

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 3166**  
ANSWERED ON 28.03.2023

**INCENTIVES FOR SETTING UP OF RENEWABLE ENERGY INSTALLATIONS**

3166. SHRI PARIMAL NATHWANI

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

- (a) the details of incentives declared for setting up of renewable energy installations and generation of energy;
- (b) whether the same incentives are applicable to the manufacturer of the equipment, apparatus such as solar panels, aluminium channels, blades of windmills etc., if so, the details thereof;
- (c) the number of top five States producing solar energy and wind energy in the country; and
- (d) the details of the status of tidal energy generation, if any, in the country?

**ANSWER**

**THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER**  
**(SHRI R.K. SINGH)**

- (a) The details of incentives being provided as Central Financial Assistance (CFA) for the implementation of major renewable energy schemes/ programmes by the Ministry are given in **Annexure**.
- (b): The Ministry of New & Renewable Energy (MNRE), Government of India, has been consistently bringing out policies for developing and facilitating domestic renewable energy equipment manufacturing in the country.

Some of the recent initiatives undertaken to promote solar & wind energy domestic equipment manufacturing in the country, inter-alia, includes the following:

Solar Energy:

- (i) Production Linked Incentive (PLI) Scheme for High Efficiency Solar PV Modules: The Government of India is implementing the Production Linked Incentive (PLI) Scheme under National Programme on 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. This Scheme has provision for Production Linked Incentive (PLI) to the selected solar PV module manufacturers for five years post commissioning, on manufacture and sale of High Efficiency Solar PV modules.
- (ii) Domestic Content Requirement (DCR): Under some of the current schemes of the MNRE, namely CPSU Scheme Phase-II, PM-KUSUM Component B and Grid-connected Rooftop Solar Programme Phase-II, 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: Through implementation of 'Public Procurement (Preference to Make in India) Order', procurement and use of domestically manufactured solar PV modules and domestically manufactured solar inverters has been mandated for Government/ Government entities.
- (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.

Wind Energy:

(vi) Government has extended concessional custom duty exemption on certain components required for manufacturing of wind electric generators, including some raw materials for blades of wind turbines, till 31.03.2025.

(c) The details of top five States with maximum installed solar energy capacities are as follows:-

<b>State</b>	<b>Solar Power Installed Capacity as on 28.02.2023 (In MW)</b>
Rajasthan	16405.75
Gujarat	8887.72
Karnataka	8110.48
Tamil Nadu	6536.77
Telangana	4657.18

The details of top five States with maximum installed wind energy capacities are as follows:-

<b>State</b>	<b>Wind Power Installed Capacity as on 28.02.2023 (In MW)</b>
Tamil Nadu	9983.12
Gujarat	9925.72
Karnataka	5276.05
Maharashtra	5012.83
Rajasthan	4681.82

(d) Tidal energy is still in Research & Development (R&D) phase and has not been implemented on a commercial scale in the country.

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**Annexure referred to in reply to part (a) of Rajya Sabha Unstarred Question No. 3166 for 28/03/2023 regarding 'Incentives for setting up of renewable energy installations'**

**Incentives being provided as Central Financial Assistance (CFA) for the implementation of major renewable energy schemes/ programmes.**

