GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

LOK SABHA

UNSTARRED QUESTION NO. 1243

ANSWERED ON 09.02.2023

ENERGY GENERATION FROM WASTE

1243. SHRI RAMDAS C. TADAS

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

- (a) whether the works with regard to the generation of energy from waste is going on rapidly in the country during the last few years;
- (b) if so, the percentage of energy being generated from waste in the total energy production;
- (c) the rank of India among other countries regarding the capacity to convert waste into energy; and
- (d) the steps taken/proposed to be taken by the Government to use new and efficient power generation technologies in this sector in the lines of other countries?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER (SHRI R.K. SINGH)

- (a) & (b) The Government has taken various steps recently to promote and encourage the establishment of new waste to energy plants across the country, inter alia, comprising of:
 - (i) New Waste to Energy (WTE) Programme under the umbrella of National Bioenergy Programme notified by Ministry of New and Renewable Energy on November 2022. The WTE Programme has a budget outlay of Rs 600 crore for the period FY 2021-22 to FY 2025-26. This Programme, inter alia, supports setting up of plants for generation of Biogas/BioCNG/Power from urban, industrial and agricultural waste by providing CFA. As on 30.01.2023, total 90 nos of waste to energy projects under Waste to Energy (WTE) Programme of Ministry of New and Renewable Energy (MNRE) are under various stages of implementation.
 - (ii) The Ministry of Petroleum and Natural Gas launched the Sustainable Alternative Towards Affordable Transportation (SATAT) initiative in October 2018 with target of setting up of 5000 BioCNG plants with production target of 15 MMT of BioCNG by 2023-24. SATAT initiative encourages entrepreneurs to set up BioCNG plants, produce & supply BioCNG to Oil Marketing Companies (OMCs) for sale as automotive fuels. As on date, about 3700 LoIs have been signed by various Oil Marketing Companies for establishing BioCNG plants.

As on 31.12.2022, total 276 nos of waste to energy plants with cumulative installed capacity of **523 MWeq** have been established for generation of energy in the form of Biogas/BioCNG/power from urban, industrial and agricultural waste which is 0.13% of total installed capacity (4,10,339 MW) of power projects in the Country.

- (c) As per International Renewable Energy Agency (IRENA), India stands at 4th position in the world for year 2021 in terms of installed electric capacity for conversion of waste into energy which includes Biogas/liquid Biofuels/ Solid Biofuels/municipal waste-based energy.
- (d) MNRE is implementing the "Renewable Energy Research and Technology Development Programme" through various research institutions and industry to enable indigenous technology development and manufacture for wide spread applications of new and renewable energy in efficient and cost-effective manner across the country.

The Ministry encourages research and technology development proposals in collaboration with the industry and provides upto 100% financial support to Government/non-profit research organizations and upto 50-70% to Industry, Start-ups, Private Institutes, Entrepreneurs and Manufacturing units.

Further, Ministry of New and Renewable Energy's autonomous institute, National Institute of Bio Energy (NIBE), Kapurthala has signed MOUs with CSIR-CMERI and other prominent institutes for research in bioenergy aspects. NIBE is also collaborating with US Energy labs, Pacific Northwest National Laboratory and Lawrence Berkeley National Laboratory, for research work in bioenergy sector.
