

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 1418
ANSWERED ON 11/03/2025

SCALING UP OF SOLAR CAPACITY

1418. SHRI JAGGESH

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether it is a fact that India has made significant strides in scaling up of solar capacity, but local solar manufacturing is still nascent;
- (b) whether most of the country's solar equipment production is confined to the assembly of imported solar cells and modules, offering minimal local value addition;
- (c) whether several solar equipment manufacturers in the country significantly depend on Chinese supply chains and related services;
- (d) if so, the details thereof; and
- (e) the steps taken by Government to overcome these challenges and emerge as a self-sufficient solar powerhouse?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER
(SHRI SHRIPAD YESSO NAIK)

(a) India's solar power sector has witnessed a massive increase in capacity over the past decade, rising from 2.82 GW in 2014 to 100 GW in 2025. India has also made significant strides in solar manufacturing. In 2014, the country had a limited solar module manufacturing capacity of just around 2 GW. Over the past decade, this has surged to 67 GW, as enlisted under the Approved List of Models and Manufacturers.

(b) Presently, the installed solar PV module manufacturing capacity in the country, as per the Approved List of Models and Manufacturers, issued on 17.02.2025 is around 67 GW. The present solar PV cell manufacturing capacity in the country as per the information provided by the Solar PV Manufacturers Associations, is around 25 GW. The installed Ingot and Wafer manufacturing capacity in the country is around 2 GW. At present there is no commercial production of Polysilicon in the country. The aforesaid manufacturing capacity of solar PV cells and modules includes around 3.2 GW fully integrated thin film solar PV module manufacturing capacity, which is not dependent on imported Solar Cells, Wafers, and Polysilicon, as the manufacturing process is fully integrated and all the major steps involved in the manufacturing process, take place in India.

Local content in a domestically manufactured solar PV module depends upon a lot of factors including the proportion of locally sourced inputs and imported inputs as well as the prices thereof and may keep on varying depending upon sourcing of inputs and prevalent market prices of the inputs. However, if the solar PV cell used in the manufacturing of solar PV modules is locally manufactured and a major portion of other inputs like solar glass, encapsulant, backsheets, aluminum frame, etc. are also procured from local manufacturers, the local content in the locally manufactured solar PV module is likely to be more than 50%.

(c) to (e) The country's solar PV module manufacturing is sufficient to cater to domestic demand. However, there is some import dependency for solar PV cells and even higher import dependency for wafers. Aforesaid import dependency, mostly from a particular geographical region, may pose some risk in terms of supply chain disruption, price fluctuation, currency rates, etc. However, in order to tackle such risk, the Government has taken several steps to incentivize domestic manufacturing in solar PV manufacturing sector, which inter-alia include those mentioned at **Annexure-I**.

Annexure referred to in reply of parts (c) to (e) of the Rajya Sabha Unstarred Question No. 1418 for 11.03.2025 regarding 'Scaling up of solar capacity'

Initiatives taken to incentivize domestic manufacturing of solar PV equipment, inter-alia, include:

(i) Production Linked Incentive (PLI) Scheme: The Government of India is implementing the Production Linked Incentive (PLI) Scheme for High Efficiency Solar PV Modules, for achieving domestic manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV modules, with an outlay of Rs. 24,000 crore. The Scheme is being implemented in two tranches. Tranche-I has an outlay of Rs. 4,500 crore, under which Letters of Award have been issued for setting up of 8,737 MW of fully integrated solar PV module manufacturing units. For Tranche-II with an outlay of Rs. 19,500 crore, Letters of Award have been issued for setting up of 39,600 MW of fully/ partially integrated solar PV module manufacturing units.

(ii) Domestic Content Requirement (DCR): Under some of the current schemes of the MNRE, namely CPSU Scheme Phase-II, PM-KUSUM Components B & C, and PM Surya Ghar: Muft Bijli Yojana, wherein government subsidy is given, it has been mandated to source solar PV cells and modules from domestic sources.

(iii) Preference to 'Make in India' in Public Procurement: In accordance with Department for Promotion of Industry and Internal Trade (DPIIT) 'Public Procurement (Preference to Make in India), Order', MNRE had notified Purchase Preference (linked with local content) for RE sector which, inter-alia, identified list of all goods and services or works in respect of which there is sufficient local capacity and local competition is available and mandated that only "Class-I local supplier" shall be eligible to bid for the above goods/services/works with the mandate that minimum local content should be at least 50%.

(iv) Imposition of Basic Customs Duty on import of solar PV cells & modules: The Government has imposed Basic Customs Duty (BCD) on import of solar PV cells and modules, with effect from 01.04.2022.

(v) Discontinuation of Customs Duty Concessions: MNRE has discontinued issuance of Customs Duty Concession Certificates for import of material /equipment for initial setting up of solar PV power projects with effect from 02.02.2021.