The Solar PV Market in India: Decoding ALMM and BCD

By Bidisha Banerjee and Upasna Ranjan.

In the previous article, we discussed the gaps in key areas that hamper the sustained growth of India's solar PV market. In this article, we shift our focus to two critical aspects that are influencing the sector.

ALMM and BCD

The Indian solar photovoltaic industry has been significantly influenced by the implementation of the Approved List of Models and Manufacturers (ALMM) and the Basic Customs Duty (BCD) mandates. Launched by the Ministry of New and Renewable Energy (MNRE) in 2019 and overseen by the Solar Energy Corporation of India (SECI), government, open access, and net-metering utility-scale solar projects can use only solar panels and manufacturers in the ALMM. This ensures that solar modules utilised in government-funded projects meet specific standards of efficiency, durability, and safety. Additionally, the Government of India has imposed BCD on imported solar cells and modules to promote domestic manufacturing. The BCD for solar cells is set at 20%, while the BCD for solar modules is 40%. This measure, effective from 1 April 2022, is intended to protect and boost the domestic manufacturing of solar cells and modules in India.

Roadblock

The ALMM mandate has, however, raised concerns among solar project developers. They worry that the domestic PV sector is still evolving and does not yet offer the same level of quality and efficiency as imported modules. Additionally, the demand for higher efficiency and cost reduction, such as 400 Watt+ modules, is not fully met as the availability of ALMM modules is limited, with only 3 GW meeting this requirement. The government declared this year that ALMM would be suspended for 12 months, or for FY 2023–2024, as it hampered ongoing projects because the demand for solar modules far exceeded indigenous supply. Manufacturers have found it challenging to increase their capacity or to start doing so to satisfy anticipated domestic demand. Policy changes that affect the business often, such as the suspension of ALMM for a year, have made this difficult.

The government's imposition of BCD on imported solar modules and cells has also raised concerns in the solar industry. While the aim is to promote domestic manufacturing capabilities, developers of renewable energy projects are concerned about the domestic producers' capacity to meet the current and future demand for modules and cells. This uncertainty could potentially lead to increased dependence on imports, presenting challenges for the sector.

The Way Forward

The temporary exemption of the ALMM mandate for FY 2023–2024 is a positive step for the solar industry, providing relief to manufacturers and project developers. However, promoting domestic manufacturing and ensuring the success of ongoing solar projects remain essential. The introduction of ALMM and BCD should coincide with the domestic PV market reaching its full potential to hasten the industry's growth and produce world-class companies.

In our final article of the series on solar photovoltaics in India, we will delve into the technological progress made, challenges, and opportunities.

Bidisha Banerjee works in the area of renewable energy and energy efficiency while Upasna Ranjan works in the area of climate mitigation at CSTEP, a research-based think tank.