GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2072
ANSWERED ON 18/03/2025

NATIONAL BIO-ENERGY PROGRAMME FOR THE DEVELOPMENT OF BIO-ENERGY SECTOR

2072. SHRI DEEPAK PRAKASH
SMT. DARSHANA SINGH
MS. KAVITA PATIDAR
SHRI NARESH BANSAL
SHRI LAHAR SINGH SIROYA
SHRI SUJEET KUMAR
DR. MEDHA VISHRAM KULKARNI
SHRI BABUBHAI JESANGBHAI DESAI

Will the Minister of *New and Renewable Energy* be pleased to state:

(a) the details of measures being taken to align the National Bio-Energy Programme with India's broader clean energy goals and sustainable development goals;

(b) the steps being taken to ensure that the opening up of previously restricted "no-go" areas for oil and gas exploration does not adversely impact marine ecosystems, particularly in the Bay of Bengal and the Arabian Sea; and

(c) the plan to assessing the long-term environmental impact of ethanol blending and the additional measures taken to further reduce India's carbon footprint?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) Ministry of New and Renewable Energy, Government of India is implementing the National Bioenergy Programme (NBP) for supporting setting up of bioenergy projects in the country. India has a large surplus of biomass and other waste available in the country hence energy recovery from these resources is a viable solution. Modern bioenergy is unique as it provides several social and environmental benefits apart from providing clean fuels. Therefore, NBP is aligned with India's broader clean energy and five Sustainable Development Goals; Good Health and Wellbeing (SDG-3); Affordable and Clean Energy (SDG-7); Industry, Innovation and Infrastructure (SDG-9); Sustainable Cities and Communities (SDG-11); and Climate Action (SDG-13).

Following are the three sub components of NBP:

(i) Waste to Energy Programme (Programme on Energy from Urban, Industrial and Agricultural Wastes /Residues)

(ii) Biomass Programme (Scheme to Support Manufacturing of Briquettes & Pellets and Promotion of Biomass (non-bagasse) based cogeneration in Industries)

(iii) Biogas Programme (Programme to support setting up of small (1 m^3 to 25 m^3 biogas per day) and medium size Biogas plants i.e., above 25 m^3 to 2500 m^3 biogas generation per day).

The details of financial support are given at **Annexure-I.**

(b) As stated by Ministry of Petroleum and Natural Gas (MoPNG), the oil and gas blocks (including the blocks in previously restricted 'No-Go' areas) are awarded through an open and transparent bidding process. Environmental clearances, including coastal zone clearances for oil and gas exploration as per the laws for the time being in force are essential before commencement of the activities. This typically involves an Environmental Impact Assessment (EIA) study after the award. The EIA process involves public hearing and ensures proper assessment of exploration activities on environment and only after obtaining necessary environmental clearances, with necessary safeguards measures for environmental protection and compliance, companies can commence exploration activities. Exploration and Production activities are undertaken in synergy with steps to enhance the livelihood of the people in the region as well as to ensure minimal impact on the environment.

(c) As stated by MoPNG, as per the "Roadmap for Ethanol Blending in India 2020-25", a successful E20 (20% ethanol blending in petrol) has estimated reduction of carbon monoxide emission of about 50% in two wheelers and 30% in four wheelers through using E20 compare to E0 (neat petrol). Hydrocarbon emissions are estimated to reduce by 20% in both two wheelers and passenger cars.

*****

Annexure-I

REFERRED TO IN REPLY TO THE RAJYA SABHA UNSTARRED QUESTION NO. 2072, Part (a) TO BE ANSWERED ON 18.03.2025 on "National Bio-Energy Programme for the development of bio-energy sector"

The existing CFA Support for setting up of Bioenergy Projects are given as under:

Waste to Energy Programme	**CFA in Rs Crore**
Biogas generation	Rs 0.25 Crore per 12000cum/day
BioCNG generation	Rs 4.0 Crore per 4800 kg/day (for BioCNG generation from new biogas plant) Rs 3.0 Crore per 4800 kg/day (for BioCNG generation from existing Biogas plant)
Power generation based on Biogas	Rs 0.75 Crore/MW (for power generation from new biogas plant) Rs 0.5 Crore/MW (for power generation from existing Biogas plant)
Power based on bio & agro-industrial waste	Rs 0.4 Crore/MW
Biomass Gasifier	Rs. 2,500 per kWe with dual fuel engines for electrical application Rs. 15,000 per kWe with 100% gas engines for electrical application Rs. 2 lakh per 300 kWth for thermal applications

Biomass Programme	**CFA**
Briquette manufacturing plants	Rs. 9.00 Lakhs/ TPH (Maximum CFA- Rs. 45.00 Lakh per project).
Non-Torrefied Pellet manufacturing plant	Rs. 21 lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 TPH plant, whichever is lower (Maximum Rs. 105 lakhs per project)
Torrefied Pellet manufacturing plant	Rs. 42 lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 TPH plant, whichever is lower (Maximum Rs. 210 lakhs per project)
Non-Bagasse Cogeneration Projects	Rs. 40 Lakhs/ Megawatt Maximum CFA- Rs. 5.00 Crore per project).

Biogas Programme	**CFA**
For small biogas plants (1-25 cubic meter/day plant capacity):	Rs. 9,800/- to Rs. 70,400/- per plant based on size of the plant in cubic meter
For Power generation and thermal application (25 - 2500 cubic meter/day plant capacity):	Rs. 35,000/- to Rs. 45,000/- per kilowatt for power generation Rs. 17,500/- to Rs. 22,500/- per kilowatt equivalent for thermal applications. *Note: 20% higher than Standard CFA in for NER, Island, Registered Gaushalas and SC/ST beneficiaries);*

***