

## De-risking international investments in the Indian Solar Energy Sector

The project on de-risking international investments intends to bring together various stakeholders to find common ground and effectively build a conducive framework for mitigating risk and enhancing international investments in the Indian Solar Energy sector.

The workshop commenced with Dr. Ashvini Kumar, Senior Director, TERI, welcoming the dignitaries and guests. Mr. Klaus Milke, Chariman, Board of Germanwatch, delivered the inaugural address, where he mentioned the solar landscape of the country and how de-risking multilateral funding could play a key role in accelerating solar installations.

The discussion started with the Indian Renewables landscape and the promising scenario for solar in the country. It was observed that India would surpass the solar targets because of excellent performance noted in the industry so far. There were also several measures taken up by the Government ministries to ensure successful installations in the country –

1. 100% FDI
2. Long term PPA
3. Reduction in tariff
4. Multilateral payments
5. Letter of credit – credit guarantee mechanisms
6. Viability Gap Funding as payment security mechanisms
7. Planning of payment security in solar park scheme as well

The importance of multilateral banks and regional financial institutions was stressed. It was also emphasized that the policy makers be aware of the market structure and work together to build a self-sustaining market.

It was observed that policy de-risking was the least cost option as opposed to financial derisking. Importance was stressed upon the need to assess the timeline of investments to commissioning, where some countries observed timelines of 6 months whereas others observed more than 36 months. The assessment would be helpful in standardizing timelines and reducing cost and thereby risk. A novel approach was suggested for enabling Indian solar developers to obtain international finance. In addition, emphasis was laid on looking at streamlining administrative procedures in project implementation.

It was mentioned that banks were not suitable to fund solar projects of different scales in entirety, as the asset liability mismatch created impediments. The solar projects have 25 years of locked assets while financing mechanisms are available for only a fraction of the time. Foreign exchange hedging mechanism was introduced to deal with currency risk – which, as later noted by the esteemed panelists, was not rolled out successfully. It was noted that apart from one Renewable Energy (RE) company, none other were listed on the stock exchange. This was seen as a huge impediment to foreign investors to enter the Indian market. In addition, it was reported that investors abroad do not like to invest in securities, while, securities and bonds would be more successful as payment guarantees for projects if subsidized by banks. Other impediments noted were availability of limited finances and validation, small ticket size and lack of transaction structures. It was emphasized that other credit enhancement programmes be created in India.

Some other key issues identified during the discussions were:

#### Financial/commercial structure risk

1. Counterparty risk amongst distribution companies
2. Cancellation of tenders and lack of PPA renegotiations
3. Mismatch of debt period and assured asset return periods'
4. Shortage of secondary market for built assets
5. Less availability of non-recourse financing
6. Higher cost of finance
7. Foreign currency risk
8. Banks' exposure to power sector

#### Technical risks

1. Transmission capacity
2. Domestic panel and BOS availability
3. Cost and availability of storage solutions

#### Political and market risks

1. Changing policy framework and regulatory risk – incentives and tariffs
2. Complexity of federal versus local government
3. Perceived risk over the security of assets
4. "Free" electricity already for some domestic users – lack of "pull"

#### Transactional risks

1. Essentially up to 29 separate countries to deal with!
2. Acquisition of land (ground mounted)
3. Complex property ownership (rooftop)
4. Delays in project start/construction
5. Delays in payments on PPAs/projects
6. Off- taker risk
7. Unsustainable bid prices

The second round of discussion was chaired by Dr Ajay Shankar, Distinguished Fellow TERI. During this session it was discussed that solar PPA are made for a period of 25 years. During this period newer technological developments happen and the older technology becomes obsolete. It was suggested that contracts should have provisions for renegotiation of tariffs.

It was also discussed that DC minigrids have been developed widely in the UK, Germany and Australia. DC minigrids have been largely neglected in India. They can be very relevant for decentralized power in India.

It is critical that high quality assets be deployed for energy generation. Manufacturers on the verge of bankruptcy frequently dump sub-standard products in India.