GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

LOK SABHA

UNSTARRED QUESTION NO. 4247

TO BE ANSWERED ON 19.03.2020

RENEWABLE ENERGY DEVELOPMENT

4247. DR. SUBHAS SARKAR

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

- (a) the present status of renewable energy development;
- (b) the quantum of funds allocated to various States during the last three years for development of New and Renewable Energy specially for solar power generation;
- (c) the details of development of energy storage and smart grid;
- (d) the quantum of funds utilized by the States during the last three years; and
- (e) the capacity created for generation of solar power during the last three years, State-wise?

ANSWER

THE MINISTER OF STATE (I/C) FOR NEW & RENEWABLE ENERGY, POWER and MoS for SKILL DEVELOPMENT AND ENTREPRENEURSHIP

(SHRI R.K. SINGH)

- (a) The Government has set a target of installing 175 GW renewable energy capacity excluding large hydro in the country by December 2022. As against this target, as on 29th February 2020, a cumulative renewable energy capacity of 86.75 GW has been installed in the country with an additional capacity of 33.72 GW under various stages of implementation and 34.07 GW under various stages of bidding. Besides, as on same date 45.69 GW of large hydro capacity also stand established with 12.97 GW under implementation.
- (b) to (d) Most of the grid connected renewable energy projects in the country are being implemented by the private sector developers selected through transparent competitive bidding process. However, the Ministry of New and Renewable Energy(MNRE) has been providing assistance in the form of Central Financial Assistance (CFA) to the designated Agencies/State Government nodal agencies for the implementation of various renewable energy schemes/programmes in the country as per scheme guidelines.

The state/UT wise details of funds released and utilized in the form of Central Financial Assistance (CFA) for implementation of various renewable energy programmes/schemes during the last three years i.e. from 2016-17 to 2018-19 are given in **Annexure-I.**

In March 2019, the Government approved the National Mission on Transformative Mobility and Battery Storage which, inter-alia, aims to enhance the demand for storage.

The Ministry of New and renewable Energy is trying to create demand for storage by bringing tenders linked with storage through Solar Energy Corporation of India and NTPC.

In the year 2015, the Government launched National Smart Grid Mission (NSGM) to plan and monitor implementation of various policies and programs related to Smart Grid activities in India. Under NSGM, five projects have been sanctioned. Of these, three projects are in the States of Jharkhand, Odisha and Rajasthan and two projects in Union Territory of Chandigarh. These projects are primarily aimed at deployment of Advanced Metering Infrastructure/Smart Metering.

(e) The details of state-wise solar capacity created for generation of solar power during the last three years are given in the **Annexure-II**.

Annexure-I

Annexure-I referred to in reply to part (d) of Lok Sabha Un-starred Question No.4247 for 19/03/2020 regarding 'Renewable Energy Development'.

State/UT wise and year-wise details of Funds released as Central Financial Assistance during last three years i.e. 2016-17 to 2018-19

(Rs in crore)

| | | | | (KS III CI OI) |
|--------|---|---------|---------|----------------|
| S. No. | State / UT Name | 2016-17 | 2017-18 | 2018-19 |
| 1 | ANDHRA PRADESH | 1.92 | 4.96 | 132.86 |
| 2 | ARUNACHAL PRADESH | 20.08 | 45.16 | 5.94 |
| 3 | ASSAM | 60.28 | 24.86 | 0.20 |
| 4 | BIHAR | 0 | 0 | 5.26 |
| 5 | CHANDIGARH | 9.69 | 2.23 | 18.76 |
| 6 | CHHATTISGARH | 72.92 | 161.96 | 95.81 |
| 7 | DADRA & NAGAR HAVELI | 0 | 0.34 | 0 |
| 8 | DAMAN & DIU | 0 | 0 | 0 |
| 9 | DELHI | 166.04 | 311.45 | 228.25 |
| 10 | GOA | 0.17 | 0 | 0 |
| 11 | GUJARAT | 74.09 | 158.89 | 361.08 |
| 12 | HARYANA | 16.24 | 2.16 | 22.39 |
| 13 | HIMACHAL PRADESH | 36.39 | 42.30 | 84.13 |
| 14 | JAMMU AND KASHMIR | 49.67 | 16.12 | 85.84 |
| 15 | JHARKHAND | 12.87 | 5.58 | 0.99 |
| 16 | KARNATAKA | 52.42 | 39.54 | 100.93 |
| 17 | KERALA | 36.17 | 44.02 | 20.73 |
| 18 | LAKSHADWEEP | 0.46 | 3.97 | 0 |
| 19 | MADHYA PRADESH | 40.16 | 442.13 | 105.01 |
| 20 | MAHARASHTRA | 155.21 | 43.12 | 147.38 |
| 21 | MANIPUR | 12.53 | 6.65 | 0 |
| 22 | MEGHALAYA | 20.52 | 23.28 | 2.08 |
| 23 | MIZORAM | 22.38 | 21.47 | 7.89 |
| 24 | NAGALAND | 17.97 | 11.49 | 2.39 |
| 25 | ODISHA | 21.17 | 13.55 | 9.11 |
| 26 | PUDUCHERRY | 1.11 | 0.31 | 0.10 |
| 27 | PUNJAB | 9.19 | 3.42 | 30.04 |
| 28 | RAJASTHAN | 86.85 | 103.14 | 64.52 |
| 29 | SIKKIM | 2.87 | 0.18 | 2.74 |
| 30 | TAMIL NADU | 169.28 | 30.50 | 54.94 |
| 31 | TELANGANA | 99.19 | 174.62 | 98.96 |
| 32 | TRIPURA | 14.57 | 2.73 | 0.22 |
| 33 | UTTAR PRADESH | 28.11 | 36.41 | 37.85 |
| 34 | UTTARAKHAND | 41.92 | 43.89 | 0.45 |
| 35 | WEST BENGAL | 1.37 | 6.58 | 4.29 |
| 36 | ANDAMAN AND NICOBAR | 0.48 | 3.03 | 0 |
| 37 | CENTRAL AGENCY (including IREDA, SECI, NISE, NIWE, NIBE, NTPC, etc.) | 1190.92 | 1874.44 | 2683.63 |

