Bangladesh's Energy Perspective

South Asia Network for Clean Energy (StANCE)

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Bangladesh RE Policy

- ☐ The objectives of Renewable Energy policy are to:
- Potential of renewable energy resources and dissemination of renewable energy technologies in rural, peri-urban and urban areas;
- Enable, encourage and facilitate both public and private sector investment in renewable energy projects;
- Develop sustainable energy supplies to substitute indigenous nonrenewable energy supplies;
- Scale up contributions of renewable energy to electricity production;
- Scale up contributions of renewable energy both to electricity and to heat energy;

Continues

Bangladesh RE Policy

- Promote appropriate, efficient and environment friendly use of renewable energy;
- Train; facilitate the use of renewable energy at every level of energy usage.
- Create enabling environment and legal support to encourage the use of renewable energy.
- Promote development of local technology in the field of renewable energy.
- Promote clean energy for CDM; and Achieve the targets for developing renewable energy resources to meet five percent of the total power demand by 2015 and ten percent by 2020.

Sustainable and Renewable Energy Development Authority (SREDA)

- Sustainable and Renewable Energy Development Authority (SREDA) is established and to start its works within next few months.
- As the new organization has got most of the necessary procedural approvals from the government's highest level.
- Activities of renewable and sustainable energy will come under SREDA.
- SREDA will act as a coordination body for the development of the renewable energy in the country.

Bangladesh Energy Sector-at a Glance

- Installed National Capacity: over 10,000 MW
- 84% of Total capacity Generated from Natural
 Gas: High Dependency
- Access to Electricity: little over 50%

Growth & Business Opportunities in this sector



Until October 2014: 3.5 million Solar Home System (SHS) has been Installed in rural Off-Grid Areas of Bangladesh.

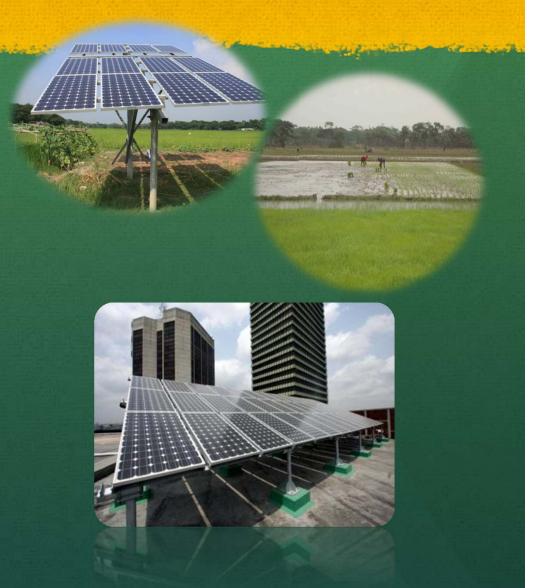
- 1. More than 70,000 SHS's are being installed in off-grid areas of Bangladesh every month.
- 2. Present Number of beneficiary is over 20 million rural people.
- 3. 100,000 or more new jobs been created in the renewable energy sector.

Two key focused areas for Bangladesh

Solar powered irrigation

Increasing urbanization...

Solar Mini Grid



In the pipeline...

- Another 3 million SHS under IDCOL financing
- Six solar module PV manufacturing facility of 80MW
- 300 Solar powered BTS
- Another 1500 Solar Irrigation System for the pilot phase
- Gob. Policy Target of Installing
 - 340 MW of Commercial Solar Power Projects
 - 160 MW of Social Solar Power Projects



Barriers faced

- At the beginning their was lack of technical capability and knowledge.
- Solar Home System was out of reach and expensive for Rural off-grid people.
- Few numbers of technical manpower available in this new sector.
- No financial support was available.
- Lack of appropriate policy for Renewable energy Sector.

My Experience

- 35 years experience in finding sustainable market-based solutions to the social, environmental and economic problems faced by rural people of Bangladesh.
- In 1996, started introducing the renewable energy technology in rural Bangladesh and started to create awareness about the climate change.
- Introduced installment-based payment which reduced the cost of a solar home system to the equivalent of monthly kerosene costs which also reduce CO₂ produced from kerosene fume.
- Vision is to transform Bangladesh into the First Solar Nation in the world by reaching 75 million energy starved people with renewable energy by the year 2020.

Renewable Energy Sector potential Bangladesh



- 1. Providing Better and healthier living Environment.
- 2. Replacing traditional lighting system with clean & Bright Lights.
- 3. Traditional cook stove will be replaced by ICS to ensure clean living environment.
- 4. Creating job opportunities in rural off-grid areas.
- 5. Developing a new sector.

Green Entrepreneurs and Skilled Technicians for Future



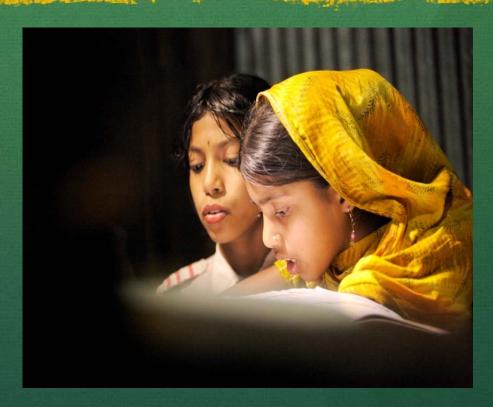
- Expansion of Renewable Energy is also creating green job as well as new opportunities in this sector.
- Women Technician are being created in Grassroots level to take the service at the door steps.



- Green women entrepreneurs are being created in rural areas by providing proper training.
- Socio Economic condition of rural Bangladesh is being changed by renewable energy.

Our Achievements:

- An innovative financial mechanism replacing monthly kerosene costs.
- Rural level assembly, repair & maintenance of solar accessories resulting low cost maintenance.
- All components & accessories produced locally brought the price of SHS affordable for rural energy starved people.
- VAT/Tax removed from solar panel import affecting the lower price of SHS.



School children can study better by Solar powered Light than Kerosene lantern.

Our Programs Change Lives

- Environment: Replacing kerosene: 500 kg/ year CO2 replaced per 50W system, reducing fire hazards, in-door air pollution and improving health
- Women: Reduced household burden for women
- Communication: Access to TV, mobile phones and internet
- **Education:** Many rural schools installing solar power, Solar powered computers
- Healthcare Facilities: Solar lights, Solar powered refrigerators in Clinics,
- Disaster management: During cyclone Sidr in 2007, PV was a lifeline. The only homes with light were those with PV.

First-Ever Zayed Future Energy Prize



HH Sheikh Mohammed bin Zayed, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, presents the first Zayed Future Energy Prize to Dipal Chandra Barua, in honour of innovation and commitment in alternative energy, at the Abu Dhabi National Exhibition Centre, January 19, 2009.



Thank you for your Kind Attention