<b>Scheme/ Programmes</b>	<b>Incentive presently eligible as per the Scheme</b>
a) Grid Connected Rooftop Solar PV Power Projects	<p>(i) For Residential Sector</p> <ul style="list-style-type: none"> <li>• Central Financial Assistance (CFA) up to 40% for capacity up to 3 kWp</li> <li>• CFA up to 20% for capacity beyond 3 kWp and up to 10 kWp</li> <li>• CFA up to 20% for GHS/RWA capacity up to 500 kWp (limited to 10 kWp per house and total upto 500 kWp)</li> </ul> <p>(ii) For Discoms</p> <p>Incentives up to 10% of project cost depending upon achievements in capacity addition above baseline.</p> <p>Vide its OM dated 27.01.2023, Ministry has fixed the CFA for the entire country. The revised CFA rates would be applicable on all future bids and the bids which are scheduled to be closed after 15 days of issuance of this OM. The revised rates are as follows:</p> <p>For general category States/UTs:</p> <p>i. Individual Household - For first 3 kW: Rs. 14588/ kW and for RTS capacity beyond 3 kW and upto 10 kW: Rs. 7294/kW.</p> <p>ii. Resident Welfare Associations/Group Housing Societies (RWA/GHS) - Rs. 7294/kW for common facilities up to 500 kWp @ 10 kWp per house.</p> <p>For special category States/UTs:</p> <p>i. Individual Household - For first 3 kW: Rs. 17662/ kW and for RTS capacity beyond 3 kW and upto 10 kW: Rs. 8831/kW.</p> <p>ii. Resident Welfare Associations/Group Housing Societies (RWA/GHS) - Rs. 8831/kW for common facilities up to 500 kWp @ 10 kWp per house.</p>
b) Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for grid-connected Solar Photovoltaic (PV) Power Projects by the Government Producers	Viability Gap Funding (VGF) support up to Rs 55 lakhs per MW to the CPSUs/Govt. Organizations entities selected through competitive bidding process.
c) PLI Scheme 'National Programme on High Efficiency Solar PV Modules'	The beneficiaries are eligible for Production Linked Incentive (PLI) on production and sale of solar PV modules. The quantum of PLI eligible for disbursement depends upon: (i) quantum of sales of solar PV modules; (ii) performance parameters (efficiency and temperature coefficient of maximum power) of solar PV modules sold; and (iii) percentage of local value addition in modules sold.
d) Solar Park Scheme	Up to 25 lakhs per Solar park, for preparation of Detailed Project Report (DPR). 20 Lakh per MW or 30% of the project cost, whichever is lower, for development of infrastructure.
e) PM-KUSUM scheme	<p><b>Component A:</b> Setting up of 10,000 MW of Decentralized Ground/Stilt Mounted Solar Power Plants</p> <p>Benefit available: Procurement Based Incentive (PBI) to the DISCOMs @ 40 paise/kWh or Rs.6.60 lakhs/MW/year, whichever is lower, for buying solar power under this scheme. The PBI is given to the DISCOMs for a period of five years from the Commercial Operation Date of the plant. Therefore, the total PBI that payable to DISCOMs is upto Rs. 33 Lakh per MW.</p> <p><b>Component B:</b> Installation of 20.00 Lakh Stand-alone Solar Pumps</p> <p>Benefit available: CFA of 30% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar agriculture pump is provided. However, in North Eastern States, Sikkim, Jammu &amp; Kashmir, Ladakh, Himachal Pradesh and Uttarakhand, Lakshadweep and A&amp;N Islands, CFA of</p>