Annexure-II referred to in reply to part (e) of Lok Sabha Un-starred Question No.4247 for 19/03/2020 regarding 'Renewable Energy Development' Source-wise and State-wise achieve ments of Solar Power made during the last three years (April 2016 to Feb 2020)

(in MW)

| | (III IVI) | | | | | | |
|--------|-------------------------|---------|---------|---------|----------------------|--|--|
| S. No. | State/UT | 2016-17 | 2017-18 | 2018-19 | Total Solar Power | | |
| 1 | Andhra Pradesh | 1294.26 | 328.24 | 890.22 | 2512.72 | | |
| 2 | Arunachal Pradesh | | 5.13 | 0 | 5.13 | | |
| 3 | Assam | 11.78 | 0.67 | 9.95 | 22.4 | | |
| 4 | Bihar | 103.42 | 33.93 | 0 | 137.35 | | |
| 5 | Chhattisgarh | 35.28 | 102.49 | 0 | 137.77 | | |
| 6 | Goa | 0.71 | 0.2 | 3.01 | 3.92 | | |
| 7 | Gujarat | 130.19 | 328.89 | 852.13 | 1311.21 | | |
| 8 | Haryana | 66.01 | 123.45 | 7.67 | 197.13 | | |
| 9 | Himachal Pradesh | 0.53 | 0 | 21.95 | 22.48 | | |
| 10 | Jammu & Kashmir | 0.36 | 0 | 13.47 | 13.83 | | |
| 11 | Jharkhand | 7.08 | 2.39 | 9.28 | 18.75 | | |
| 12 | Karnataka | 882.38 | 3915.22 | 1151.44 | 5949.04 | | |
| 13 | Kerala | 61.15 | 33.46 | 30.65 | 125.26 | | |
| 14 | Madhya Pradesh | 80.67 | 448.31 | 534.81 | 1063.79 | | |
| 15 | Maharashtra | 66.61 | 777.56 | 394.36 | 1238.53 | | |
| 16 | Manipur | 0.03 | 0.03 | 3.38 | 3.44 | | |
| 17 | Meghalaya | 0.01 | 0.01 | 0.1 | 0.12 | | |
| 18 | Mizoram | 0 | 0.1 | 0.3 | 0.4 | | |
| 19 | Nagaland | 0.5 | 0.5 | 0 | 1 | | |
| 20 | Orissa | 12.5 | 0.15 | 315.16 | 327.81 | | |
| 21 | Punjab | 388.89 | 104.15 | 0 | 493.04 | | |
| 22 | Rajasthan | 543 | 518.49 | 894.02 | 1955.51 | | |
| 23 | Sikkim | 0 | 0 | 0.01 | 0.01 | | |
| 24 | Tamil Nadu | 630.01 | 213.65 | 666.65 | 1510.31 | | |
| 25 | Telangana | 759.13 | 2004.27 | 300.84 | 3064.24 | | |
| 26 | Tripura | 0.09 | 0 | 0 | 0.09 | | |
| 27 | Uttar Pradesh | 193.24 | 357.13 | 265.69 | 816.06 | | |
| 28 | Uttarakhand | 192.35 | 24.79 | 46.67 | 263.81 | | |
| 29 | West Bengal | 18.37 | 11.06 | 38.63 | 68.06 | | |
| 30 | Andaman & Nicobar | 1.46 | 0 | 5.17 | 6.63 | | |
| 31 | Chandigarh | 10.52 | 7.88 | 9.51 | 27.91 | | |
| 32 | Dadar & Nagar Haveli | 2.97 | 2.49 | 0 | 5.46 | | |
| 33 | Daman & Diu | 6.46 | 0.15 | 3.86 | 10.47 | | |
| 34 | Delhi | 25.99 | 17.8 | 57.32 | 101.11 | | |
| 35 | Pondicherry | 0.05 | 0.08 | 2.98 | 3.11 | | |
| | Total | 5526 | 9362.67 | 6529.23 | 21417.9 | | |
| | | | | | | | |