

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
STARRED QUESTION NO.104
ANSWERED ON 27.07.2023**

BENEFITS OF CO-FIRING BIOMASS PELLETS IN TPPS

***104. SHRI SHYAM SINGH YADAV:**

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government has carried out experiments to ascertain the benefits of co-firing biomass pellets in Thermal Power Plants (TPPs) to reduce reliance on coal and mitigate air pollution due to stubble burning;**
- (b) if so, the details thereof and if not, the reasons therefor;**
- (c) whether there is a detailed strategy, project/ programme for the production of biomass pellets to be used for co-firing in thermal power plants; and**
- (d) if so, the details thereof and if not, the reasons therefor?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (d) : A Statement is laid on the Table of the House.

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) IN RESPECT OF LOK SABHA STARRED QUESTION NO.104 FOR REPLY ON 27.07.2023 REGARDING BENEFITS OF CO-FIRING BIOMASS PELLETS IN TPPs ASKED BY SHRI SHYAM SINGH YADAV

(a) & (b) : Experiments have been carried out by NTPC-NETRA in NTPC Dadri coal based thermal power plant to ascertain the impact of co-firing biomass on the Thermal Power Plants (TPPs). Through the studies, it has been well established that 5% to 10% of biomass can be safely co-fired with coal in TPPs without any adverse impact on the power plant. To that extend this would help in reducing requirement of coal for the TPPs and also mitigate air pollution caused due to stubble burning, to some extent.

So far around 2.1 Lakh Metric Ton (LMT) of agro-residue based biomass has been co-fired in coal based thermal power plants, leading to reduction of more than 2.5 Lakh Metric Tonnes (LMT) carbon dioxide emissions.

(c) & (d) : To address the burning issue of air pollution particularly in National Capital Region (NCR) due to farm stubble burning and to reduce carbon footprints of thermal power generation, the Ministry of Power constituted the National Mission on Use of Biomass in Thermal Power Plants (SAMARTH) on 12th July 2021 and the revised biomass policy was issued on 8th October 2021, mandating all TPPs in the country to use 5% of biomass pellets in the co-firing with coal. This policy was further modified vide Ministry's O.M dated 16.06.2023. Besides, Government has also taken the following steps:

- (i) A customized window has been made available on the GeM Portal for Biomass pellet procurement.**
- (ii) Biomass has been notified under Priority Sector lending by the RBI. This would enable easier & faster availability of bank loans to the pellet manufacturers. The State Bank of India has launched a dedicated scheme to provide long term loan to pellet manufacturers.**

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(iii) Following Financial Subsidy Schemes have been issued by Central Pollution Control Board (CPCB) and Ministry of New & Renewable Energy (MNRE) to encourage the new entrepreneurs:

- i. MNRE Scheme “Biomass Programme” provides assistance to set up the biomass pellet plants.**
- ii. CPCB guidelines “One-time financial assistance scheme for setting up pellets plant in NCR”**

For providing financial assistance for setting up biomass pellet manufacturing plants, schemes envisaged are (a) MNRE Bio Energy Schemes in which Pellet Manufacturing plants will be provided with Rs. 9 Lakh per MTPH (Metric Ton Per Hour) or Rs 45 Lakhs per plant as Central Financial Assistance (b) CPCB financial support under Environment Protection Charge (EPC) funds for both pelletisation plant & torrefaction plant i.e. a maximum amount of Rs. 28 lakhs per ton plant production capacity per hour, or 40% of the capital cost considered for plant and machinery of a 1 TPH plant; whichever is lower, shall be given as one-time financial support by CPCB, subject to a maximum total financial support of Rs. 1.4 crore per proposal.
