



EU-ISA event on "How to increase investments in solar energy?" 30th October, New Delhi

On 30th October 2019, the European Union (EU), International Solar Alliance (ISA) and the European Investment Bank (EIB), jointly organised a session on “How to increase investments in solar energy?” during the 2nd Assembly of the ISA in New Delhi. The session was supported by PwC India as contractor under the EU-India Clean Energy and Climate Partnership.

Inaugural session

H.E. Mr. Ugo Astuto, Ambassador of the EU to India focused on the ‘importance of deepened cooperation between the EU and the International Solar Alliance’. He informed the participants that, like the host country India, the EU considers the Paris Agreement and the SDGs as top priority. The EU has the target to be 32.5% more energy efficient by 2030 and 32 % of the EUs gross final consumption should come from renewable energy by 2030. The objective is to be climate neutral by 2050. He stressed the need to increase investments in solar sector and highlighted the recently launched International Platform on Sustainable Finance. He referred to the agreement signed between the EU and ISA during CoP 24 in December 2018 on deepening cooperation & developing synergies.

H.E Mr. Upendra Tripathy, Director General (DG) of the ISA, welcomed H.E. Mr. Ugo Astuto, delegates and members. He emphasized upon the importance of sustainable finance & increasing investments for solar sector. He outlined the site visits planned for the next couple of days: 1) RE lab of Tata Power which shows how a smart grid can be activated, energised & synchronised; 2) Delhi metro to understand how adoption of solar energy can be profitable by highlighting how DMRC saved millions in revenue & offset carbon emissions by adopting rooftop solar & procuring solar power from Madhya Pradesh solar park. He elaborated on the ISA goals and estimated that close to 135 GW of solar capacity can be deployed by ISA member countries. He thanked the EU for the close cooperation, including on infopedia (<https://isainfopedia.org>).

Presentations

1. The Global Solar Energy Market – Latest Developments

Ms. Vandana Gombhar, Editor, Global Policy at Bloomberg New Energy Finance, presented the latest development in the global solar market with an emphasis on cost reduction, manufacturing capacities and the potential of 24x7 supply of solar power. The presentation included the following points:

- Solar capacity addition forecasted to reach approximately 150 GW per annum globally
- India has one of the world’s lowest LCOE as observed in First half (H1) of 2019
- Rapid capacity additions, technology advancements & favourable policies have been the major factors for reducing capex and achieving record tariffs
- India is estimated to install more than 200 GW of Solar capacity by 2029 & to become the major contributor at global level
- Multiple opportunities like Floating Solar PV & Building Integrated Photovoltaics are emerging and are also being tapped

2. Sustainable Finance

Mr. Jacob Werksman, Principal Adviser to DG for Climate Action, European Commission, presented on the EU's action plan on financing sustainable growth and the recently launched International Platform on Sustainable Finance:

- The EU keeps on increasing its ambition on climate change. The target of the new European Commission is to become climate-neutral by 2050. The Commission proposes a target of minimum 25% of EU expenditure towards climate action & sustainable development goals
- The action plan on financing sustainable growth aims at reorienting capital flows towards sustainable investment, mainstreaming sustainability into risk management and transparency and long-termism in financial and economic activity. It addresses reporting, taxonomy, benchmarks and green bond standards.
- The action plan contains 6 environmental objectives: climate change mitigation; adaptation; sustainable use and protection of water; circular economy, waste prevention and control, pollution prevention and control, protection of healthy ecosystems.
- Economic activity must substantially contribute to one of these objectives, without significantly harming any of the other objectives. In addition there are minimal social safeguards.
- International Platform on Sustainable Finance (IPSF) was launched on 18 October by the EU, Argentina, Canada, Chile, China, India, Kenya and Morocco. In this platform countries exchange best practices and coordinate efforts on environmentally sustainable finance initiatives in the areas of taxonomies, disclosures, standards and labels.

3. Financing Renewable Energy

Mr. Dónal Cannon, Head of Regional Representation for South Asia, European Investment Bank (EIB), presented EIB's commitment to finance renewable energy and climate action. He emphasised the need for a taxonomy. The presentation also covered the following points:

- Green Sustainable Bonds rapidly emerging as key source of capital for scaling solar deployment
- Sustainable Bonds from emerging markets accounted for approximately 33% of global issuance in 2017 according to HSBC, September 2017 report
- Financial & Corporate have the highest share of bond issuance with majority of tenor less than 5 years
- Principles of Green Sustainable Bond and how the risk profile is same as regular bond

4. The Solar Risk Mitigation Initiative

Mr. Arnaud Dubrac, Lead Energy Specialist, The French Development Agency (AFD), presented the Solar Risk Mitigation Initiative (<https://www.youtube.com/watch?v=Ni5wTd1GYfM>). He emphasized how projects are slow to emerge due to high risk perception, lack of component-wise classification and lack of clarity on timelines. The presentation also covered the following points:

- Lack of enabling environment, weak procurement process & absence of proper risk mitigation framework are the major challenges impeding the growth of solar PV in developing countries
- Goal of The French Development Agency (AFD) is to accelerate energy transition of emerging/developing countries towards energy services (efficient & carbon free) accessible to all

