

**Target for grid connected solar roof top systems**

2305. DR. K. P. RAMALINGAM: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether it is a fact that the funding for the target set for installation of grid connected solar roof top systems is expected from various sources, including State Government budget, loans from public and private banks under priority sector and the subsidies from the Ministry;

(b) whether it is also a fact that Government has a scheme to provide 15 per cent subsidy on the benchmark cost for some select categories; and

(c) whether such subsidy is not there for industrial and commercial establishments?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI PIYUSH GOYAL): (a) Yes, Sir.

(b) Yes, Sir.

(c) Subsidy is not provided for industrial and commercial establishments with effect from 3rd August 2015, except in those establishments where the power system is owned by a Government organization.

**Production of biogas**

2306. DR. T.N. SEEMA: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the estimate of biogas being produced in the country, State/UT-wise;

(b) the targets fixed for setting up of biogas plants under the National Biogas and Manure Management Programme (NBMMP) during the Twelfth Five Year Plan and the estimated quantum of biogas likely to be produced State/UT-wise;

(c) whether any subsidy is provided to weaker sections of the society for installation of household biogas plants and if so, the details thereof;

(d) whether a number of States have submitted proposals for allocation of funds for setting up of biogas plants under NBMMP and if so, the details thereof; and

(e) the steps taken/being taken thereon?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI PIYUSH GOYAL): (a) The estimated biogas production from family type biogas plants and large biogas plants installed in the country under different programmes of the Ministry of New and Renewable Energy is about 16,955 lakh cubic metre per year. The State/UT-wise detail is given in the Statement-I (*See below*).

(b) A target of setting up of 6.50 lakh family type biogas plants has been fixed under the National Biogas and Manure Management Programme (NBMMP) during the Twelfth Five Year Plan. The total estimated quantum of biogas production from these biogas plants under the NBMMP is likely to be about 13 lakh cubic metre per day. The State/UT-wise details of physical targets for the 1st four years of the Twelfth Five Year Plan period is given in the Statement-II (*See below*).

(c) Yes, Sir. Under the National Biogas and Manure Management Programme (NBMMP), higher subsidy is given to the weaker section of the society for installation of family type biogas plants. The beneficiaries of Scheduled Castes and Scheduled Tribes are given subsidy of ₹ 7,000/- for one cubic metre capacity biogas plant (₹ 5,500/- for General Category) and ₹ 11,000/- for 2-6 cubic metre capacity biogas plants (₹ 9,000/- for General Category). For the beneficiaries in the North Eastern States including Sikkim, the subsidy is ₹ 15,000/- for one cubic metre and ₹ 17,000/- for 2-6 cubic metre capacity plants (except plain areas of Assam, where the subsidy is ₹ 10,000/- and ₹ 11,000/- for 1 cubic metre and 2-6 cubic metre plants respectively).

(d) and (e) The Ministry receives proposal from the States and implementing agencies for allocation of targets at the beginning of the year. Based on the previous year's performance and availability of funds, the annual targets are fixed by the Ministry. This year's target of 1,11,000 biogas plants has already been fixed and communicated to the States and Implementing Agencies.

***Statement-I***

*The State/UT-wise estimated biogas production from family type biogas plants and large capacity biogas plants*

| Sl. No. | States/Union Territories | Estimated biogas production in lakh cu.m. per year as on 31.03.2015<br>(during 2014-15) |
|---------|--------------------------|---|
| 1       | 2                        | 3   |
| 1.      | Andhra Pradesh           | 1646.32   |
| 2.      | Arunachal Pradesh        | 10.14   |
| 3.      | Assam                    | 338.14  |
| 4.      | Bihar                    | 379.09  |
| 5.      | Goa                      | 11.98   |
| 6.      | Gujarat                  | 1606.14   |
| 7.      | Haryana                  | 282.99  |

| 1     | 2                           | 3        |
|-------|-----------------------------|----------|
| 8.    | Himachal Pradesh            | 138.47   |
| 9.    | Jammu and Kashmir           | 8.97     |
| 10.   | Jharkhand                   | 21.28    |
| 11.   | Karnataka                   | 1487.90  |
| 12.   | Kerala                      | 421.63   |
| 13.   | Madhya Pradesh              | 1134.71  |
| 14.   | Maharashtra                 | 2990.55  |
| 15.   | Manipur                     | 6.21     |
| 16.   | Meghalaya                   | 29.18    |
| 17.   | Mizoram                     | 14.68    |
| 18.   | Nagaland                    | 23.07    |
| 19.   | Odisha                      | 776.64   |
| 20.   | Punjab                      | 639.69   |
| 21.   | Rajasthan                   | 284.46   |
| 22.   | Sikkim                      | 25.91    |
| 23.   | Tamil Nadu                  | 880.33   |
| 24.   | Telengana                   | 28.90    |
| 25.   | Tripura                     | 9.83     |
| 26.   | Uttar Pradesh               | 2447.45  |
| 27.   | West Bengal                 | 1043.36  |
| 28.   | Andaman and Nicobar Islands | 0.40     |
| 29.   | Chandigarh                  | 0.28     |
| 30.   | Dadra and Nagar Haveli      | 0.49     |
| 31.   | Delhi/New Delhi             | 1.98     |
| 32.   | Puducherry                  | 1.68     |
| 33.   | Chhattisgarh                | 158.29   |
| 34.   | Uttarakhand                 | 103.62   |
| TOTAL |                             | 16954.76 |

