

ISA Session

“Roadmap of Solar Energy for Universal Energy Access”

Venue: ISA Pavilion in India Energy Week, Bengaluru, India

February 8th 2023 - Event-06 (14.30hrs – 16:00hrs IST)

(Hybrid Mode)

R2/02022023

International Solar Alliance along with its partner organizations and other global organization will host an event on “Energy Access- Solar Mini-Grids”. The event expected to benefit the member countries, funding agencies, technology providers, project developers, EPC agencies and other stakeholders to understand the latest developments, opportunities and challenges in scaling solar mini-grids.

ISA, an Inter-Governmental organization with 111 signatory countries, has been helping its member countries to scale up solar and make it a preferred source of energy. ISA has been helping the member countries to set up solar mini-grid projects and believes that such projects should lead to creation market in the countries and help them in building the technical capacities to implement such projects.

Access to electricity remains one of the key primary indicators of global progress toward the SDG7 targets. Around 733 million people¹ – mostly in Sub-Saharan Africa – still lack access to electricity. If the current rate of progress in electrification continues, around 670 million people¹ will remain without electricity by 2030. The difficulties in reaching the remotest and most vulnerable populations is the key challenge is achieving universal energy access. One solution to providing reliable electricity access to all, both to those with unreliable power and those with no power at all is integrating distributed energy resources into traditional centralized electrical grid systems.

The term distributed energy includes combinations of distributed generation, storage, and demand-side management, addressing both sides of the power system: supply and demand. On the generation side, the cost of providing power using distributed energy is falling quickly (and is often renewable in nature, although distributed energy is not inherently renewable by definition). On the demand side, demand-side management makes the most use of generation capacity and the power it produces, creating greater efficiency and less draw on overtaxed electrical grids. For those developing new energy systems, it makes both economic and environmental sense to employ distributed energy for electrification.

Furthermore, distributed energy does not function in competition with traditional grid infrastructure, but as a complement. When integrated with traditional power supplies, distributed energy provides the greatest, quickest impact for expanded electricity access.

To achieve universal energy access by 2030 around 217,000 mini grids with the investment of \$127 billion are required to be installed across the globe in order to reach to remote and isolated communities.² Additionally, solar mini-grids can also be utilized in powering existing solar water pumping system to support the requirement of agriculture sector for both irrigation and drinking purpose.

While the importance of solar mini-grids has already been recognized, it is critical to develop national strategies for universal energy access to include solar mini-grids plan. The enabling ecosystem needs to be created to support solar mini-grid developers as well as customers. Policies and regulations should clearly put emphasis on productive livelihood applications. Focus on research and innovation to bring down cost of electricity generated from solar mini-grids will further accelerate adoption of solar mini-grids. Ultimately, there is clear need to step up financing for solar mini-grid sector to deploy its fullest potential to address the issue of universal energy access. Investments from private sector – both domestic and international – will support accelerated deployment. This investment will further attract national and international market players in the sector creating a reliable ecosystem with improved customer engagement and services.

¹ IRENA: Tracking SDG7, The Energy Progress Report 2022

² The World Bank, ESMAP: MINI GRIDS FOR HALF A BILLION PEOPLE

The International Solar Alliance (ISA), through the efforts of global solarization, is committed to support member countries in their journey towards energy access and energy transition. The ISA undertakes joint efforts to reduce financing costs and the cost of solar technology applications and services. It seeks enhanced electricity access through deployment of solar capacity across the globe with special focus on Least Developed Countries (LDCs) and Small Island Developing States (SIDS). ISA extensively works in the African region to identify business models in solar mini-grid segments that can be replicated across member states. Also, ISA has been focusing on identifying innovative financing instruments for various solar mini-grids. ISA's programme on Solar Mini-grids are specifically designed to cater to energy access related issues and has prepared the E-Handbook of Solar Mini-Grid Systems.

Tentative Agenda & Potential Speakers:

Time	Discussion Point	Responsibility
10 minutes	Opening Remarks and Context Setting	Dr. Ajay Mathur Director General, International Solar Alliance
5 minutes	Special Remarks	Senior Official MNRE, Govt. of India #
10 minutes	Presentation on the mini-grid sector status – business models, case studies, learnings, and challenges	#Mr. William Brent, Chief Marketing Officer Husk Power
10 minutes	Presentation on the mini-grid sector status – business models, case studies, learnings, and challenges	#Mr. Ganapathi Srinivasan, Director, OMC Power
10 minutes	Presentation on business model and Case Study	#Sugata Mukherjee, Tata Power, Head of Mini-Grids Business TATA Power (TPRMG)
30 minutes	Panel discussion: Moderator: Mr. Remesh Kumar K, Chief Of Unit, PPIC, ISA	
6 minutes	1. Mr. Rohit Chandra, Founder & CEO, OMC Power	
6 minutes	2. Mr. William Brent, Chief Marketing Officer, Husk Power Systems#	
6 minutes	3. Mr. Manoj Gupta, CEO, Tata Power Renewable Microgrid#	
6 minutes	4. Mr. Sreedhar Rao, Head Business Development, SunMoksha	
6 minutes	5. Hiren Pravin Shah, Executive Director & CEO, REPLUS	
10 minutes	Interaction with Audience	Moderator
5 minutes	Closing Remarks and Vote of Thanks	Mr. Remesh Kumar K, Chief Of Unit, PPIC, ISA

Joining on virtual mode