

Prospect of Renewable Energy in Bangladesh: Policy Options

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Abstract

Renewable energy technologies (RETs) can help reduce poverty, energy shortage and environmental degradation such as desertification, biodiversity depletion and climate change effects in Bangladesh. The country is short of gas and electricity supply. Over-exploitation of biomass in meeting energy needs of the rural people has caused environmental degradation. RET can help solve those problems if it is widely used in the rural Bangladesh where people primarily depend on biomass energy. Bangladesh has enough renewable to mitigate such energy crisis and its adverse consequences. Bangladesh being an underdeveloped country, global initiative would be helpful in transferring RETs for the village households. This paper describes the glimpses of RETs in Bangladesh in terms of its policy issues, implementation, dissemination, marketing, and research and development activities. Modern RETs are still in the research, development and demonstration phase in the country. Like most of the developing countries, there is a niche market for new RETs and several private sector entrepreneurs and NGOs have tried to explore this market. Scarcity in energy sector is a major problem, which can hamper the growing development of a country. Bangladesh is one of the electricity-deprived countries; however, the energy demand of Bangladesh is increasing day by day. Due to the shortage of natural resources and environmental issues, many nations are now moving towards renewable energy. Among various form of renewable energy, wind energy is one of most potential source. In this paper, the present energy condition of Bangladesh is discussed and the necessity of moving towards renewable energy is clarified. The wind speed found at different locations at different heights and different years from the survey of several organizations are presented. Although, the results of installed low capacity wind turbines (from few kW to few tens of kW) operated by private or government organization at different places in Bangladesh are not so encouraging; however, it is shown that Bangladesh has a high potential of using large wind turbine (MW range) for capturing wind energy at different places. The present condition of wind energy in Bangladesh and other countries in the world are also presented to emphasize the requisite of moving towards wind energy.

Keywords

Renewable energy technology; solar home system; rural development; environmental; electricity; biogas; improved cooking stove; clean energy; energy efficiency.