

- (a) the current status of utilization of bio-diesel and bio-ethanol in the country;
- (b) whether there is any plan to use these fuels in a phased manner to reduce the utilization of fossil fuel; and
- (c) whether there is any policy for cultivation of fuel crops in the country?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) The Oil Marketing Companies (OMCs) have been directed to sell five per cent ethanol blended petrol in entire country except North-Eastern States, Jammu & Kashmir, Andaman & Nicobar Islands and Lakshdweep. So far, 58.7 crore litres of ethanol has been supplied by the sugar mills/ethanol manufacturers for blending as against the contracted quantity of 146.0 crore litres. Bio-diesel is currently not being marketed commercially for blending with diesel as the biodiesel industry is still at nascent stage of development.

(b) In the National Policy on Biofuels, an indicative target of 20 per cent blending of biofuels with petro-fuels by 2017 has been proposed. However, the blending levels of bio-ethanol and bio-diesel will be reviewed and moderated periodically as per their availability.

(c) As per National Policy on Biofuels, plantation of trees bearing non-edible oilseeds is to be taken up on Government/community wastelands, degraded or fallow land in forest and non-forest areas for production of bio-diesel. Ethanol is mainly being produced in the country at present from molasses, which is a by-product of sugar industry. In order to augment availability of ethanol and reduce over supply of sugar, the sugar industry has also been permitted to produce ethanol directly from sugarcane juice.

Introduction of renewable energy resources in Darjeeling

†1161. SHRI SAMAN PATHAK: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether Government has any proposal to introduce more schemes of renewable energy resources in hilly areas of Darjeeling;
- (b) if so, the details thereof; and
- (c) the norms for implementing the renewable energy schemes?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) and (b) The Government has several schemes/programmes for promoting utilization of renewable energy sources in the country, details of which are given in the Statement (See below). All these schemes are applicable to the hilly areas of Darjeeling also.

†Original notice of the question was received in Hindi.

(c) The schemes/programmes of renewable energy are implemented as per the guidelines of the schemes in the country.

Statement

Central Financial Assistance/subsidies provided under various renewable energy programmes/schemes in the country

A. Off Grid Renewable Energy Programmes

S. No.	Scheme/Programme	Central Financial Assistance provided
1	2	3
1.	Remote Village Electrification: Electricity generation/lighting systems 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 perhousehold. 100% cost of a single light SPV home lighting system for BPL households.
2.	Family Type Biogas Plants NE Region States including Sikkim (except plain areas of Assam)	Rs.11,700 to Rs. 14,700 per plant depending on capacity of plant and under CDM Programme or NBMMP
	Plain areas of Assam	Rs.9,000 to Rs.10,000 per plant depending on capacity of plant and under CDM Programme or NBMMP
	J&K, Himachal Pradesh, Uttarakhand (excluding Terai region), Nilgiris of Tamil Nadu, Sagar, Kurseong and Kalimpong sub-divisions of Darjeeling, Sunderbans, A&N Islands	Rs. 3,000 to Rs.10,000 per plant depending on capacity of plant and under CDM Programme or NBMMP
	All Others	Rs. 2,100 to Rs.8,000 per plant depending on capacity of plant and under CDM Programme or NBMMP
3.	Biomass Gasifiers for Rural Areas	Rs. 15.00 lakh/ 100 kW for village level electricity generation with 100% producer gas engine. 20% higher subsidy for Special Category States & Islands
4.	Biomass Gasifiers for Industrial Applications	Rs.2.00 lakh/300 kWe for thermal applications

1	2	3
		Rs.2. 50 lakh/100 kWe with dual fuel engine Rs.10.00 lakh/100 kWe with 100% producer gas engine
		Rs.15.00 lakh/100 kWe with 100% producer gas engine in institutions.
5.	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)
6.	Urban Waste to Energy	Rs.1.0 to 3.0 crore / MWe, depending on technology. (20% higher subsidy for Special Category States)
7.	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)
8.	Solar Photovoltaic (SPV) Systems	
Aggregate Systems capacity		CFA
		NE Region and Special Category States
		Other States/ UTs
	SPV Home-lighting systems	4500 (18Wp) 8660 (37-74Wp)
		2500 (18Wp) 4800 (37-74 Wp)
	SPV Street Lighting systems	17300(74Wp)
		9600 (74 Wp)
	Stand-alone SPV Power plants more than 1 kWp (with capacity less than 1 kWp on case to case basis.)	Rs.225/Wp
	more than 10 kWp with distribution line	Rs.125/Wp
	SPV Traffic Lights - up to 100 Wp module capacity	Rs.270/Wp
		Rs.150/Wp for systems with battery bank of 6 hrs./Rs. 115/Wp without battery bank for organizations not availing accelerated depreciation.
	PV Blinkers	Rs.100/Wp for system with battery bank of 6 hrs. / Rs.75/Wp without battery bank for organizations availing accelerated depreciation.
	Solar Power Packs Up to 1 kWp	
	Solar illuminating Hoardings/ Bill boards - up to 1 kWp modules capacity	

