

# Expedited RE Expansion Essential To Ensure Energy Security

**B**angladesh in its Integrated Energy and Power System Master Plan (IEPMP) has set a target to achieve net zero greenhouse gas emissions by 2070 or beyond. Hence finalizing the plan for phasing out fossil fuel is no longer a priority for Bangladesh. Increasing contribution of renewable energy (RE) for ensuring energy security is essential now rather than considering it important for addressing climate change. Work is in progress in this regard. Relevant people are optimistic that there will be a considerable achievement toward this goal by 2030. Siddique Zobair, former member of SREDA and International Consultant at Alternate Energy, said this in an exclusive interview with Mollah Amzad Hossain, Editor of Energy & Power.

**What are your views about the commitment and sincerity of policymakers and bureaucracy about smooth development of RE in Bangladesh?**

Please note that the political leadership, including the honorable Prime Minister, is totally committed to the development of renewable energy and clean energy. It is challenging to achieve the target but there is no issue of sincerity with political leadership. But for reasons unknown, the bureaucracy is not yet fully convinced to battle the challenges and expansion of RE. Though the necessary policy directives have been already given yet required dynamism has not been created for expansion of the RE. We need to bear in mind that envisioned success cannot be achieved unless people involved in the process own the initiatives.

**It is being said that the cost of generation of solar power is much**

**higher than other countries. The cost of equipment and accessories has already been reduced in other countries. Bangladesh can not avail that opportunity for lack of transparency in the selection of entrepreneurs. How will you evaluate this?**

We must compare apple to apple before giving any observation. This is not being done for alternative energy. The tariff of coal and liquid fuel-based power in Bangladesh is much higher than other countries. There is also no doubt that the tariff of solar power is much higher than India and middle-eastern countries. Solar radiation in Bangladesh is considerably lower than that of Rajasthan, India and Middle Eastern countries. Consequently, making the same level of investment, the energy output is lower than those countries. Moreover, the cost of funds is higher in Bangladesh. Higher risk premium is also required for loans because of the lower credit rating of Bangladesh. Many of the equipment used for solar are locally available in India and other countries. Bangladesh needs importing most of these. Taking all the above into consideration, the tariff of solar is comparatively higher in Bangladesh than other countries. But this is progressively going down.

**Most RE projects in Bangladesh have been taken up based on unsolicited offers. Many observers claim that tariffs could be significantly reduced if the entrepreneurs could be selected through competitive bidding. What are your views?**

There is no denial that most entrepreneurs are selected based on



Siddique Zobair

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their unsolicited offers so far. Now time has come for selecting entrepreneurs on a competitive basis. Bangladesh must go for it. That will assure us the appropriate tariff of RE. We can set up a benchmark tariff and go from there.

**There is a popular belief that competitive solar tariffs may be achieved if the government and the other fossil fuel-based IPPs could acquire land, develop and provide to the entrepreneurs and ensure power evacuation facilities to the power grid. What are your views?**

You are probably aware that when the government introduced fossil fuel-based IPPs, the government acquired land and ensured primary energy supply and evacuation of power to the grid. Tariffs

will come down to reasonable levels if similar incentives are provided to RE too. Initiative has been taken for setting up a 5,000MW capacity solar park at a char area of Jamalpur. Attractive tariff offers can be achieved if the above incentives are provided to the entrepreneurs. Entrepreneurs at the special economic zones should also be provided with such incentives for the development of RE projects.

***There is a popular belief that for smooth development of solar electricity, a decentralized and distributed generation mechanism is a better option than grid-connected solar. Bangladesh has adopted a plan for achieving a 40% contribution of clean energy by 2041. Should we then gradually go for distributed generation?***

We consider solar and wind as variable renewable energy (VRE). There is no doubt that if a significant amount of VRE integrate into the grid than load balancing and synchronization of grid will be a challenge. In addition to developing grid connected RE, plans are moving ahead for developing distributed generation. RE will be developed at its own pace. Its development will not be hampered if enhance spinning reserve, establish grid connected storage system, modernize and upgrade transmission and distribution system as well as set auto command system of grid operation and balancing grid power supply by adjusting the base load generation. Base load plants will be operated in flexible mode. In my opinion, for a well synchronized grid, there should not be any issue in dealing with variable load. Initiative has been taken for ensuring 20% of the capacity as storage in the all-new contracts for grid connected solar projects. Challenges are there but technical solution is also available.

***Cost of solar power is considered higher in Bangladesh. The addition of storage will increase the cost further. What is your opinion?***

There is confusion about it. The cost of storage has been reduced significantly worldwide and it is gradually coming down. Cost of solar worldwide and

even in Bangladesh is staying ahead of coal-based power. The cost of solar power per unit now has dropped below 10 US cents per unit. It may increase to one US cents per unit if 20% storage capacity is added in the near term but ultimately this will come down.. This is not a huge issue. The grid can be kept stable even with the increase in power imports from the regional countries like Myanmar, Nepal and Bhutan along with increased generation of RE.

***The net metering policy is a milestone initiative of Bangladesh. 110MW power has been added from rooftop solar under this initiative. What is your observation about the future of this?***

Net metering policy is a great initiative. Success has started coming. Updating the policy has become essential now. The government has already initiated actions for this. Rooftop solar has become attractive due to its cost advantage over grid power. I am confident that it will grow faster in the future. In my opinion, there is a possibility of adding 3,000MW of rooftop solar by 2030. However, all the tax discrepancies must be removed from it.

***There was a belief for a long time that wind power has no prospect in Bangladesh. But it has by now proved to be a misconception. A 60MW wind power plant has started operation at Cox'sbazar now. Another 400MW wind power project is in the pipeline. What is your opinion about the prospect of wind power?***

You are right. ADB has completed a preliminary feasibility study on offshore wind. Some indication of the prospect has been identified. ADB has been requested for carrying out another feasibility study on offshore wind prospect. The prospect of offshore wind will be confirmed on completion of the study. Apart from above, a Danish company has started a feasibility study on a 500MW wind power project. Based on the outcome of the feasibility study, a contract may be signed for the implementation of the project. Besides,

a prefeasibility study has started after signing a MOU between the Power Division and a Chinese company. After completion of those studies and based on real generation data of 60 MW onshore wind project can get indication of wind energy potential in Bangladesh.

***Solar Irrigation Roadmap has been worked out with the assistance of ADB. Following this, a large part of diesel using irrigation pumps will be converted into solar by 2032. What is the present state of it?***

There exist 1.3 million diesel-run irrigation pumps in Bangladesh now. Huge savings in the import of diesel can be achieved if these can be replaced with solar pumps. At the same time, this can contribute a lot in developing the greening of the agriculture sector. Honorable Prime Minister Sheikh Hasina is giving top priority to solar irrigation. On successful implementation of the project, it may be possible to generate up to 1,000MW power. But the ADB study evidenced that mere setting up of solar pumps cannot make the initiative commercially viable. Arrangements need to be made to connect the solar irrigation pumps to the power grid. There are many challenges but managing the challenges is not impossible.

There is no alternative to developing a comprehensive and implementable business model of solar irrigation. Power division has requested the ADB to draw an implementation plan of solar roadmap. We hope that one or more workable business models for solar irrigation will be suggested in the plan. After completion of this, major success is expected by 2031.

***Many believe that updating the Renewable Energy Policy 2008 is essential for achieving expected success of RE development. What are your views?***

Recognizing the urgency, the government has launched an initiative for the work. As far as my knowledge goes, the policy updating will be completed within the next few months to make the policy time tested.

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