GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY **LOK SABHA**

UNSTARRED QUESTION NO. 3138

TO BE ANSWERED ON 04.08.2016

Installed Capacity of Power Generation

3138. DR. KAKOLI GHOSH DASTIDAR:

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

- (a) the present installed capacity of power generation in the country and the share of renewable energy in that capacity;
- (b) whether India is among top five countries of the world in terms of renewable energy production capacity, if so, the details thereof;
- (c) the reasons for less capacity utilisation of renewable energy sources and the steps being taken by the Government in this regard;
- (d) whether the Government proposes to enhance the incentives for the said purpose; and
- (e) if so, the details thereof?

ANSWER

MINISTER OF STATE FOR POWER, COAL, NEW & RENEWABLE ENERGY & MINES (SHRI PIYUSH GOYAL)

- Against the total installed capacity of 304.51 GW from all sources, capacity addition of 44.24 GW have been installed through Renewable Energy Sources, which is about 14.53 % of the total installed capacity in the country as on 30-6-2016.
- As per Renewable 2016 Global Status Report REN- 21, at the end of 2015, India stood 5th in the total capacity generation of Renewable energy power (excluding large Hydro Power) after China, United States, Germany and Japan.
- (c): A capacity addition of over 44.24 GW have already been installed from various renewable energy sources in the country. Further, the Government has up-scaled the target of renewable energy capacity to 175 GW by the year 2022 which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power.
- (d) & (e): The Ministry of New and Renewable Energy (MNRE) has made changes in the policy with regard to subsidy/incentives under various renewable energy programmes during the 12th Five Year Plan. The details of subsidy/incentives presently being provided under various programmes is given in Annexure.

Annexure referred to in reply to parts (d & e) of Lok Sabha Unstarred Question No 3138 for 4/8/2016 regarding 'Installed Capacity of Power Generation'

Incentives/Subsidy available under various schemes / programmes.

A. GRID-INTERACTIVE RENEWABLE POWER PROGRAMMES:

1. Wind Power Projects:

Generation Based Incentive (GBI)	Rs.0.50 per unit subject to max of
	Rs.1.00 crore/MW

2. Solar Power Projects:

Solar PV Power projects		
under Jawaharlal Nehru	Minimum Project	VGF support upto 30% of Project Cost
National Solar Mission	Capacity 10MW	limited to Rs.2.50 Cr/MW based on reverse
(JNNSM) Phase-II, Batch-I		bidding process.
of total 750 MW with	Maximum Project	
Viability Gap Funding	Capacity 50MW	
(VGF) support from National	1 3	
Clean Energy Fund (NCEF).		

3. Small Hydro Power Projects

Support to new SHP projects in State sector:

Category	Above 100 KW and	Above 1 MW – 25 MW
	up to 1000 KW	
Special category and NE States	75,000 per KW.	7.5 Crores / MW limited to `20 crore per
		project.
Other States	35,000 per KW.	3.5 Crores / MW limited to `20 crore per
		project.

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

Areas	Upto 25 MW
N E Region, J & K, H.P. &Uttarakhand	1.5 crore/ MW limited to `5.00 crore per project
(Special Category States)	
Other States	1.0 crore/ MW limited to `5.00 crore per project

4. Biomass Power and Bagasse Cogeneration Projects:

Private / Joint / Cooperative / Public Sector Sugar Mills:

	Special Category and NE States	Other States
Biomass Power projects	Rs.25 lakh per MW*	Rs.20 lakh per MW*
Bagasse Co-generation	Rs.18 lakh per MW*	Rs.15 lakh per MW*

Co-generation projects by	Rs.40 lakh	Rs.40 lakh
cooperative/public sector sugar mills	Rs.50 lakh	Rs.50 lakh
40 bar & above	Rs.60 lakh	Rs.60 lakh
60 bar & above	Per MW of	Per MW of surplus power
80 bar & above	surplus power	(maximum support of Rs. 6.0 crore per
	(maximum support	project)
	Rs. 6.0 cr / project)	

^{*}Maximum support of Rs. 1.50 crore per project.

5. Waste to Energy Projects:

Type of Waste	Central Financial Assistance
Municipal Solid Waste	Rs.2.00cr./MW, Max. Support 10 Cr.
	/project.
Urban Waste	Rs.2.00cr./MW, Max. Support 5 Cr.
	/project.
Industrial waste	Rs. 0.20cr to Rs. 1.00cr/MW, Max. Support
	Rs.5.00cr/project.

B. OFF-GRID / DECENTRALIZED RENEWABLE ENERGY PROGRAMMES

S.No	Programme	Subsidy
6.	Family Type Biogas Plants	
	NE Region States including Sikkim (except plain areas of Assam)	Rs.15,000 to Rs.17,000 per plant
	Plain areas of Assam	Rs.10,000 to Rs.11,000 per plant
	J&K, Himachal Pradesh, Uttarakhand (excluding Terai region), Nilgiris of Tamil Nadu, Sadar, Kurseong and Kalimpong sub-divisions of Darjeeling, Sunderbans, Andaman & Nicobar Islands and SC & ST (not included in above areas)	Rs.7,000 to Rs.11,000 per plant
	All Others	Rs.5,500 to Rs.9,000 per plant
7.	Solar Photovoltaic Systems	 Subsidy of 30% of project cost For solar light through NABARD, Regional Rural Banks (RRB) and other commercial bank 40% subsidy is available.
8.	Solar Water Heater	60% and 30% of the benchmark cost in special category states and other states respectively. Benchmark cost in the range of Rs. 11,000/sq.m. and 8,000/sq.m for different configuration of systems.
9.	Concentrating Solar Thermal Technology	30% of the project cost.

10.	Small Aero-Generators and Hybrid Systems	Rs.1.00 lakh per KW
11.	Micro-hydel plants/ Water mills	 Rs. 1.25 lakh/kw for Micro-hydelupto 100 kw. Rs.0.50 lakh per watermill for mechanical application Rs.1.50 lakh per watermill for electrical application
12.	Biomass Gasifier	 Rs. 15,000 / kW (with 100% producer gas engine) Rs. 2,500/kw for duel fuel engine Rs. 2.0 lakh per 300 kw for Thermal Applications 20% higher CFA for special category states
13.	Improved Cookstoves Family sized /domestic cook-stoves/earthen cookstoves	50% of cost of cook-stoves with maximum ceiling of Rs. 400 for natural draft (including earthen chulhas with metal combustion chambers) and Rs.800 for forced draft - average support taken at Rs. 600/- per cookstove.
	Community Cook-stoves for MDM Kitchens, Anganwadis, Tribal/SC/Backward hostels, government and forest rest houses etc.	50% of cost of cook-stoves with maximum ceiling of Rs. 2500 for natural draft and Rs. 5000 for forced draft type cook-stoves - average support taken at Rs. 3750 per cook-stove