

Dialogue Session - Making solar the energy source of choice - Building resilient supply chains for clean energy transitions in the Global South

Globally, the rising cost of living, increased geopolitical challenges, and the continued impacts of climate change have exposed vulnerabilities in the supply chain, with the International Solar Alliance (ISA) leading discussions on how solar supply chains can be developed, especially in developing countries. ISA supports regional coordination between member countries to support net zero ambitions, with 1900 GW of capacity required to achieve the transition scenario, and USD 150 billion in investments in solar manufacturing required by 2030 to develop the required capacity.

The extreme concentration of the solar PV supply chain presents multiple risks, geopolitical and economic. The development of local solar PV manufacturing across the globe would bring advantages to the entire sector, from end customers to project developers as well as public authorities. Even if local solar PV manufacturing is unlikely to be as cost competitive as China's, there are many other sources of value. In addition to reducing geopolitical supply or economic risk, developing regional supply chains can increase energy independence and reduce the cost and emissions of logistics around the world.

The Becquerel Institute in its 2023 report identifies the strategic questions for the development of a more diversified and more resilient global solar PV supply chain remains full of obstacles. Firstly, investments on the order of \$150B globally by 2030 will be needed to develop the hundreds of GW of production capacities required along the value chain. Therefore, creating the conditions to unlock financing will be a major consideration for decision makers. Secondly, the labour needs associated with the estimated production capacities' expansions are enormous. Depending on the considered step of the value chain, the level of qualification of this required workforce can vary from unskilled labour such as for warehousing purposes, to highly skilled labour, e.g. in the case of R&D or production supervision. In countries where the available workforce is limited, or if lacks the necessary skills, the ambitions in terms of local manufacturing could be heavily constrained. This employment-related aspect is a very powerful lever, as the creation of local jobs can also help increase social acceptance, triggering a virtuous circle where local manufacturing and local market deployment can reinforce each other.

Target audience: International/ regional/local business partners, government representatives and stakeholders and C Level from Global South

Format: Dialogue

(7 mins) Opening Remarks by Dr Vibha Dhawan, Director General, TERI

(12 mins) Context setting presentation by Ir Gaëtan Masson, CEO, The Becquerel Institute

(10 mins) Unveiling of Key Recommendations (with photo-op) and screening of multimedia clip from ISA Private Sector Pavilion in International Solar Festival

(50 mins) Moderated discussion; other speakers including:

- Representative from ESMA
- Representative from Indian Solar PV private sector
- Representative from MDBs (World Bank)