

PERFORMANCE MATRIX TABLE for P+W+C+M Basket							
	Module Efficiency* (%) →	During five Year period after commissioning					
		Base PLI Rate (₹/W _p)					
	≥20.50% & <21.00%	≥21.00% & <21.50%	≥21.50% & <22.00%	≥22.00% & <22.50%	≥22.50% & <23.00%	≥23.00%	
Module's Temperature Coefficient of P _{max} ** (in % per degree Celsius)↓	Position	U	V	W	X	Y	Z
-0.40 to -0.30	A	0.00	1.45	1.65	1.85	2.00	2.20
Better than -0.30	B	1.45	1.65	1.85	2.00	2.20	2.20

PERFORMANCE MATRIX TABLE for W+C+M Basket							
	Module Efficiency* (%) →	During five Year period after commissioning					
		Base PLI Rate (₹/W _p)					
	≥20.50% & <21.00%	≥21.00% & <21.50%	≥21.50% & <22.00%	≥22.00% & <22.50%	≥22.50% & <23.00%	≥23.00%	
Module's Temperature Coefficient of P _{max} ** (in % per degree Celsius)↓	Position	U	V	W	X	Y	Z
-0.40 to -0.30	A	0.00	0.90	1.05	1.25	1.40	1.55
Better than -0.30	B	0.90	1.05	1.25	1.40	1.55	1.55

PERFORMANCE MATRIX TABLE for C+M Basket							
	Module Efficiency* (%) →	During five Year period after commissioning					
		Base PLI Rate (₹/W _p)					
		≥20.50% & <21.00%	≥21.00% & <21.50%	≥21.50% & <22.00%	≥22.00% & <22.50%	≥22.50% & <23.00%	≥23.00%
Module's Temperature Coefficient of P _{max} ** (in % per degree Celsius) ↓	Position	U	V	W	X	Y	Z
-0.40 to -0.30	A	0.00	0.50	0.65	0.85	1.00	1.15
Better than -0.30	B	0.50	0.65	0.85	1.00	1.15	1.15

* Under Standard Test Conditions (STC), i.e. Irradiance 1000 W/m², cell temperature 25°C, air mass (AM)= 1.5;

**P_{max} = Maximum Power at Standard Test Conditions (STC); Module's temperature coefficient refers to percentage change in P_{max} per degree Celsius rise in temperature

c) **Local Value Addition (LVA) Factor**_i is a function of the percentage of LVA, submitted for the ith year. LVA Factor is derived as per the following table:

LVA%	LVA% less than 50%	LVA% ≥50% but less than 60%	LVA% ≥60% but less than 70%	LVA% ≥70% but less than 80%	LVA% ≥80% but less than 90%	LVA% ≥90%
LVA Factor	0	0.73	0.79	0.85	0.92	1

The PLI amount increases with increased LVA, in order to encourage manufacturers to source their material from the domestic market. The percentage of LVA will be calculated as follows: [(Sale value of Module as per the GST invoice excluding net domestic indirect taxes) – (Value of direct and indirect imported materials and services (including all Customs Duty) as per Bill of Entry filed in Customs, used in manufacture of module)] / [(Sale value of Module as per GST invoice excluding net domestic indirect taxes)] x 100%.

d) **TF or Tapering Factor:** In order to give a signal to Solar PV Manufacturing industry that they will need to be competitive after five years, the PLI rate (₹/W_p) will be higher in the beginning and lower towards the end of the five-years period

over which the PLI will be paid. To achieve the objective of tapering down the PLI rate (in ₹/Wp), the PLI rate (₹/Wp) will be multiplied by a tapering factor of 1.4 for the 1st year of the five years PLI disbursement period followed by a tapering factor of 1.2, 1.0, 0.8 and 0.6 for the 2nd, 3rd, 4th and 5th year of the PLI disbursement period respectively.

Year	1	2	3	4	5
Tapering Factor	1.4	1.2	1	0.8	0.6

e) **Sales (in W_p)** is the net sales of solar PV modules of performance parameters (efficiency and temperature coefficient) and LVA equal to or better than those given at para 3.2(vi). The PLI disbursed to a manufacturer will be calculated as per the formula at para 5.2 and will depend on sales or the maximum eligible capacity awarded under the PLI scheme, whichever is less; actual Performance and actual Local Value Addition achieved, provided that only those modules will be counted in sales whose performance and LVA satisfy the levels given at para 3.2(vi).

5.3. Sequence of Allotment and Tie Breaking

i. The bid with the highest efficiency in the first year of production shall be first allocated the admissible bid capacity. In case of a tie in efficiency in the first year, the bid with the highest efficiency in the second year of production shall be allocated the admissible bid capacity first and so on. In case two bids have the exact same efficiency trajectory over all five years, the LVA trajectory shall similarly be compared year wise. In case, both efficiency and LVA trajectory over all the five years are the same, such tied bids will be prioritized on the basis of bid capacity and if bid capacities are also the same, then such tied bidders will be given the same ranking and allotted manufacturing capacity accordingly. However, in case of insufficient funds, the remaining possible allocation shall be divided equally between such tied bidders.

ii. In case the funds available at any point are sufficient to allocate only a part capacity of a bid that is next in priority, such a bidder would be free to exercise refusal on accounts of economies of scale and this allocation shall be offered to the next bidder in sequence.

