

The Prospects of Coal as an Alternative Environmental Friendly Fuel to Mitigate Energy Crisis in Bangladesh Economy

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The substratum of any nation's economy is energy. It constitutes crucial infrastructural inputs into the economic development process. Extensive research has been conducted in the past, and all of them stated that energy is vital for the developing process. Bangladesh, being a lower middle income nation, has a very high population growth rate; therefore the demand for energy is increasing rapidly. Bangladesh has been blessed with substantial amount of natural gas, that helped the nation to make significant economic process. But the natural gas reserves are depleting, which will become a threat to the energy sector. Renewable resources, such as solar photovoltaic system, hydropower, and wind power are either constrained by its' initial cost or due to geographical reasons. Along with that, various political, social and economic reasons have also forced us to realize the importance of finding an alternative energy resource such as coal and the main purpose of this paper is to find out whether coal-fired power plants, are feasible or not in context to the Bangladesh energy sector. Coal technology has made a long way. The unfavorable side of coal can be avoided to a large extent. Technology such as Clean Coal, a preparation plant, can reduce the harmful effects that coal emits after burning it. Carbon capture and storage has also made notable progress in reducing carbon dioxide emission. This can be used in any of the pre-combustion, combustion or post-combustion process. Another technology, Fischer-Tropsch technology, has proved its significance in various countries. This is a stock of chemical reactions that converts a mixture of carbon monoxide and hydrogen into liquid hydrocarbon, a key component of gas to liquids technology to produce a synthetic lubricant and fuel. Sulfur dioxide, nitrogen oxide, and mercury all of it can be addressed, with respect to its own technologies. Bangladesh is highly dependent on its natural gas reserves and other countries, for petroleum products. This is affecting us in a lot of ways and none of them are in positive manners. Therefore, an alternate energy resource is highly required for a getaway towards sustainable energy that can fuel the nation.

Field of Research: Economics