



SREDA
Sustainable and Renewable
Energy Development Authority



Implemented by:
giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

Volume 1 : Jan-Jun 2021

Newsletter

National Solar Help Desk

The National Solar Help Desk (NSHD) is an undertaking of Sustainable and Renewable Energy Development Authority (SREDA), to support the proliferation of primarily Solar Rooftop programme under net metering. Initial establishment of NSHD is being supported by the Renewable Energy and Energy Efficiency Programme (REEEP II) implemented by GIZ Bangladesh. SREDA envisions to enlarge the scope of NSHD to cover all renewable energy solutions in the future.

Net Metering Rooftop Solar Program

Bangladesh has targets to achieve 100% access to electricity for its people and to graduate to developing country by 2021. To achieve the above target of electricity generation and to retain the growth of development, uninterrupted and flawless power generation is very important. Government is considering diversifying the electricity generation from renewable resources rather than fossil fuels to reduce the effects of climate change as well as greenhouse gas emissions.

The Government of Bangladesh (GoB) has developed the Power System Master Plan (PSMP) 2016 on fuel diversification to enhance the energy security across the country. Alongside the conventional energy sources, renewable energy (RE) will play a significant role in meeting the future demand of electricity as well as fulfilling environmental obligations. Bangladesh adopted the Renewable Energy Policy in 2008. The RE Policy of Bangladesh mandated that 10% of electricity should come from renewable energy sources by 2020, meaning that at least 2000 MW has to be generated from RE sources. According to a recent political dialogue, Bangladesh envisions to produce 40% of power generation from renewable resources by 2041.

Moreover, Bangladesh enjoys good amount of sunshine year around and the use of solar energy continues to grow while the cost continues to decline.



Rooftop Solar at Paragon Feed Ltd.

Net metering is one of the approaches designed to encourage renewable energy (RE) promotion by allowing utility customers to generate their electricity from solar or any other renewable sources and export the excess electricity to grid after own consumption. Realizing its importance, the Government has published the Net Metering Guideline in July 2018 to inspire industrial, residential, government and commercial buildings power consumers to adopt rooftop based solar energy to establish a mechanism for distributed RE integration to the grid. As of 30 June 2021, a total of 1385 Net metering rooftop solar systems have been installed all over the country with a total capacity of 24.706 MW which has the capacity to reduce 19,863.6– ton CO₂ per year.

National Solar Help Desk (NSHD)

With the technical support of GIZ Bangladesh, the establishment of National Solar Help Desk at SREDA is completed, which will eventually support the roll out of the Rooftop Solar nationwide as a one stop information and service center.

This platform will create a common structure to support the successful implementation of rooftop solar projects under net metering. It will contain necessary information from the perspective of the public sector, private sector, financial sector, utilities, as well as from SREDA. To make the NSHD beneficial for the end users, the information needs of the consumers, the mechanism to manage service requests and the technical and IT requirements for making the system a success is being carefully considered. Following the vision of 'Digital Bangladesh', the help desk will have a regularly updated online portal, to enable the consumers to easily access all relevant documents and forms. For additional information or customized need, consumers or users will have options for virtual meetings and discussions with help desk representatives using online appointment system at National Solar Help Desk Portal [<https://shd.sreda.gov.bd/>]. Consumers will also have option for physical meetings or telephonic discussion for special needs using other options of the same appointment system. Services of this national solar help desk is limited to the consumers of rooftop solar projects for the time being.



GFA Consulting Group, as an implementation partner of REEEP II, has covered the logistics for NSHD, arranged for necessary orientation and support, and mobilized its officers and executives to offer effective services to the stakeholders of rooftop solar in cooperation with SREDA management and officials. Since the physical tasks of the implementation of National Solar Help Desk have been completed, inauguration of the National Solar Help Desk was scheduled in the first week of July, 2021. This event is now expected to be delayed further for the ongoing countrywide lockdown. Hence, the inauguration event will be rescheduled as soon as the lockdown period is over. The event will follow a hybrid mode allowing most of the guests to join virtually due to ongoing pandemic situation. Live streaming of the event will be available in Facebook and YouTube page of SREDA.

