesia's cement industry.

Keywords : Cement industry, Drying technologies, Food waste, Municipal Solid Waste (MSW), Refuse-Derived Fuel (RDF)

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