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# 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 was supported by GIZ Bangladesh. At present, NSHD is covering different activities under the leadership of SREDA. SREDA envisions to enlarge the scope of NSHD to cover all Renewable Energy solutions in the future.

# Meeting with ICT Division on Developing Unified Online NEM (Net Energy Metering) Application System

A meeting took place on July 4, 2023, at SREDA's 'Mohanonda' meeting room, involving representatives from the ICT Division, SREDA, NSHD, and GIZ on developing a unified online NEM (Net Energy Metering) application system. Mr. Rashedul Alam, Assistant Director (Solar) at SREDA, highlighted the necessity of this system for streamlining the NEM application process and improving monitoring, and proposed to link the online system with e/D-nothi for efficient approval process and monitoring. In response, representatives from the ICT Division suggested integrating utility organograms through a2i's API and creating an integrated online system. The system would facilitate user applications, utility approval processes, application status checks, and monitoring by SREDA. The meeting concluded with plans for collaboration, MoU signing, and the development of an integrated online application system.



Picture: Meeting with ICT Division on Developing Unified Online NEM (Net Energy Metering) Application System

# The Coordination Committee for Accelerating Financing Activities in the Renewable Energy Sector

The second and third meeting of the Coordination Committee for Accelerating Financing Activities in the Renewable Energy Sector, chaired by Mr. Khandker Md. Abdul Hye, Member, RE, SREDA and convener of the committee, took place on July 20 and November 7, 2023, respectively.

In the second meeting, the convener emphasised the need for increased awareness about sustainable finance at the customer level and suggested advertising through various media channels.

Afterwards, representatives provided updates on their activities related to sustainable finance. These included initiatives such as disbursing loans for renewable energy projects, conducting training, workshops, and promoting sustainable finance through advertising and seminars. Decisions made during the meeting included the creation of a reporting format for investment statistics in the renewable energy sector and regular reporting by banks and financial institutions. Additionally, a focal person from each institution was appointed to facilitate financing in the renewable energy sector.



Picture: Third meeting of the Coordination Committee for Accelerating Financing Activities in the Renewable Energy Sector



*Picture: Second meeting of the Coordination Committee for Accelerating Financing Activities in the Renewable Energy Sector* 

The third meeting commenced with the confirmation of minutes from the second meeting, incorporating suggested changes for the reporting format for investment statistics in the renewable energy sector.

Subsequently, discussions centered around the progress review and regular reporting by banks and financial institutions. NSHD presented quarterly reports from four institutions on sustainable finance. The need for a standardized reporting format and consistent reporting from all institutions was emphasized.

> Mr. Mohammad Delwar Hossain of Bangladesh Bank gave a power point presentation on Green Re-financing Schemes. Mr. Hossain highlighted eco-friendly initiatives and encouraged banking officials, especially decisionmakers, to familiarize themselves with the Sustainable Finance. A decision was made to organize training through Bangladesh Bank for management level of banks and financial institutions, with a focus on sustainable finance awareness.

## Site visit and Pre- Feasibility of Rooftop Solar

#### **Rancon Group**

A site visit was conducted by NSHD to inspect Rancon Group's 350 kWp rooftop solar project on July 13, 2023. Managed/ operated by Rancon Infrastructure and Engineering Ltd., the solar plant commenced operations in February 2023, with plans for an additional 1 MW rooftop solar system in progress.

During the visit, several challenges were noted, including voltage ramping issues during

heavy-duty welding machine operation. Generation data indicated that 270 kW of power was being generated during the visit, falling short of the expected production. Recommendations included addressing power ramping, developing a customised generator adjustment system, investigating overheating inverters, improving panel cleaning, and extending the lightning protection system for panel safety.



Picture: Visit to Rancon Group

#### Telephone Shilpa Sangstha Ltd. (TSS)

Telephone Shilpa Sangstha Ltd. (TSS), a digital device manufacturing company in Gazipur, owned by the Government of Bangladesh, a is considering the installation of a rooftop solar system as part of its green initiative and energy cost reduction strategy. With a significant electricity demand for its operations, TSS aims to harness solar energy to meet a portion of its energy needs and reduce its carbon footprint. A 387 kWp (320 kW AC) solar system has been proposed for installation, with the possibility of expanding to other sections in the future. Accurate structural measurements and

assessments should be conducted to ensure the feasibility of this project.

