

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 2556
ANSWERED ON 22.12.2022

SUPPORT FOR SMALL HYDRO ELECTRIC PROJECTS

2556. MS. RAMYA HARIDAS
DR. M.P. ABDUSSAMAD SAMADANI
SH. KODIKUNNIL SURESH

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

- (a) whether the Government is providing any grants or financial support for small hydro electric projects that have an output capacity of below 25 megawatts;
- (b) if so, whether the Government of Kerala has requested the Government for such financial support for its hydro electric projects in Kerala;
- (c) if so, the details thereof along with the quantum of funds allocated for each project during the last three financial years and the current year;
- (d) whether any delay has occurred in the disbursal of such central Government funds and if so, the details thereof;
- (e) whether the Government has reinstated subsidies which prevailed early in the energy sector and if so, the details thereof; and
- (f) whether the Government proposes to introduce special schemes to popularise solar energy in various States and if so, the details thereof?

ANSWER

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

- (a) No Sir. At present, there is no scheme to provide Central Financial Assistance for setting up of Small Hydro Power projects (up to 25MW capacity).
- (b) to (d) No Sir. This Ministry has not received any formal proposal regarding financial support for development of SHP projects from Government of Kerala.
- (e) The details of subsidies/Central Financial Assistance (CFA) provided for the implementation of major renewable energy schemes/programmes by the Government are given at **Annexure-I.**
- (f) The details of the schemes introduced by the Government to popularize solar energy in various States are given at **Annexure-II.**

Annexure-I referred to in reply to part (e) of Lok Sabha Unstarred Question No. 2556 for 22/12/2022 regarding ‘Support for Small Hydro Electric Projects’

Subsidies/Central Financial Assistance (CFA) provided for the implementation of major renewable energy schemes/ programmes.

| Scheme/ Programmes | Incentive presently eligible as per the Scheme |
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| a) Grid Connected Rooftop Solar PV Power Projects | (i) For Residential Sector <ul style="list-style-type: none"> • Central Financial Assistance (CFA) up to 40% for capacity up to 3 kWp • CFA up to 20% for capacity beyond 3 kWp and up to 10 kWp • CFA up to 20% for GHS/RWA capacity up to 500 kWp (limited to 10 kWp per house and total upto 500 kWp) (ii) For Discoms Incentives up to 10% of project cost depending upon achievements in capacity addition above baseline. |
| 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>Component A: Setting up of 10,000 MW of Decentralized Ground/Stilt Mounted Solar Power Plants 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>Component B: Installation of 20.00 Lakh Stand-alone Solar Pumps 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 & Kashmir, Ladakh, Himachal Pradesh and Uttarakhand, Lakshadweep and A&N Islands, CFA of 50% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar pump is provided.</p> <p>Component C: Solarisation of 15 Lakh Grid Connected Agriculture Pumps including through feeder level solarisation Benefit available: (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 & Kashmir, Ladakh, Himachal Pradesh and Uttarakhand, Lakshadweep and A&N Islands, CFA of 50% of the benchmark cost or the tender cost, whichever is lower, of the solar PV component is provided. (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.</p> |

| Scheme/ Programmes | Incentive presently eligible as per the Scheme |
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| f) Green Energy Corridor Scheme (for development of intra-state transmission system for RE projects) | GEC Phase-I: CFA of 40 % of DPR cost or awarded cost whichever is lower. GEC Phase-II: CFA of 33 % of DPR cost or awarded cost whichever is lower. |
| g) Biomass Programme | (a) For Briquette/Pellet manufacturing plants: Rs. 9.00 Lakhs/ TPH (Maximum CFA- Rs. 45.00 Lakh per project) (b) For Non-Bagasse Cogeneration Projects: Rs. 40 Lakhs/ Megawatt (Maximum CFA- Rs. 5.00 Crore per project) |
| 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 & 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_e with dual fuel engines for electrical application</p> <p>ii) Rs. 15,000 per kW_e with 100% gas engines for electrical application</p> <p>iii) Rs. 2 lakh per 300 kW_{th} for thermal applications.</p> <p>Note:</p> <ul style="list-style-type: none"> In case, the Waste to Energy plants are set up in Special Category States (NE Region, Sikkim, Himachal Pradesh and Uttarakhand), Jammu & Kashmir, Ladakh, Lakshadweep and Andaman & Nicobar Islands, the eligible CFA would be 20% higher than Standard CFA pattern given above. 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. |
| i) Biogas Programme | <p>a) Rs. 9,800/- 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> |

Annexure-II referred to in reply to part (f) of Lok Sabha Unstarred Question No. 2556 for 22.12.2022 regarding 'Support for Small Hydro Electric Projects'

Schemes introduced by the Government to popularize solar energy in various States

1. Scheme for Development of Solar Parks and Ultra-mega Solar Power Projects with a target for setting up of 40,000 MW capacity.
2. Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for setting up 12,000 MW grid-connected Solar Photovoltaic (PV) Power Projects by Government Producers with Viability Gap Funding (VGF) support.
3. Production Linked Incentive scheme 'National Programme on High Efficiency Solar PV Modules' for achieving manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV modules (Tranche- I & II).
4. PM-KUSUM Scheme to promote small grid-connected solar energy power plants, stand-alone solar powered agricultural pumps and solarization of existing grid connected agricultural pumps.
5. Rooftop Solar Programme Phase II for grid-connected solar rooftop power plants.