

## **Energising Solar Module Manufacture**

### **Why in news?**

Recently Cabinet has approved the proposal for a Production Linked Incentive (PLI) scheme-National Programme on High Efficiency Solar PV Modules.

### **What will be the outcomes of this initiative?**

- This will help in achieving manufacturing capacity in Giga Watt (GW) scale with a higher efficiency of solar PV modules.
- Currently solar capacity addition largely depends upon imported solar PV cells and modules as the domestic industry has limited operational capacities of solar PV cells and modules.
- PLI can increase module efficiency, local value addition, reduce import dependence in a strategic sector like electricity and can support the Atmanirbhar Bharat initiative.

### **What are the challenges in executing the scheme?**

- Though the scheme promotes domestic industry, there are challenges as many components are still imported.
- Close to 80 per cent of the solar module requirements through imports given the cost variation which is due to lack of scale and poor backward integration of Indian manufacturers.
- The capacity addition in the solar power installations in India did not translate into an increased demand for the domestic solar cell/module manufacturers over the years.
- As per the MNRE, India's cell- and module-manufacturing capacity is 3 GW and 10 GW, respectively.
- Moreover the solar manufacturing in India is largely limited to the last two stages- production of cells and modules.
- Polysilicon which has excellent semiconductor properties is used as feedstock for solar and act as initial building block for manufacturing silicon-based solar PV cells.
- This polysilicon should be kept out as it takes longer to set up projects using it and focus should be on cell and modules which will help expand capacity faster.

## **What are the steps taken by the government to solar sector?**

- In order to protect the interests of the domestic solar module/cell manufacturers, government has taken various measures and policies.
- This includes safeguard duty on imported modules and cells, anti-dumping duty on solar glass, and basic Customs duty.
- Apart from this government has notified multiple schemes like manufacturing-linked IPP tender, PM KUSUM etc., with mandatory use of domestically manufactured modules.
- This provides a strong order pipeline aggregating to 35-40 GW over the next 3-5-years for domestic solar OEMs.
- But timely implementation of these schemes along with policy clarity on fiscal and financial concessions is required to promote domestic manufacturing.
- This PLI scheme has the potential to not only increase India's installed manufacturing capacity but also bring India back on the global map of solar manufacturing.
- Also the PLI scheme can focus on incentivising MSMEs -which is the backbone of India's economy -that will produce modules and cells.
- This will not only help in having homogeneous distribution of manufacturing units across the country but will add value in terms of employment generation, capacity building etc.

## **Will competitiveness improve?**

- The PLI scheme should be intertwined with incentives subsidised rates for electricity/water along with interest subvention.
- PLI scheme coupled with incentives to manufacturers will help Indian manufacturers compete with global players and reduce Indian solar industry's import dependency.
- However, there is no clarity over the quantum per MW output, disbursement and eligibility criterion.
- China has large scale with integrated operations, technological strengths and various cost advantages for OEMs.
- Hence it is likely that over the near to medium term, dependence on module imports is unlikely to reduce materially for solar IPPs in India.

**Source: Business Line**



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