Honourable State Minister, MPEMR will join the event as the Chief Guest. Chairman, BEPRC; Secretary, Power Division and Country Director, GIZ Bangladesh will remain as Special Guests.

NSHD has completed all preparations to offer services to utilities, consumers, investors and stakeholders of Solar Rooftop Projects. Formal inauguration is planned immediately after the existing lockdown period. However, users can now confirm appointment for online services and avail subsequent services using the links and contacts mentioned in the last page of this Newsletter.



1.1 MW Rooftop Solar Project at Far East Spinning Mill, Madhabpur

Training on Net Metering Guideline-2018 and SIP Grid Integration Guideline-2020

To disseminate and expand implementation of Rooftop Solar Programme under Net Metering Guideline, SREDA with the support of GIZ REEEP II conducted trainings on “Net Metering Guideline-2018 and SIP Grid Integration Guideline-2020” for the officials of distribution utilities. As the Electricity Distribution utilities DESCO, DPDC, BREB, BPDB, WZPDCL and NESCO and their local offices are the nodal points for implementation of the Rooftop Solar programme, play a key role in expansion of rooftop projects as they provide approval for installation, are in direct contact with end user, manage the distribution network and also have billing interface with rooftop owner. For smooth implementation of rooftop solar projects in Bangladesh, the officials of distribution utilities should have clear understanding of Rooftop Solar along with the benefits of investing in it. Keeping this in mind, a series of virtual half day trainings on “Net Metering Guideline-2018 and SIP Grid Integration Guideline-2020” for the officials of distribution utilities were organized by SREDA, in collaboration with REEEP II, GIZ

Bangladesh. The 1st, 2nd, 3rd and 4th batches of training were held on 27 January 2021, 02 February 2021, 10 February 2021 and 25 February 2021 respectively. More than 1200 participants, from the six electricity distribution utilities attended those trainings.

Mr. Mohammad Alauddin, Chairman (Additional Secretary), SREDA chaired the 1st batch training programme. Mr. Md. Habibur Rahman, Secretary, Power Division, in his speech as special guest for the first batch training, mentioned that the business model of net metered rooftop solar would potentially be the most profitable approach among all other solar energy business model. Owners of industries would be benefited by that business model. Mr. Nasrul Hamid MP, Honourable State Minister, MPEMR while delivering his concluding remarks of the 1st batch training as the Chief Guest, urged all electricity distribution utilities to set a target for implementation of net metered rooftop solar programme in Mujib Year.

“Mr. Nasrul Hamid, MP, Honourable State Minister, MPEMR, while delivering his concluding remarks during the 1st batch training as the Chief Guest, urged all electricity distribution utilities to set a target for implementation of net metering rooftop solar programme in Mujib Year.”

At the same time, he requested the participants to encourage others in their respective fields of work and exchange the knowledge gathered from the training to achieve the government goals. He also requested SREDA to create awareness about their conducted activities in this regard and mentioned that SREDA would provide necessary technical assistance to the distribution utilities.



Mr. Mohammad Alauddin, Chairman (Additional Secretary), SREDA chaired the 1st batch training programme



