

## Perspective and Challenge of Tidal Power in Bangladesh

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**Abstract :** Tidal power can play a vital role in integrating as new source of renewable energy to the off-grid power connection in isolated areas, namely Sandwip, in Bangladesh. It can reduce the present energy crisis and improve the social, environmental and economic perspective of Bangladesh. Tidal energy is becoming popular around the world due to its own facilities. The development of any country largely depends on energy sector improvement. Lack of energy sector is because of hampering progress of any country development, and the energy sector will be stable by only depend on sustainable energy sources. Renewable energy having environmental friendly is the only sustainable solution of secure energy system. Bangladesh has a huge potential of tidal power at different locations, but effective measures on this issue have not been considered sincerely. This paper summarizes the current energy scenario, and Bangladesh can produce power approximately 53.19 MW across the country to reduce the growing energy demand utilizing tidal energy as well as it is shown that Sandwip is highly potential place to produce tidal power, which is estimated approximately 16.49 MW by investing only US \$10.37 million. Besides this, cost management for tidal power plant has been also discussed.

**Keywords :** sustainable energy, tidal power, cost analysis, power demand, gas crisis

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