Scheme/ Programmes	Incentive presently eligible as per the Scheme
	<p>50% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar pump is provided.</p> <p><b>Component C:</b> Solarisation of 15 Lakh Grid Connected Agriculture Pumps including through feeder level solarisation</p> <p>Benefit available:</p> <p>(a) Individual Pump Solarization: CFA of 30% of the benchmark cost or the tender cost, whichever is lower, of the solar PV component will be provided. However, in North Eastern States, Sikkim, Jammu &amp; Kashmir, Ladakh, Himachal Pradesh and Uttarakhand, Lakshadweep and A&amp;N Islands, CFA of 50% of the benchmark cost or the tender cost, whichever is lower, of the solar PV component is provided.</p> <p>(b) Feeder Level Solarization: Agriculture feeders can be solarized by the State Government in CAPEX or RESCO mode with CFA of Rs. 1.05 Crore per MW available from MNRE. However in North Eastern States, Sikkim, Jammu &amp; Kashmir, Ladakh, Himachal Pradesh, Uttarkhand, Lakshadweep and Andaman &amp; Nicobar Island, CFA of Rs. 1.75 crore per MW is available.</p>
f) Green Energy Corridor Scheme (for development of intra-state transmission system for RE projects)	<p>GEC Phase-I: CFA of 40 % of DPR cost or awarded cost whichever is lower.</p> <p>GEC Phase-II: CFA of 33 % of DPR cost or awarded cost whichever is lower.</p>
g) Biomass Programme	<p>(a) For Briquette/Pellet manufacturing plants: Rs. 9.00 Lakhs/ MTPH (Maximum CFA- Rs. 45.00 Lakh per project)</p> <p>(b) For Non-Bagasse Cogeneration Projects: Rs. 40 Lakhs/ Megawatt (Maximum CFA- Rs. 5.00 Crore per project)</p>
h) Waste to Energy Programme	<p>(a) for Biogas generation: Rs 0.25 crore per 12000 cum/day (Maximum CFA- Rs.5.00 crore/project)</p> <p>(b) for BioCNG/Enriched Biogas/Compressed Biogas generation: (Maximum CFA- Rs.10 crore/project)</p> <p>(i) BioCNG generation from new Biogas plant- Rs 4.0 Crore per 4800 Kg/day;</p> <p>(ii) BioCNG generation from existing Biogas plant- Rs 3.0 Crore per 4800 Kg/day;</p> <p>(c) for Power generation based on Biogas (Maximum CFA- Rs. 5.00 crore/project):-</p> <p>(i) Power generation from new biogas plant: Rs 0.75 Crore per MW</p> <p>(ii) Power generation from existing biogas plant: Rs 0.5 crore / MW</p> <p>(d) for Power generation based on bio &amp; agro-industrial waste (other than MSW through incineration process):- Rs. 0.40 crore/MW (Maximum CFA - Rs.5.00 Crore/Project)</p> <p>(e) for Biomass Gasifier for electricity/ thermal applications:</p> <p>i) Rs. 2,500 per kW<sub>e</sub> with dual fuel engines for electrical application</p> <p>ii) Rs. 15,000 per kW<sub>e</sub> with 100% gas engines for electrical application</p> <p>iii) Rs. 2 lakh per 300 kW<sub>th</sub> for thermal applications.</p> <p>Note:</p> <ul style="list-style-type: none"> <li>In case, the Waste to Energy plants are set up in Special Category States (NE Region, Sikkim, Himachal Pradesh and Uttarakhand), Jammu &amp; Kashmir, Ladakh, Lakshadweep and Andaman &amp; Nicobar Islands, the eligible CFA would be 20% higher than Standard CFA pattern given above.</li> <li>Biogas/BioCNG/Power (biogas based) generation plants based on cattle dung as main feedstock set up by Gaushalas independently or through joint ventures/partnerships will be eligible for 20% higher CFA than Standard CFA pattern given above. These Gaushalas (Shelters) should be registered with the respective State Government.</li> </ul>

<b>Scheme/ Programmes</b>	<b>Incentive presently eligible as per the Scheme</b>
i) Biogas Programme	<p>a) Rs. 9800/- to Rs. 70,400/- per plant based on size of the plant in cubic meter for small biogas plants (1-25 cubic meter/day plant capacity);</p> <p>b) Rs. 35,000/- to Rs. 45,000/- per kilowatt for power generation and Rs. 17,500 /- to Rs. 22,500/- per kilowatt equivalent for thermal applications (25 - 2500 cubic meter/day plant capacity) .</p> <p>The eligible CFA would be 20% higher than Standard CFA in for NER, Island, Registered Gaushalas and SC/ST beneficiaries</p>
j) R&D programme	<p>The Ministry encourages research and technology development proposals in collaboration with the industry and provides upto 100% financial support to Government/non-profit research organizations and upto 50-70% to Industry, Start-ups, Private Institutes, Entrepreneurs and Manufacturing units.</p>