6. Disbursement of PLI

The manufacturing units sanctioned under the programme will be eligible for getting PLI on annual basis on sales of high efficiency solar PV modules for 5 years from commissioning or 5 years from scheduled commissioning date, whichever is earlier. Consequently, in case of delayed commissioning, the PLI period will reduce from 5 years by the period of the delay in commissioning. A team constituted by MNRE or SECI will visit the manufacturing unit immediately after its commissioning to verify promised extent of integration, manufacturing capacity, efficiency and temperature coefficient of modules. The manufacturers will be asked to give a self-declaration and a Statutory Auditor's or Chartered or Cost Accountant's certificate in support of claims of

PLI. The manufacturers will be required to provide documents in support of the PLI claimed for a particular year based on (i) sales (watt) of modules, (ii) percentage of local value addition and (iii) PLI rate (as per the position in Performance Matrix). Documents required to be submitted by manufacturer for availing PLI will be detailed in the tender documents. MNRE will also make provisions for adequate safeguards, including for periodical special audits and appointing technical organizations to conduct sample checks to verify claims of manufacturers in respect of module efficiency and temperature coefficient.

7. Timelines for commissioning of solar PV manufacturing facilities

The time-period allowed for commissioning of solar PV manufacturing units under the Scheme is as follows:

Level of Integration	Time allowed for commissioning
P+W+C+M	Within 3 years from the date of the Letter of Award
W+C+M	Within 2 years from the date of the Letter of Award
C+M	Within 1.5 years from the date of the Letter of Award

8. Sustainable manufacturing

8.1. Manufacturers will be required to set up facilities for recovery and recycling of solar waste. Manufacturers will be encouraged to adopt circular economy principles in their manufacturing and supply chains.

8.2. Considering India's International commitments, particularly to achieve about 50% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030, the scheme would encourage use of renewable energy in the manufacturing facilities set up under the scheme. The successful bidders will ensure that at least 20% of the electricity consumption for the solar PV manufacturing plant will be sourced from renewable energy sources. Different modalities for compliance of this requirement will be permitted. Detailed provisions in this regard will be specified in the tender documents.

9. Penalties

9.1. In case a selected manufacturer fails to meet the extent of integration or manufacturing capacity promised at the time of selection, it will not get any PLI till it overcomes these deficiencies. If the manufacturer achieves the promised levels subsequently, it will be eligible for PLI from the next month following the month in which it achieved the promised levels of integration and capacity. However, in such cases, the manufacturer will not be able to get PLI for full 5 years since 5 years PLI is counted from the scheduled date of commissioning of the plant or the actual date of commissioning, whichever is earlier. In case, the modules manufactured by a selected manufacturer do not meet the minimum parameters as per the table for trajectories of minimum module performance and minimum LVA at para 3.2 (vi), then it will not get any PLI in respect of such modules.



9.2. Bidders will have to submit, at the time of bid submission, Earnest Money Deposit (EMD) as prescribed in the tender document. The tender document will inter-alia, contain provisions regarding forfeiture of EMD in case of selected bidder refusing to submit the requisite documents/ Performance Bank Guarantees (PBG) as per tender document / extant guidelines or the selected bidder not meeting eligibility criteria upon submission of documents.

9.3. Bidders who have been awarded capacities will have to submit Performance Bank Guarantees (PBG), at the time of accepting the award as per extant Ministry of Finance guidelines. In case they fail to implement the promised 'Extent of integration' or the 'Manufacturing capacity' submitted by them in their bids, within the scheduled commissioning date, Bank Guarantees commensurate to the manufacturing commitments not fulfilled by the bidder will be forfeited by SECI and balance Bank Guarantees will be released by them. Detailed modalities in this regard will be given in tender documents. Encashment of bank guarantees, accrued interest or other charges collected by SECI will be remitted to the Consolidated Fund of India by SECI as per rule-230(8) of GFRs 2017.

9.4. To ensure that the bidder-manufacturers quote realistic levels of year-wise module performance and LVA, in case, for any given year, the bidder-manufacturer falls short on quoted level of module efficiency/ quoted level of temperature co-efficient of P_{max} / quoted level of LVA, but meets the minimum requirements as prescribed in the trajectories of module performance and LVA at para 3.2(vi), the amount of PLI to be disbursed to it for that given year, will be limited to 75% of the PLI amount as per the actual achieved levels of module efficiency, temperature co-efficient of P_{max} and LVA.

10. Monitoring of the PLI scheme and power to remove difficulties:

10.1. As approved by the Cabinet on 11th November 2020, the Empowered Group of Secretaries (EGoS) chaired by Cabinet Secretary will monitor implementation of the PLI scheme, undertake periodic review of the outgo under the Scheme, ensure uniformity of all PLI Schemes and take appropriate action to ensure that the expenditure is within the prescribed outlay. Any changes required in the modalities of the scheme, subject to the condition that the overall financial outlay remains within ₹ 19,500 crore, will be placed for consideration of the EGoS.

10.2. A Scheme Monitoring Committee (SMC) under the chairmanship of Secretary, MNRE, and comprising representatives from MNRE, SECI, NISE, other organizations, and experts as may be required for the purpose, shall take periodical review of the status of implementation/ performance of solar PV manufacturing capacities awarded/ set up under the scheme. The committee will also facilitate / recommend measures to resolve difficulties, if any including delay in commissioning.

10.3. Any changes required in the scheme guidelines, without changing the modalities which require placing before EGoS as mentioned in Para 10.1 above, will be done with the approval of Hon'ble Minister (Power and New & Renewable Energy), subject to the condition that the overall financial outlay remains within ₹ 19,500 crore.

