FOURDUST: Turning Green Waste Into Energy

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Growing global demand and utilization of fossil fuels has accelerated growth in wealth, but also higher levels of pollution and the consequent degeneration of public health. Moreover, mismanaged green waste and the rate of deforestation have exacerbated rapid climate change. This paper investigates an alternative to conventional unsustainable sources of energy. Though the concept of generating energy is not new, its execution and application are replete in markets of developing countries including Pakistan. To convert biomass into energy, the experimental methodology was the densification of raw material specifically sugarcane Bagasse and Coconut husk by carbonizing, shredding, and ultimately molding into fuel bio-briquettes. Our analysis shows a significant variance in burning time and cost-effectiveness in comparison to traditional substitutes including coal, charcoal. Therefore, it is evident from the research's finding that energy can be produced efficiently and sustainably to avert the current energy crisis. Therefore, it is essential to encourage the usage of briquettes, particularly in developing nations where the demand for fuel wood is high.

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King Abdulaziz &amp
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