

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 2220**  
ANSWERED ON 22.03.2022

**SOLAR, WIND, TIDAL AND OTHER RENEWABLE ENERGY**

2220. SHRI JAWHAR SIRCAR

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

- (a) the installed capacity and the power generated by renewable energy sources, according to different categories like solar, wind, tidal and others;
- (b) the plans to expand production of renewable energy sources in the country and the annual expenditure in terms of installations and incentives; and
- (c) by when the generation from renewable, nuclear and clean zero carbon sources is likely to cater to 50 percent, 75 percent and 90 percent of India's energy needs?

**ANSWER**

**THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER**

**(SHRI R.K. SINGH)**

(a) A total of 152.90 GW of renewable energy capacity projects (including large hydro) have been installed in the country as on 28-2-2022 which includes 50.78 GW from solar power, 40.13 GW from wind power, 10.63 GW from Bio-power, 4.84 GW from small hydro power and 46.52 GW from large hydro power. Further, projects of 72.61 GW capacity are under various stages of implementation and 21.11 GW capacity are under various stages of bidding.

The details of electricity generated from various renewable energy sources in the country during the year 2021-22 (upto January 2022) are given below:

Source	Electricity Generated. Million Units(MU)
Wind	61525.49
Solar	57869.53
Bio-power	13286.66
Small hydro	9256.86
Large hydro	133610.06
<b>Total</b>	<b>275548.60</b>

(b) & (c): In accordance with Hon'ble Prime Minister's announcement at COP26, Ministry of New and Renewable Energy is committed to achieving 500 GW of installed electricity capacity from non-fossil fuel sources by 2030.

As per Central Electricity Authority (CEA) Report on Optimal Generation Capacity Mix for 2029-30, the share of renewable energy (including large hydro) has been estimated to be around 60 percent of total installed capacity by the end of year 2029-30. Further, the share of renewable energy (including large hydro) has been estimated to be around 40 percent of gross electricity generation during the year 2029-30.

An amount of Rs 3793.79 crore has been incurred as expenditure during the years 2021-22 (upto 14-3-2022) for implementation of various renewable energy schemes/programmes by the Ministry in the country.

Further, the details of incentives being provided as central financial assistance (CFA) for the implementation of major renewable energy schemes / programees by the Ministry is given in **Annexure**.

**Annexure referred to in reply to part (b&c) of Rajya Sabha Un-starred Question No. 2220 for 22/3/2022 regarding ‘Solar, Wind, Tidal and other Renewable Energy’**

**Details of Incentives being provided as Central Financial Assistance (CFA) for the installation of major renewable energy programmes.**

<b>Scheme/programmes</b>	<b>Details of incentives</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>
b) Grid connected Solar PV Power Projects by Government producers under CPSU scheme Phase II (Government Producers Scheme)	VGF support up to Rs 55 lakhs per MW to the CPSUs/Govt. Organizations entities selected through competitive bidding process.
c) Solar Park Scheme	<p>Upto 25 lakh per Solar park for preparation of Detailed Project Report (DPRs).</p> <p>20 Lakh per MW or 30% of the project cost whichever is lower.</p>
d) PM-KUSUM scheme	<p>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 will be given to the DISCOMs for a period of five years from the Commercial Operation Date of the plant. Therefore, the total PBI that shall be payable to DISCOMs will be Rs. 33 Lakh per MW.</p> <p>CFA of 30% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar Agriculture pump will be provided. However, in North Eastern States including Sikkim, hilly states of Himachal Pradesh and Uttarakhand and UTs of J&amp;K, Ladakh, Lakshadweep and A&amp;N Islands, CFA of 50% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar pump will be provided.</p> <p>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 including Sikkim, hilly states of Himachal Pradesh and Uttarakhand and UTs of J&amp;K, Ladakh, 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 will be provided.</p>
e) Green Energy Corridor Scheme	<p>GEC Phase-I: CFA of 40 % of DPR cost or awarded cost whichever is lower. Total CFA approved by CCEA is Rs. 4056.67 crore.</p> <p>GEC Phase-II: CFA of 33 % of DPR cost or awarded cost whichever is lower. Total CFA approved by CCEA is Rs. 3970.34 crore.</p>