GREEN BUILDING: EXPLORATORY USE OF BAMBOO LEAF ASH TO REDUCE CO_2 EMISSION AND ENERGY CONSERVATION IN CONCRETE PRODUCTION

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ABSTRACT

The global campaign against depletion of ozone layer and greenhouse effect is on the increase every day. It is in this view that more sustainable materials that could replace or reduce the high emission of CO_2 and high-energy consumption to the environment is discussed in this paper. Bamboo leaf ash (BLA) was investigated with its suitability in energy conservation and CO_2 emission reduction to the atmosphere. It was concluded that incorporating 15% BLA to cement usage for lightweight and mass concrete construction would significantly lower the amount of energy required during cement manufacturing and CO_2 emitted to the atmosphere and environment.

Keywords: Greenhouse, high emission, energy consumption, bamboo leaf ash and cement.