1	2	3
	Other systems for community use in Urban and industrial Areas	
	SPV Roof-top Systems in Urban Areas - from 10kW to 100 kW	Rs. 75/Wp, limited to 30% of the cost of systems to profit making bodies availing depreciation benefits Rs. 100/Wp, limited to 40% of the cost of systems to non-profit making bodies

B. Grid-interactive Renewable Power Programmes:

Sl.No. Projects Category		Central Financial Assistance provided	
		Special Category States (NE Region, Sikkim, J&K, HP and Uttarakhand)	Other States
1	2	3	4
1	Small Hydro Power Projects	Rs.2.25crore X (C) ^{0.646}	Rs. 1.50 crore X (C) ^{0.646}
2	Biomass Power Projects	Rs.25 lakh X (C) ^{0.646}	Rs.20 lakh X (C) ^{0.646}
3	Bagasse Co-generation Projects by private sector 40 bar & above	Rs.18 lakhX (C) ^{0.646}	Rs.15lakhX (C) ^{0.646}
4	Bagasse Co-generation Projects (by cooperative/public/joint sector)	Rs.40 lakh/MW*	Rs.40 lakh/MW*
	40 bar & above	Rs.50 lakh/MW*	Rs.50 lakh/MW*
	60 bar & above	Rs.60 lakh/MW*	Rs.60 lakh/MW*
	80 bar & above	Limited to Rs.8 crore/project	Limited to Rs.8 crore/project
5	Biomass Power using Advanced Technologies	Rs.1.2crore X C ^{0.646}	Rs. 1.0 crore X C ^{0.646}
6	Wind Power projects	Rs.3.00 crore X C ^{0.646}	Rs.2.50croreX C ^{0.646}
7.	Biomass Gasifier	20% higher CFA	Rs.15.0 lakh/kWe on prorata basis or multiple thereof
8.	Solar PV Power	50% of project cost subject to a maximum of Rs.10 crore / MW for tail end grid power projects to be implemented by utilities or generation companies in the State sector	

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

* For new sugar mills (which are yet to start production and sugar mills employing backpressure route/seasonal/incidental cogeneration) subsidies shall be one-half of the level mentioned above.

1	2	3
	SPV lanterns.	Rs.2,400 for NE and special areas; nil for other. 100% cost of one SPV lantern for school going girl child of BPL family studying in class IX - XII during entire period of school study
	SPV Water Pumping Systems	Rs.30/Wp of SPV array used, subject to a maximum of Rs.50,000 per system.
9.	Small Aero-Generators and Hybrid Systems	90% of ex-works cost or Rs.2.40 lakh/ kW, whichever is less, in unelectrified islands 75% of ex-works cost or Rs.2.00 lakh/ kW, whichever is less, in other areas, for Government/community use. 50% of ex-works cost or Rs.1.25 lakh/ kW, whichever is less, for all other users.
10.	Solar Thermal Systems/ Devices	Box type cookers: Incentive to SNA: - Rs.200 per cooker of ISI brand - Rs.100 per cooker of non-ISI brand - Up to Rs.1.50lakh for pub./workshops etc. Support to manufacturers; reimbursement of 50% fees for obtaining BIS approval.
11.	Solar Thermal Systems/ Devices (Continued)	Solar Water Heating systems: - Subsidized Loan @ 2% to domestic users (nil) for special category States), - 3% to institutions and 5% to community users plus Rs.100/square meter of collector area as incentive to motivator. - Capital subsidy @ Rs. 1400/1750/1900 per sq.m. to commercial establishments/ institutions/housing complex developers. Solar Air Heating/ Steam Generating Systems: Capital subsidy @ 35-50% of the cost subject to certain ceilings.

1	2	3
		Dish / community type solar cookers: 30% of cost limited to Rs.1,500 for Dish type cookers and Rs. 15,000 for Scheffler / Community type cooker.
12.	Akshay Urja Shops	Subsidized loan @7% upto Rs.10 lakh and performance based grant and incentive up to Rs.10,000 per month.

Setting up of renewable energy sources

†1162. SHRI SAMAN PATHAK: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the sites in Darjeeling hill areas in West Bengal where projects based on renewable energy sources have been set up and the details of the power generated therein;

(b) whether Government is aware that the project set up at Mamring Basti (Kharsang) to harness renewable energy sources has failed completely; and

(c) whether Government has any new schemes to restart the failed projects?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) Small hydro power projects with aggregate capacity of about 100 MW have been set up in the Darjeeling area of West Bengal. Site-wise details of these projects are given in the Statement (See below).

(b) Yes, Sir. Under the remote village electrification programme, a micro hydro project at Darekhola of 2x25 kW was commissioned in 2006 and provided electricity to 180 families of Mamring khola area. However, due to insufficient water in the river Darekhola, this project stopped its operation after December, 2007.

(c) The Ministry has a scheme to support renovation and modernization of old Small hydro power projects in public sector, under which support of Rs.15,000/kW is available, for which the proposals are to be submitted by State Government.

Statement

Details of small hydro power projects set up in the Darjeeling area of West Bengal

Sl.No.	Name of Project	Power Generation Installed Capacity in MW
1	2	3
1.	Sidrapong	0.60
2.	Fazi & Fazi Extn.	2.65
3.	Little Rangit	2.00