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LIFE CYCLE ENERGY USAGE AND GHG EMISSIONS STUDY OF A SUGAR MILL IN INDIA

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Abstract

Day by day, energy resources are diminishing and the concentration of GHG (greenhouse gas) emissions are increasing in the world. So, analysis and waste utilization of industries has a great concern for the society. Sugar mill plays an important role in the context of Indian market. Sugar industry mainly consist of three plants i.e., sugar mill, cogeneration plant and distillery unit. These units i.e. cogeneration and distillery are basic industries for power and chemical sectors which is having a common input from sugar mill. Here four combinations have been considered for the sugar mill having different combination of plants. In the present study, energy usage and GHG emissions have been estimated for different combinations of sugar mill.

Key words: energy use, GHG emission, LCA, sugar mill

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