TSS's move towards solar energy aligns not only with their sustainability goals but also aims to reduce their electricity bills and decrease CO2 emissions. The pre-feasibility assessment outlines the potential solar system size, layout, expected energy generation, and estimated cost savings from reduced electricity bills, paving the way for TSS to proceed with this environmentally friendly and cost-effective energy solution.

#### **Concern Worldwide**

Concern Worldwide, an international humanitarian organization with offices in Dhaka and Cox's Bazar, sought to enhance its sustainability by installing rooftop solar systems to meet part of their energy needs. In response, the National Solar Help Desk of SREDA conducted a pre-feasibility assessment.

For the Dhaka office, with 2454 sqft. rooftop space, a 28 kWp system was proposed, incorporating combination of a 15-kW grid-tied inverter and a 8 kW hybrid inverter for backup power. In Cox's Bazar, utilizing 4870 sqft rooftop space, a 53 kWp system was recommended, featuring the combination of a 40-kW grid-tied inverter and a 6-kW hybrid inverter for backup power.

potential reduced The benefits included electricity with Concern bills, aligning Worldwide's green initiative, and contributing to CO2 emission reduction. The report included the layout, projected energy generation, and estimated savings.



Picture: Available Rooftop area of Concern Worldwide Dhaka Office

#### Bangladesh Submarine Cable Company Limited (BSCCL)

Bangladesh Submarine Cable Company Limited (BSCCL) operates a submarine cable landing station at Kuakata, Bangladesh, requiring significant electricity. To reduce costs, emissions, and meet energy demands, BSCCL seeks to install a rooftop solar system. BSCCL aims to align its operations with green energy practices.

The assessment, conducted by the National Solar Help Desk of SREDA after a site visit on October 18, 2023, delineates two potential areas for solar installations. The first area, a spacious 187,737.7 sq ft on the south side,



Picture: Available area for Net Metered Solar System at BSCCL



Picture: Visit to Bangladesh Submarine Cable Company Limited (BSCCL)

allows for the deployment of a 1 MWp solar system under the net metering scheme, ensuring optimal utilization of the available space. The second area involves installing solar modules atop the 195 columns of the perimeter wall, accommodating a 115.05 kWp solar system with a unique hybrid configuration.

The pre-feasibility assessment outlines the potential solar system size, layout, expected energy generation, and estimated cost savings from reduced electricity bills reflecting BSCCL's commitment to green practices and renewable energy integration.

#### Khulna Shipyard Limited (KSY)

As a premier shipyard operated by the Bangladesh Navy, KSY is a vital entity contributing to the country's naval capabilities. After a site visit on October 19, 2023, National Solar Help Desk of SREDA conducted an in-depth analysis, including potential system size, layout, projected energy generation, and anticipated electricity bill savings.

The roof of fabrication building is one of the potential areas for installing rooftop solar at KSY. Identified areas of the building reveal a comprehensive plan for the deployment of an 808 kWp solar system. This not only aligns with KSY's commitment to sustainable practices but also reflects the broader national agenda of integrating renewable energy into governmentoperated enterprises. The initiative showcases KSY's dedication to reducing its carbon footprint, enhancing energy efficiency, and contributing to the overall sustainability goals of Bangladesh.



Picture: Available area for Net Metered Solar System at Khulna Shipyard Limited (KSY)

## Workshop on Rooftop Solar System under Net Metering Guideline with Urban Development Directorate (UDD)

A workshop on rooftop solar systems under the Net Metering guideline was held at the Urban Development Directorate (UDD) on July 23, 2023. The workshop emphasized the benefits of rooftop solar systems and explored possibilities for their widespread adoption in urban development projects. Mr. Naila Ahmed, Joint Secretary of the Ministry of Housing and Public Works, attended as gues of honour. The workshop commenced with introductions, followed by a presentation by Mr. Rashedul Alam, Assistant Director from SREDA, on the topic of "Rooftop Solar System under Net Metering guideline."

