Sustainable energy sources in Bangladesh: A review on present and future prospect

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ABSTRACT

Bangladesh is a small country with its large population struggled with several challenges over the last few decades, including overpopulation, power grid disruptions, floods, and global warming. Sufficient rate of energy production is must for a developing country, but quickly expanding population and overall economic growth interrupt the energy sector. Renewable energy plays a vital role to contribute in this sector. For becoming an agricultural country biomass is an important sustainable energy source for this country. Organic crop residues, animal waste, and municipal solid waste are the most accessible biomass energy sources in this country. On the other hand, by using the membrane gas separation technology the quality biogas can be improved and it helps the environment from the toxic CO₂ which is a major element of biogas. This study represents the extension, potential and innovations identified with the utilization of biomass assets. Besides the improvement of biogas also discussed in this paper. This paper also represents the various initiatives conducted by the government that are all relevant to biomass energy. This work further can be studies to innovate different biomass technology and to improve the quality of biogas.

KEYWORDS

Bangladesh; Energy; Energy sources; Renewable energy; Sustainability

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