

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 5222
ANSWERED ON 02/04/2025

DOMESTIC MANUFACTURING OF SOLAR CELLS

5222. SHRI MUKESHKUMAR CHANDRAKAANT DALAL

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

- (a) the details of capital goods recently exempted from customs duties for manufacturing solar cells and panels and their expected impact on domestic manufacturing capacity and import dependency;
- (b) the current manufacturing capacity for solar cells and panels in the country and the progress achieved so far in reducing reliance on imports through such exemptions;
- (c) the reasons for not exempting customs duties on solar glass and tinned copper interconnects and the anticipated impact of this decision on production costs;
- (d) the measures being taken to ensure domestic manufacturers remain competitive while meeting energy efficiency and sustainability goals in the solar energy sector; and
- (e) the future plans to enhance solar energy manufacturing including new incentives or initiatives, if any, to support capacity expansion and increase adoption of solar energy across India?

ANSWER

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

(a) The Government of India vide its notification No. 30/2024-Customs dated 23.07.2024 has exempted custom duty on import of;

- (i) the goods specified in List 41 of the aforesaid custom notification (details at **Annexure-I**), for the manufacture of solar photovoltaic cells falling under tariff item 85414200 or solar photovoltaic modules falling under tariff items 85414300.
- (ii) Parts, for manufacture of goods at item (i) above.

The aforesaid measure is envisaged to reduce the cost of setting up of solar PV cell and module manufacturing units in the country and increase the cost competitiveness of domestic solar cell and module manufacturers and thereby contributing to reduction in import dependency.

(b): Presently, the installed solar PV module manufacturing capacity in the country, as per the Approved List of Models and Manufacturers, issued on 27.03.2025 is around 74 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.

Imports of solar PV cells and modules in India have declined in last few years. In FY 2021-22, the value of import of solar PV cells and modules was around 4501 million USD, which declined to around 2489 million USD in FY 2024-25 till December 2024. Thus, various policy measures taken by the Government have resulted in reduction of imports of solar PV cells and

modules and the exemption from customs duty on the specified goods for manufacturing solar cells and modules is envisaged to further complement the reduction in Imports.

(c) The Government had not exempted customs duties on solar glass and tinned copper interconnect to provide level playing field to domestic manufacturers of these items, vis-à-vis the foreign manufacturers supplying these items to Indian market. The impact of the imposition of Customs Duties on import of solar glass and tinned copper interconnect depends upon various factors like demand supply scenario, prevalent local and global prices, variation in prices of foreign currencies etc. However, it is envisaged that the overall impact on the production cost of solar modules will be marginal in the long run.

(d) The Government has taken several measures to incentivize domestic solar PV manufacturing, which inter alia include those mentioned at **Annexure-II**. These steps are, inter-alia, envisaged to ensure domestic manufacturers remain competitive while meeting energy efficiency and sustainability goals in the solar energy sector.

(e) In Union Budget Speech for FY 2025-26, the Government has announced setting up of National Manufacturing Mission covering small, medium and large industries for furthering “Make in India” by providing policy support, execution roadmaps, governance and monitoring framework for central ministries and states. The Mission will also support Clean Tech manufacturing. This will aim to improve domestic value addition and build our ecosystem for solar PV cells.

Further, the Ministry of New and Renewable Energy (MNRE) is working towards achieving 500 GW of electric power installed capacity from non-fossil fuel-based energy resources by 2030.

These initiatives, along with the measures outlined in **Annexure-II**, are anticipated to contribute to the development of solar energy manufacturing and its adoption across India.

Annexure referred to in reply of part (a) of the Lok Sabha Unstarred Question No.5222 for 02.04.2025 regarding 'Domestic Manufacturing of Solar Cells'

List 41 mentioned in notification No. 30/2024-Customs dated 23.07.2024

- (1) Solar Cell Tabber and Stringer Machine with or without automation
- (2) Automatic Laminating and Hot Pressing Tool
- (3) Electroluminescent and Visual Inspection Machines
- (4) Sun Simulator or Flash Tester
- (5) Auto Bussing and Soldering tools
- (6) Laser Cutting Machine
- (7) IQC lab and Reliability Chamber Tools
- (8) Automation Line for Solar Module Manufacturing
- (9) Wafer Inspection Camera or Machine
- (10) Wafer Texture Machine
- (11) Wafer Polishing Machine
- (12) Automation Line for Solar Cell Manufacturing
- (13) Plasma Enhanced Chemical Vapor Deposition (PECVD) machines
- (14) Passivation Tool
- (15) LDSE (Laser Detective Selective Emitter) Machine
- (16) Printing Machine (Line)
- (17) Abatement or Gas Treatment System
- (18) All types of Boats or carriers in Solar Photovoltaic Cell including Graphite, Quartz Silicon Carbide boats and boat cleaning tool
- (19) Wafer Cleaning Machine
- (20) Cell Tester and Sorter
- (21) Rework Tool
- (22) Process Ultra-Pure Water Generation Unit
- (23) Semi-Conductor Treatment Unit
- (24) Substrate Cleaning and Treatment Unit
- (25) Chemical Dispensing Unit
- (26) Chemical Application Unit
- (27) Cell Definition
- (28) Module Finishing Unit
- (29) Inspection Measurement Systems.

Annexure referred to in reply of part (d) of the Lok Sabha Unstarred Question No. 5222 for 02.04.2025 regarding 'Domestic Manufacturing of Solar Cells'

Initiatives taken to incentivize domestic solar PV manufacturing, 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. Under the scheme, Letters of Award have been issued for setting up of 48,337 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, solar PV modules, and solar glass: The Government has imposed Basic Customs Duty (BCD) on import of solar PV cells, solar PV modules, and solar glass.

(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.

(vi) Exemption of Custom Duty on capital goods for manufacture of Solar Cells and Modules: The Government has exempted customs duty on import of the goods specified in List 41 of the notification No. 30/2024-Customs dated 23.07.2024, for the manufacture of solar PV cells and modules.