Mr. Md. Habibur Rahman, Secretary, Power Division delivering his opening remarks



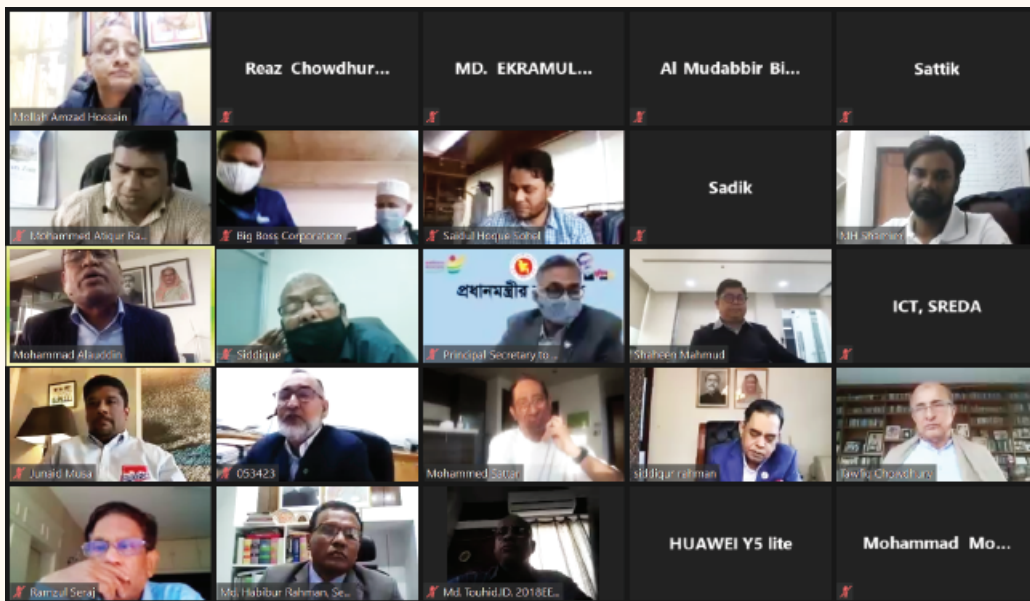
Mr. Nasrul Hamid, MP, Honourable State Minister, MPEMR delivering his concluding remarks of the 1st batch

Workshop on Scaling Up Net Metered Rooftop Solar in Garments Industry

A virtual workshop on 'Scaling Up Net Metered Rooftop Solar in Garments Industry' was organised by SREDA, in collaboration with REEEP II, GIZ Bangladesh on 30 December 2020. Dr. Tawfiq-e-Elahi Chowdhury BB, Adviser (Minister) to the Prime Minister, Power, Energy and Mineral Resources Affairs, attended the awareness workshop as the Chief Guest. Dr. Ahmad Kaikus, Principal Secretary to the Honourable Prime Minister was also present as a Special Guest of the workshop. Mr. Md. Habibur Rahman, Secretary, Power Division, Ministry of

Power, Energy and Mineral Resources chaired the virtual event moderated by Mr. Mohammad Alauddin, Chairman (Additional Secretary), SREDA. Dr. Rubana Huq, then president of BGMEA and members from garments industries participated in the programme.

In his welcome note Mr. Mohammad Alauddin, mentioned that the Net Metering Guideline was formulated in 2018 to incentivize and to promote solar energy. He also informed that a business model already exists for rooftop solar as the current electricity tariff structure varies from 8.50 Taka to



Participants of the workshop with BGMEA

10.00 Taka for Industrial Consumers whereas Levelized Cost of Energy (LCOE) of rooftop solar energy would be around 3.10 Taka/kWh for own financed projects and 3.6 Taka/kWh for projects with loan. Therefore, there is enormous opportunity for garments industry to save their electricity bill from own electricity generation and consumption. At the same time, they can contribute to Greenhouse Gas (GHG) emission reduction as a co benefit which could potentially be positively recognized by the buyers.

Stakeholders from garments industry expressed their opinions on the rooftop solar and net metering systems covering financial analysis for Capital Expenditure (CAPEX) and Operating Expenses (OPEX) models. They have questioned about compliance related issues to install the rooftop solar system in garments industries, system loss of transformer while exporting generated solar electricity to the grid, reduction of loss in case of malfunction of inverter, definition of rooftop, option to install solar panels in other areas of the premises, installation of solar tracker, converting existing off grid rooftop solar to net metering system. Among others, Dr. Rubana Huq thanked SREDA for organizing such a workshop. Dr. Rubana mentioned that green financing was still a

challenge in Bangladesh. She also informed that BGMEA signed a charter with UNFCCC and 129 green factories who installed rooftop solar systems, didn't receive the green price yet. Dr. Rubana requested SREDA to support simplification of the loan process for the interested factory owners to encourage them in setting up rooftop solar system at their rooftops.