- AFD has committed to investing 1.5 billion Euros in solar projects in ISA countries by 2022 & has approved 50 million Euros for RLSF+ (European Liquidity Support for Sustainable Energy) mechanism
- Solar Risk Mitigation Initiative (SRMI) aims to attract low cost capital by supporting countries in developing:
 - Sustainable, climate friendly & affordable power solutions
 - Transparent procurement framework in line with international legal standards to attract private sector investment
 - Risk mitigation frameworks

Panel discussion

The presenters were then joined by Mr. Manoj Gupta (Solar Power Europe and Vice President - Fortum India Pvt. Ltd.) and Mr Christoph Kessler (Director, KfW Office New Delhi) for a panel discussion moderated by **Ms. Mafalda Duarte**, Head of the Climate Investment Funds (CIF). Key takeaways or opinions shared by each panellist during the discussion are:

- **Mr. Manoj Gupta** – ISA member countries, especially African nations, on an average have solar potential of 5.5/kWh/m²/day and many developing nations depend on imports as they lack the required manufacturing capacity to fuel the growth. Stakeholders can look into these aspects & develop suitable frameworks to address the challenges for increasing the deployment of projects. Innovative financing & policy advocacy are imperative for the market to see substantial growth.
- **Mr. Christoph Kessler** – KfW is an important contributor in sustainable development with stringent standardization requirements i.e. Environmental & social impact assessment, technological standards, etc. Even though low tariffs create a win-win situation, projects are exposed to quality issues as competition increases thereby leading to sub-standard assets & loss in revenue. It is imperative that stakeholders have stringent quality control norms in line with relevant international standards.
- **Ms. Vandana Gombhar** – Solar (along with Wind) is now the cheapest source to generate electricity in more than 50% of the world. It is estimated that by 2030, these sources will be cheaper than coal and gas, almost everywhere across the globe. Over the last 9 years solar costs have declined by 85%, thanks to advancement in technology & favourable policies. Consumers preference for Rooftop solar & behind-the-meter batteries play a major role in capacity addition & is expected that solar photovoltaic can be a dispatchable source of power (24x7) with the help of battery & other sources like pumped storage. To achieve SDG goals & stay below the 2 degree Celsius, electricity generation from variable renewable energy sources is assumed to be 25,915 TWh and constitute 62% of total energy mix by 2050. Capacity addition & quality asset deployment is possible only with aggressive & robust policies, ease of doing business, macro environment, etc.
- **Mr. Arnaud Dubrac** – Financing small businesses will continue to be difficult due to high risk exposure as financiers look at credit history and SRMI tools for evaluation of application. Foreign banks are also working with local banks to provide them with low cost finance and guarantee support in case of failure. It is vital to understand the outcomes of the project for increasing the chances of accessing funds.
- **Mr. Dónal Cannon** – Bond markets are one of the most innovative ways to raise capital but it is important to concentrate on the portfolio & what is the exact objective of issuing the bond. It is evident that green/sustainable bonds don't have any premium i.e. risk profile is similar to a regular bond, so taxonomy plays a crucial role in attracting multiple anchor investors & diversification.

- **Ms. Mafalda Duarte** – CIF has signed a Memorandum of Understanding with the International Solar Alliance to increase deployment of solar energy in member countries. Stressed on the importance of technical assistance framework for increasing investments in renewable energy.
- **Mr. Jacob Werksman** – Stakeholders need to keep in mind the global environmental objective and transition towards sustainable development as to avoid catastrophic consequences.

Some of the key initiatives that are expected to further support investment in the solar energy sector:

- **Infopedia (isainfopedia.org):** An online platform dedicated to the dissemination of information, best-practices, technologies and knowledge on solar energy. The one-stop online platform, on all things solar, for policy and decision makers, development organisations, businesses, academic community, and the general public. It provides easy access to knowledge, online training, information on stakeholders from around the globe, information on the ISA member countries related to solar energy.
- **The International Platform on Sustainable Finance (IPSF):** was founded by the EU along with six other countries on 18th October, 2019 in the margins of the Annual World Bank-IMF Summit in Washington. The ultimate objective of the International Platform is to scale up the mobilization of private capital towards environmentally sustainable investments.
- **Solar Risk Mitigation Initiative:** The Solar Risk Mitigation Initiative (SRMI), developed with support from AFD and World Bank is an integrated approach to tackle policy, technical and financial issues associated with scaling up solar energy deployment. SRMI has 3 main components; an enabling policy environment in targeted countries (technical assistance, capacity building, resource mapping, etc.); support procurement of bankable projects; access to risk mitigation coverage to reduce the risk of private investment. On the 3rd component, AFD is working with the African Trade Insurance, KfW and the EU on the development of the RLSF instrument (EIP/EFSD).
- **Voluntarily adoption of targets:** Organizations are taking up voluntary targets to boost investments in climate action & sustainable development. For example, **The European Investment Bank (EIB) has increasingly become more climate-oriented.** EIB, as one of the largest multilateral providers of climate finance worldwide has so far committed at least 25% of its investments to climate change mitigation and adaptation, supporting low-carbon and climate-resilient growth. In 2018 the EIB, or the EU bank as is also termed, exceeded its climate action target for the ninth year running, providing EUR 16.2 billion or 30% of its entire annual investment programme to fight climate change. The EIB announced in New York at last month's UN General Assembly that it is now stepping up its contribution to climate action and has pledged to put half of its new financing towards environmental sustainability by 2025.