



MERCOM  
INDIA

2023

**STATE OF  
SOLAR PV  
MANUFACTURING  
IN INDIA**

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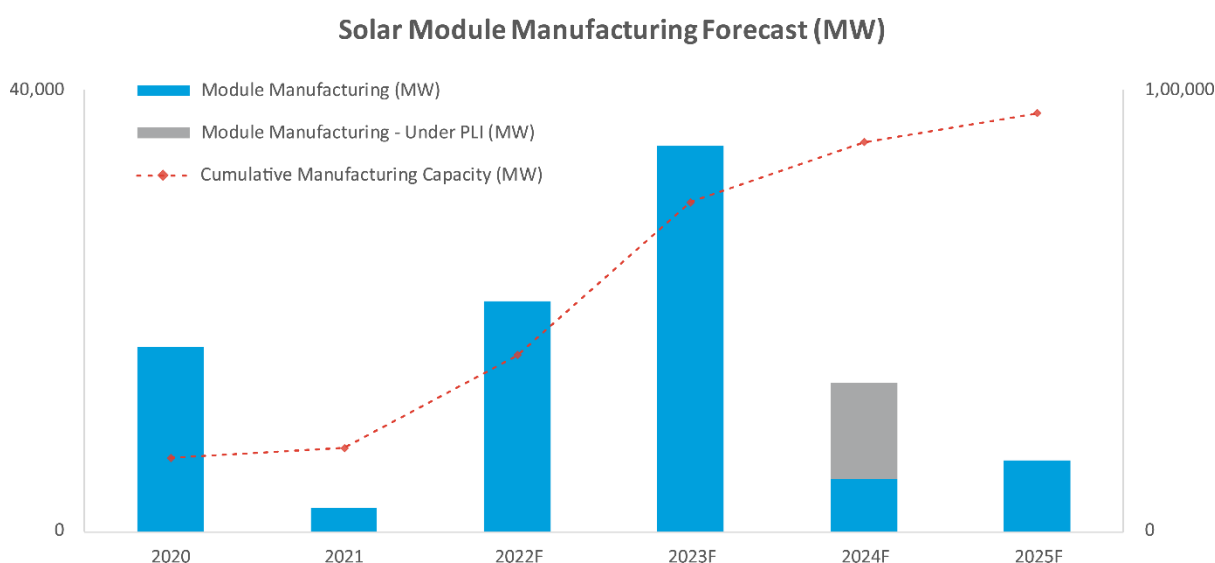
## Executive Summary

Mercom's 'State of Solar PV Manufacturing in India' report provides a detailed account of the Indian solar photovoltaic (PV) module manufacturing landscape. The report identifies the challenges and opportunities for Indian PV manufacturers and their evolving role in the global solar industry with capacity and technology development during the coming years. In addition, an analysis of global and Indian PV manufacturing by technology scenarios will enable companies to chart their procurement strategies and business growth in line with the forecasted capacity additions.

The report also includes the price competitiveness of Indian solar module manufacturers compared to the imports and detailed coverage of policies impacting the domestic PV manufacturing industry. Stakeholders will find this report helpful in understanding manufacturing expansion, vertical integration, and expansion trajectory to plan their investments and procurement strategies.

The government of India has been increasingly focused on ramping up domestic PV manufacturing to achieve self-reliance in the solar supply chain.

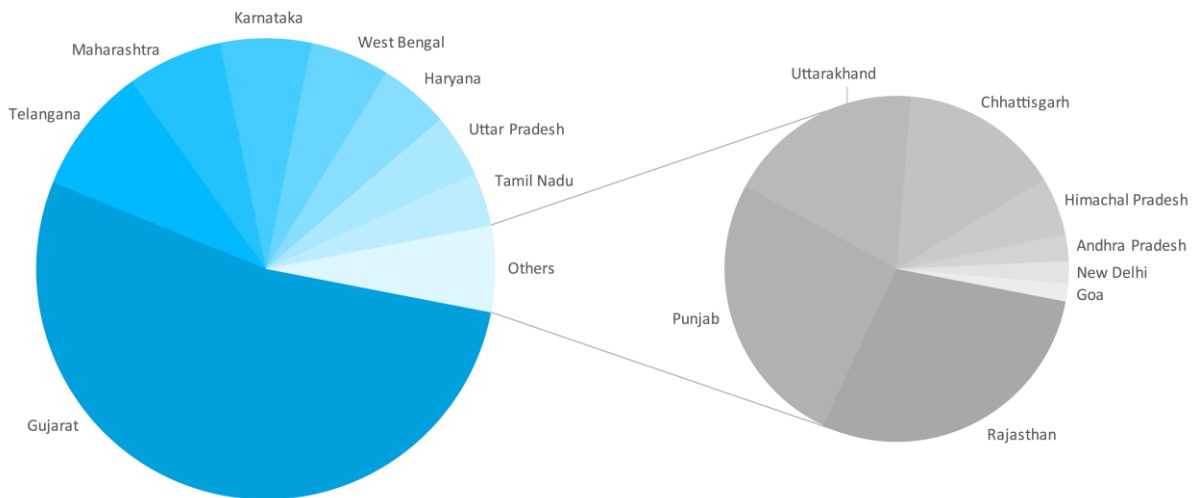
India's solar module manufacturing capacities announced exceeded 39 GW at the end of September 2022, while the cell capacity was about 4.7 GW.



Source: Mercom India Research

Manufacturers of solar modules and cells have mostly set up facilities in Gujarat.

The implementation of the Approved List of Models and Manufacturers (ALMM) Order (which does not have Chinese suppliers enlisted), Basic Customs Duty (BCD), and Domestic Content Requirement mandate have been primary drivers for domestic PV manufacturing capacity expansion.

**India: Installed Module Manufacturing Capacity**


Source: Mercom India Research

While ALMM and DCR mandates have successfully created the demand for domestic modules, the imposition of BCD has improved the price competitiveness of domestic modules compared to imported ones.

Various states' industrial, electronics, and solar policies promote domestic solar manufacturing through fiscal and non-fiscal incentives. The Production Linked Incentives (PLI) program is an additional incentive to enhance vertical integration of new capacity additions and technology used.

Domestic manufacturing capacities are estimated to reach around 95 GW for solar modules and 32 GW for solar cells by 2025 and 2024, respectively. In addition, significant capacities of polysilicon, ingots, and wafers will likely be added by the end of 2024. Winners under Tranche-I of the PLI program are expected to commission these capacities. Pending capacity allocations under Tranche-II would significantly enhance the domestic value chain for PV manufacturing.

**For the complete report, write to [reports@mercomindia.com](mailto:reports@mercomindia.com) or call 91.80.41211148.**

## About Mercom India

Mercom India (formerly Mercom Communications India), a subsidiary of U.S.-based Mercom Capital Group, is a clean energy research and communications firm in India recognized worldwide for its expertise in Indian cleantech markets. Located in Bangalore, India, Mercom has been providing communications and research services across India for clean energy organizations since early 2009. For more information, visit:

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**Mercom India Private Limited**  
(formerly Mercom Communication India Private Limited)

No. 590, 1st Main Road  
3rd Block, Dollars Colony  
RMV 2nd Stage  
Bengaluru-560094  
t | +91.80.4121.1148

A subsidiary of:

**Mercom Capital Group, llc**

4611 Bee Caves Road, Suite 303  
Austin, Texas 78746  
t | +1.512.215.4452  
w | <https://mercomcapital.com>  
e | [info@mercomcapital.com](mailto:info@mercomcapital.com)