Site assessment on Solar Radiation Measurement Stations

SREDA has initiated “National Solar Radiation Resource Assessment (NSRRA)” and installed 8 solar radiation measurement stations at different locations of Bangladesh with support from UNDP SREP Gen Project to conduct solar resource assessment and make the irradiation data available for solar project developers. Also, a web based server was installed at SREDA office to collect and monitor the solar irradiance data collected from those stations.



Solar Irradiation Station visit at RUET

As part of the assessment process, a small technical team from SREDA and REEEP II visited Rajshahi University of Engineering and Technology (RUET) Solar Radiation Measurement Station on 21 March 2021 under the leadership of distinguished Chairman, SREDA, Mr. Mohammad Alauddin (Additional Secretary). Subsequently, a discussion meeting was held with Dr. Md. Faruk Hossain, Head of EEE and Director of Research and Extension, RUET on the operation, maintenance and application of the irradiation station and data.

However, it was not possible to receive desired data from those irradiation stations due to technical and management issues though it is very crucial to receive quality data for a longer time of period for research and application of those data. At this circumstance, SREDA has requested REEEP II, GIZ to assess the functionality and operational status of those 8 Solar Radiation Measurement Stations. Based on the assessment and quality of installation, decisions will be made on correction needed to make those stations operational and to receive quality data from existing Solar Radiation Measurement Stations.



Sun Tracker at PSTU, Patuakhali



Discussion on Solar Irradiation Station at BRUR

Subsequent visits took place to other three stations at later dates.

Visit to Solar Irradiation Station at Begum Rokeya University (BRUR), Rangpur took place on Monday 24 May 2021. This visit included a detailed discussion with Md. Aminur Rahman, Additional Register, BRUR and his team on different aspects of the Solar Irradiation Station.



Visit to Solar Irradiation Station at BRUR



DHI pyranometer with shadow ring at BRUR

Another visit took place to Patuakhali Science & Technology University, (PSTU), Patuakhali on Monday 31 May 2021 under the leadership of Member (P&R), SREDA.

Visit to Shahajalal University of Science & Technology (SUST), Sylhet was conducted on 10 June 2021 under the leadership of Member (RE), SREDA. This visit included a very fruitful discussion with the Vice Chancellor of the university and the faculty members.



Discussion meeting with SUST team



Visit to Solar Irradiation Station, SUST

It was found that the solar irradiation stations at those sites are facing technical difficulties due to lack of monitoring and maintenance of the items at site. SREDA has initiated the process of signing MoU with the respective authorities for monitoring of those radiation tools at sites. Some of the items will need maintenance or repair work before handover to respective authorities. Detailed site assessment reports are made available to decide on next step. Assessment of remaining solar irradiation sites will resume once the countrywide lockdown due to current pandemic situation is over.

Contact Details of National Solar Help Desk



National Solar Help Desk

SREDA Office, 9th Floor
IEB Building, Ramna, Dhaka-1000

Hotline: 01550 777777, 09611 552 425 / 589

Email: nshd@sreda.gov.bd

Website: <https://shd.sreda.gov.bd>

Online service: Zoom/Google Meet/MS Team

Appointment: <http://shdappointment.sreda.gov.bd>

Published on behalf of SREDA by GFA Consulting Group, the implementing partner of Renewable Energy Component of Renewable Energy and Energy Efficiency Programme (REEEP II)

A project assisted by the German Government via the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.



Responsibility of the Content: GFA Consulting Group

Author: Farzana Amin, Shadukul Talukder & Reaz Chowdhury, GFA Consulting Group

Photo Sources: GFA Consulting Group

Design and Layout: ADFRAME (printing and publication)

Editing: Ananya Rubayat, GIZ Bangladesh

For more information on REEEP II,

Contact: Al Mudabbir Bin Anam, Programme Coordinator, REEEP II

Email: mudabbir.anam@giz.de

@Bangladesh 2021