

**Pilot projects to generate energy from municipal solid waste**

2418. DR. CHANDAN MITRA: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether Government proposes to set up five pilot projects to generate energy from municipal solid wastes;
- (b) if so, the details thereof along with the names of cities identified for the purpose and the financial assistance proposed to be provided for each project; and
- (c) by when these projects are likely to be in operation?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) Yes, Sir.

(b) The Ministry of New and Renewable Energy is implementing a programme for, setting up of five new projects on energy recovery from municipal solid wastes (MSW). Under this programme, projects have been taken up in the cities of Bangaluru, Hyderabad, New Delhi and Pune. These projects are eligible for central financial assistance of Rs. 2.00 crore per megawatt with upper limit of Rs. 10.00 crore per project, subject to fulfillment of terms and conditions of the programme. Benefits of Customs and Excise Duty concessions are also provided for initial setting up of power generation plants based on MSW.

(c) One project of 16 megawatt capacity at Okhla, New Delhi is in operation since May, 2012 and others are expected to be completed by December, 2013.

**Renewable energy resources in Meghalaya**

2419. SHRI THOMAS SANGMA: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether despite being rich in different renewable energy resources, Meghalaya still faces highest electricity deficit in the country;
- (b) whether Government has done any study to identify the renewable energy potential in the State; and
- (c) if so, the details thereof, source-wise and the details of support provided by the Central Government to tap these resources to meet the electricity shortfall?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) Meghalaya faced an electricity deficit of 93 MU (21.4%) against requirement of 434 MU and peak power deficit of 6 MW (1.5%) against peak demand of 275 MW during the period April-June 2012 as per data compiled by the Central Electricity Authority.

(b) Yes, Sir.

(c) Based on studies undertaken by the Government, a potential of 229 MW for small hydro power, 44 MW for wind power, 11 MW for biomass power and 2 MW for waste to power has been estimated in Meghalaya. The potential for solar power is estimated at around 30 MW/sq. km of open shadow free area covered with solar collectors.

The Union Government is promoting projects for generation of power from various renewable energy sources mainly with private investment, through a mix of financial and fiscal incentives such as, capital and interest subsidy, generation based incentive, accelerated depreciation, concessional excise and customs duties and 10 years tax holiday on revenue generated from the projects through sale of power. A higher quantum of subsidy/incentives is provided for setting up renewable power generation plants in NE region states, including Meghalaya. The CFA/subsidy available for different categories of projects are given in Statement.

***Statement***

*Incentives/Central Financial Assistance (CFA) provided under various Renewable Power Schemes/Programmes*

**A. CFA under OFF-GRID / Decentralized Programmes**

Sl. No.	Off-grid/Decentralised Renewable Energy systems	Central Financial Assistance
1	2	3
1.	Remote Village Electrification: Renewable energy systems for Electricity generation/lighting for households in remote unelectrified census villages/hamlets	90% of the cost of electricity generation systems subject to a pre-specified maximum amount for each technology and an overall ceiling of Rs. 18,000 per household.  100% cost of a single light Solar PV home lighting system for BPL households.

1	2	3
2.	Family Type Biogas Plants	Rs. 11,700 to Rs. 14,700 per plant depending on capacity of plant and CDM benefits availed
	NE Region States including Sikkim (except plain areas of Assam)	Rs. 9,000 to Rs. 10,000 per, plant depending on capacity of plant and CDM benefits availed
	Plain areas of Assam	Rs. 3,000 to Rs. 10,000 per plant depending on capacity of plant and CDM benefits availed
	J&K, Himachal Pradesh, Uttarakhand (excluding Terai region), Nilgiris of Tamil Nadu, Sadar, Kurseong and Kalimpong sub-divisions of Darjeeling, Sunderbans, A & N Islands	Rs. 2,100 to Rs. 8,000 per plant depending on capacity of plant and CDM benefits availed
	All Others	
3.	Biomass Gasifiers	For Rural applications: Rs. 15.00 lakh/100 kW for village level electricity generation with 100% producer gas engine. 20% higher subsidy for Special Category States & Islands  For Industrial applications: Rs. 2.00 lakh/300 kWe for thermal applications Rs.2.50 lakh/100 kWe with dual fuel engine Rs.10.00 lakh/100 kWe with 100% producer gasengine  For Institutional applications: Rs. 15.00 lakh/100 kWe with 100% producer gas engine
4.	Biomass Co-generation (non-bagasse) for captive use in industry	Rs. 20.00 lakhs per MW subject to a maximum of Rs.1 crore/project. (20% higher subsidy for Special Category States)

1	2	3
5.	Urban Waste to Energy	Rs.1.0 to 3.0 crore/MWe, depending on technology. (20% higher subsidy for Special Category States)
6.	Industrial Waste-to-Energy Plants	Rs. 20.00 lakh to Rs. 1.00 crore/MWe, depending on technology. (20% higher subsidy for Special Category States)
7.	Solar Energy Systems (Photovoltaic/Thermal)	Subsidy of 30% of project cost and/ or 5% interest bearing loans.
8.	Small Aero-Generators and Hybrid Systems	Rs. 1.00 lakh and Rs. 1.50 lakh per kW for commercial and non-commercial beneficiaries respectively. Higher support of Rs. 2.25 lakh per kW for projects in NE Region States Sikkim and Jammu & Kashmir.
9.	Micro-hydel plants/Water mills	Rs. 0.35 lakh per watermill for mechanical application Rs. 1.10 lakh per watermill for electrical application

