

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF CHEMICALS AND PETROCHEMICALS

LOK SABHA

UNSTARRED QUESTION DIARY NO. 922
ANSWERED ON 08/12/2023

METHANOL ECONOMY INITIATIVE

922. DR. SUJAY RADHAKRISHNA VIKHE PATIL:
DR. HEENA VIJAYKUMAR GAVIT:
PROF. RITA BAHUGUNA JOSHI:
DR. SHRIKANT EKNATH SHINDE:
DR. KRISHNA PAL SINGH YADAV:

Will the Minister of CHEMICALS AND FERTILIZERS be pleased to state:

- a. the current status and success achieved so far in implementing the Methanol Economy Initiative particularly in terms of its impact on reducing carbon emission and fostering energy sustainability in the country;
- b. the details of the budgetary allocation made/utilized by the Government for the Methanol Economy Initiative to support the initiative's objectives and projects;
- c. whether the Government has any plans for the future of the Methanol Economy Initiative including any new projects, policy enhancements or international collaborations aimed at furthering the goals of this initiative;
- d. if so, the details thereof;
- e. whether the Government has taken/proposes to take any measures and formulate strategies to ensure the sustainability and long-term success of the Methanol Economy Initiative especially in the context of changing energy trends and environmental priorities; and
- f. if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR CHEMICALS AND FERTILIZERS

(SHRI BHAGWANTH KHUBA)

(a) to (f) The NITI Aayog has been driving the national efforts towards methanol economy programme in India since 2016 by constituting three expert groups on production, utilization and R&D to explore the different aspects of the methanol economy. Based on the reports of the Expert Groups and the discussions held at an International Conference in the year 2016, NITI Aayog, had drawn a road map to explore methanol as an alternative fuel.

The NITI Aayog, has set up an Apex committee and 5 task forces in accordance to promote methanol production from coal, methanol production from biomass and municipal waste, utilization of methanol, conversion of the internal combustion engine and dissemination of information.

The details of the progress made in the Methanol Economy programme is given below:

- The Ministry of Road Transport and Highways (MoRTH) has notified methanol blends in petrol – 15%, 85% and 100% by volume – called M15, M85 and M100, respectively.
- The Indian standard for M15 has been formulated by the Bureau of Indian Standards (BIS).
- The Indian Oil Corporation Limited (IOC) has prepared the M15 blend and its stability has been checked.
- Thermax Limited, Pune jointly by IIT, Delhi and BHEL, Hyderabad demonstrated 1 TPD and 0.5 TPD respectively for the production of methanol using high ash coal through indigenous technology.
- Emissions and material compatibility, for the M15 blend, have been completed by the Automotive Research Association of India (ARAI), Pune.
- The ARAI, in collaboration with the Maruti Suzuki Ltd., Hero Motocorp, TVS Motors, Bajaj Auto Ltd. and Mahindra & Mahindra has completed the road trials and the durability test of the vehicles on M15.
- The IOC has carried-out performance and emission trials on M15 blended petrol.
- Assam Government in association with Assam Petrochemicals has launched methanol based cooking stoves.
- IOCL launched M15 dispensing station at Tinsukia District, Assam.
- Kirloskar Oil Engines Limited developed a 100% methanol-operated engine of 20 kWh capacity.
- Ashok Leyland Ltd. in association with IOCL have successfully demonstrated the performance of diesel engines with MD15 (15% Methanol blended in diesel) and pilot trials of buses with MD15 in association with Kerala State Road Transport Corporation has been flagged off on 12th March, 2023 in Bangalore.

The Department of Science & Technology has supported the following two R&D projects for demonstration of pilot plant for production of methanol using high ash coal and the following have already been demonstrated:

- 1 Tonne per day (1TPD) methanol pilot plant demonstrated jointly by Thermax Limited, Pune and IIT, Delhi.
- 0.5 Tonne per day (0.5 TPD) plant for conversion of high ash Indian Coal to Methanol by BHEL, Hyderabad.