Mr. Alam explained the net energy metering process, where excess electricity generated by rooftop solar panels is exported to the grid. This method doesn't require batteries and results in lower electricity bills. He highlighted existing installations in educational institutions, government buildings, and industries. The discussion also touched upon the potential for floating solar systems and the space required for solar power generation. UDD expressed interest in adopting energy mapping for a 20-year rooftop solar plan in one of their upazilas. The workshop concluded with a decision to pilot energy mapping in one upazila under the Nine Upazila Project.



Picture: Workshop on Rooftop Solar System under Net Metering Guideline with Urban Development Directorate (UDD)

### National Solar Radiation Resource Assessment (NSRRA) Station at Power Division

National Solar Radiation Resource Assessment (NSRRA) station, established at Power Division with support from GIZ Bangladesh, has been in operation since March 01, 2023. This development represents a crucial step in harnessing solar energy efficiently and sustainably in Bangladesh.

To enhance the utility and accessibility of this solar resource data, an Internet of Things (IoT) company has been working on a Solar Irradiation Data Monitoring System. This system will enable remote access to the data collected by the NSRRA station, ensuring that it is readily available to everyone. By making this information easily accessible, the initiative aims to promote solar energy utilization across various sectors, encourage research and development in the field, and ultimately contribute to a more sustainable and renewable energy future for Bangladesh.



Picture: National Solar Radiation Resource Assessment (NSRRA) Station at Power Division

# Consultation Meeting on Developing Unified Online NEM Application System and RE Generation Platform

A consultation meeting focusing on the Online development of "Unified NEM а Application System and Renewable Energy Generation Monitoring Platform" for Rooftop Solar Systems was convened on September 19, 2023 at Gomoti Hall, SREDA. Participants included officials from six electricity distribution utilities, SREDA, a2i, the ICT division, the Chief Electrical Inspector's Office, Bangladesh Solar and Renewable Energy Association (BSREA), and GIZ, with Ms. Munira Sultana, ndc, Chairman (Grade-1) of SREDA, presiding as the Chief Guest.



Picture: Consultation Meeting on Developing Unified Online NEM Application System and RE Generation Platform

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The session comprised two presentations, one discussing the concept of a centralized online NEM application system for all utilities and the other addressing the concept of a Renewable Energy generation monitoring platform. During the discussions, participants raised questions and suggestions, such as integrating the

## Technical Training on Rooftop Solar under NEM

A comprehensive 5-day technical training program on "Rooftop Solar under NEM" organized at Six Season Hotel by Policy Advisory for Promoting Energy Efficiency and Renewable Energy (PAP) Project of GIZ Bangladesh in collaboration with the Power Division was held from November 12-16, 2023. The objective of the training, assisted by NSHD, was to enhance the technical and strategic skills of participating officials from EPCs.

The training was designed to equip participants with in-depth knowledge and practical skills in the field of rooftop solar projects. The initial sessions of the training covered fundamental aspects such as PV technology, global market trends, and lessons learned from worldwide examples, proposed system into existing connection and billing software, ensuring tracking capabilities, and incentivizing high-performance rooftop solar systems. Mr. Rashedul Alam, Assistant Director (Solar), SREDA, moderated the sessions and addressed queries, assuring that all suggestions would be considered in development.

setting the groundwork for the understanding of net metering basics. A significant focus was given to site suitability assessment and emphasizing the importance of thorough site inspection reports. The training went beyond theoretical aspects, incorporating hands-on group work and a site visit to apply inspection checklists and discuss technical findings.

Participants engaged in discussions to share experiences and insights, fostering a collaborative learning environment. The training aimed to not only enhance technical knowledge but also to provide a platform for participants to connect, exchange ideas, and contribute to the development of rooftop solar projects in Bangladesh.



Picture: Technical Training on Rooftop Solar under NEM

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# Feedback Analysis of NSHD Service Recipients



1111 services have been provided by NSHD since its inception

64 systems (around 28.25MWp) implemented with the support of NSHD

# **Contact Details of National Solar Help Desk**



# **National Solar Help Desk**

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