**B. CFA under Grid-interactive renewable power programmes:**

**1. Small Hydro Power**

**Support to new SHP projects in State sector:**

Category	Above 100 KW and up to 1000 KW	Above 1 MW - 25 MW
Special category and NE States	Rs. 50,000/KW	Rs. 5.00 crore for first MW + Rs. 50 lakh/MW for each additional MW
Other States	Rs.25,000/KW	Rs. 2.50 crore for first MW + Rs.40 lakh/MW for each additional MW

**Support to new SHP project in private/co-operative/joint sector:**

Category	Up to 1000 KW	Above 1 MW - 25 MW
Special category and NE States	Rs. 20,000 / KW	Rs. 2.00 crore for first MW + Rs. 30 lakh/MW for each additional MW
Other States	Rs. 12,000/KW	Rs. 1.20 crore for first MW + Rs. 20 lakh/MW for each additional MW

**2. Biomass Power Project and Bagasse Cogeneration Projects:****A. Private/Joint/Cooperative/Public Sector Sugar Mills.**

	Special Category States (NE Region, Sikkim, J&K, HP & Uttaranchal)	Other States
Project Type	Capital Subsidy	Capital Subsidy
Biomass Power projects	Rs. 25 lakh X (C MW) <sup>^</sup> 0.646	Rs. 20 lakh X (C MW) <sup>^</sup> 0.646
Bagasse Co-generation by Private sugar mills	Rs. 18 lakh X (C MW) <sup>^</sup> 0.646	Rs. 15 lakh X (C MW) <sup>^</sup> 0.646
Bagasse Co-generation projects by cooperative/public sector sugar mills		
40 bar & above	Rs. 40 lakh *	Rs. 40 lakh *
60 bar & above	Rs. 50 lakh *	Rs. 50 lakh *
80 bar & above	Rs. 60 lakh *	Rs. 60 lakh *
	Per MW of surplus power@ (maximum support Rs. 8.0 crore per project)	Per MW of surplus power@ (maximum support Rs. 8.0 crore per project)

\*For new sugar mills, which are yet to start production and existing sugar mills employing back pressure route/seasonal/incidental cogeneration, which exports surplus power to the grid, subsidies shall be one-half of the level mentioned above.

@ Power generated in a sugar mill (-) power used for captive purpose *i.e.* net power fed to the grid during season by a sugar mill.

- B.** Bagasse Cogeneration projects in cooperative/public sector sugar mills implemented by IPPs/State Government Undertakings or State Government Joint Venture Company/Special Purpose Vehicle (Urja Ankur Trust) through BOOT/BOLT model

C. Project Type	Minimum Configuration	Capital Subsidy
Single coop., mill through BOOT/BOLT Model	60 bar & above 80 bar & above	Rs.40 L/MW of surplus power * Rs.50 L/MW of surplus power* (maximum support Rs.8.0 crore/ sugar mill)

\* Power generated in a sugar mill (-) power used for captive purpose i.e. Net power fed to the grid during season by a sugar mill.

- D. Bagasse Cogeneration Project in existing cooperative sector sugar mills employing boiler modifications:**

Project Type	Minimum Configuration	Capital Subsidy
Existing Cooperative Sugar Mill	40 bar & above 60 bar & above 80 bar & above	Rs.20 L/MW of surplus power * Rs.25 L/MW of surplus power* Rs.30 L/MW of surplus power*

\* Power generated in a sugar mill (-) power used for captive purpose i.e. Net power fed to the grid during season by a sugar mill. CFA will be provided to the sugar mills who have not received CFA earlier from MNRE under any of its scheme.

### 3. Wind Power:

Special Category States (NE Region, Sikkim, J&K, HP and Uttarakhand)		Other States	
For Demo. Projects	Rs. 3.00 crore X C <sup>0.646</sup>	Rs. 2.50 crore X	C <sup>0.646</sup>
Commercial Wind Power -	Generation Based Incentive (GBI) for Commercial Wind Power projects @ Rs.050 per kwh subject to a maximum of Rs.62.50 lakh / MW, which do not avail accelerated depreciation benefit.		

C: Capacity of the project in MW; ^ : raised to the power.

**4. Biomass Gasifier**

Special Category States (NE Region, Sikkim, J&K, HP and Uttarakhand)	Other States
20% higher CFA	Rs. 5,000/kW

**5. Solar Power:**

- i. Generation based incentive linked to CERC announced tariff guidelines for projects connected at 11kV and below.
- ii. For projects connected at 33kV and above—National Vidyut Vyapar Niagam (NWN) to purchase power at a rate fixed by CERC.

**Findings of inquiry into JNNSM scam**

2420. SHRIMATI KUSUM RAI:

SHRI ARVIND KUMAR SINGH:

SHRI PRABHAT JHA:

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

(a) the details of the findings and recommendations of the inter-Ministerial committee to inquire into Rs.13,000/- crore scam in Jawaharlal Nehru National Solar Mission (JNNSM) which has submitted its report to Government recently;

(b) whether Government has examined the report;

(c) if so, the details thereof;

(d) if not, the reasons therefor;

(e) whether Government has fixed the responsibilities in the alleged scam;

(f) if so, the details thereof; and

(g) if not, the reasons therefor?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) to (g) An article appeared in the magazine "Down to Earth" in its issue dated 1-15 February, 2012 in which allegations were made regarding violation of Guidelines of the 1000 MW Solar Power Project Scheme of Jawaharlal Nehru National Solar Mission (JNNSM) being implemented through NVVN. The Ministry