**Statement-II**

*Allocation of physical targets for installation of family type biogas plants under National Biogas and Manure Management Programme (NBMMP) during the first four years of the Twelfth Plan.*

| Sl. No. | State/UT/Agency   | Physical Targets (Nos. of biogas plants) |
|---------|---|--|
| 1       | 2   | 3  |
| 1.      | Andhra Pradesh, (NEDCAP), Hyderabad                       | 51440                                    |
| 2.      | Arunachal Pradesh, (APEDA), Itanagar                      | 300                                      |
| 3.      | Assam (FDA-cum-CCF, Social Forestry Assam)                | 28100                                    |
| 4.      | Bihar   | 0  |
| 5.      | Chhattisgarh, (CREDA), Raipur                             | 15750                                    |
| 6.      | Goa (Directorate of Agriculture)                          | 400                                      |
| 7.      | Gujarat (GAIC Ltd.) Ahmedabad                             | 16300                                    |
| 8.      | Haryana, (Directorate of Agriculture) Panchkula           | 6350                                     |
| 9.      | Himachal Pradesh (Dir. of Agri. Shimla)                   | 1130                                     |
| 10.     | Jammu and Kashmir, JKEDA, Srinagar                        | 550                                      |
| 11.     | Jharkhand (JHREDA Ranchi)                                 | 1000                                     |
| 12.     | Karnataka, RD&PR Deptt. Bangalore                         | 53800                                    |
| 13.     | Kerala, Directorate of Agril. and ANERT Thiruvanthapuram  | 14825                                    |
| 14.     | Madhya Pradesh, MPSAIDC, Ltd. Bhopal                      | 43100                                    |
| 15.     | Maharashtra (RD&WC Dept.) Mumbai                          | 57660                                    |
| 16.     | Manipur (MANIREDA)  | 0  |
| 17.     | Meghalaya, Shillong (MNREDA)                              | 1500                                     |
| 18.     | Mizoram (Directorate of Animal Husbandry and Veterinary)  | 3000                                     |
| 19.     | Nagaland, Directorate of New and Renewable Energy, Kohima | 1600                                     |
| 20.     | Odisha (OREDA), Bhubaneswar                               | 23700                                    |
| 21.     | Puducherry REAP   | 0  |
| 22.     | Punjab (PEDA, Chandigarh)                                 | 39600                                    |

| 1     | 2  | 3      |
|-------|--|--------|
| 23.   | Rajasthan (BDTC, CTAE Udaipur)                               | 2975   |
| 24.   | Sikkim (SREDA), Gangtok                                      | 800    |
| 25.   | Tamil Nadu (Directorate of Rural Development and PR) Chennai | 3050   |
| 26.   | Telangana  | 19800  |
| 27.   | Tripura (TREDA)  | 1750   |
| 28.   | Uttar Pradesh, RDD Lucknow, UP                               | 8950   |
| 29.   | Uttarakhand-URED, Dehradun and Rural Dev                     | 4110   |
| 30.   | West Bengal (WBREDA) Kolkata                                 | 12000  |
| 31.   | KVIC, Mumbai*  | 48460  |
| TOTAL |  | 462000 |

\*KVIC annual targets distributed in the States.

#### Potential of solar energy in Karnataka

2307. SHRI BASAWARAJ PATIL: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) the potential area for solar energy in Karnataka, district-wise;
- (b) the support by the Central and State Governments for best utilization of natural resources; and
- (c) the schemes adopted by the State Government to best utilize the solar energy in those districts?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI PIYUSH GOYAL): (a) Karnataka is blessed with good solar radiation resource. As such solar energy could be generated in all districts of Karnataka. The district-wise, taluk-wise solar radiation data is furnished in Annexure. The Karnataka Renewable Energy Development Limited (KREDL) is nodal agency for development of Renewable Energy (RE) generation in Karnataka. Total solar potential of Karnataka is 25 GW as assessed by National Institute of Solar Energy (NISE).

(b) The support by the Central and State Governments for best utilization of solar resources is as follows:

Support by Central Government:

1. Excise and custom duty exemptions for equipment to develop solar projects.