

LOK SABHA
UNSTARRED QUESTION No. 527
TO BE ANSWERED ON 28th November, 2024

ETHANOL BLENDING WITH PETROL

527. SHRI ANUP SANJAY DHOTRE:
SMT. BIJULI KALITA MEDHI:
SHRI MUKESHKUMAR CHANDRAKAANT DALAL:
SHRI DINESHBHAI MAKWANA:
SHRI CHAVDA VINOD LAKHAMSHI:
SHRI MANISH JAISWAL:
SHRI JANARDAN MISHRA:
SHRI PARSHOTTAMBHAI RUPALA:
SMT. KAMALJEET SEHRAWAT:
SHRI NABA CHARAN MAJHI:
SHRI KHAGEN MURMU:

पेट्रोलियम और प्राकृतिक गैस मंत्री

Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

- (a) the steps taken/proposed to be taken by the Government to promote ethanol blending with petrol;
- (b) whether ethanol blending contributes towards reducing dependence on imported oil and address environmental concerns and if so, the details thereof;
- (c) the total surge in ethanol-blended petrol supply during the last ten years and the current year; and
- (d) the details and salient features of ethanol production machine commissioning technology developed in India and if so, the details thereof?

ANSWER

पेट्रोलियम और प्राकृतिक गैस मंत्रालय में राज्य मंत्री
(श्री सुरेश गोपी)

**MINISTER OF STATE IN THE MINISTRY OF PETROLEUM &
NATURAL GAS
(SHRI SURESH GOPI)**

(a) to (c): The Government, since 2014, has taken several measures to meet the ethanol blending targets which includes expansion of feedstock for production of ethanol, administered price mechanism for procurement of cane based ethanol under the Ethanol Blended Petrol (EBP) Programme, lowered GST rate to 5% on ethanol for EBP Programme, introduction of various Ethanol Interest Subvention Schemes

(EISS), during 2018-22, for ethanol production from molasses as well as grains and Long Term Offtake Agreements (LTOAs) by Oil Marketing Companies (OMCs) with Dedicated Ethanol Plants (DEPs) etc. Supply of ethanol blended petrol for public sector OMCs has surged from 2506 crore litre during ethanol supply year 2013-14 to estimated 4828 crore litre during ethanol supply year 2023-24 with corresponding increase in blending percentage from 1.53% to 14.60%. Ethanol blending in petrol by Public Sector OMCs has resulted in crude oil substitution of about 185 LMT (lakh metric tonne) and net CO₂ reduction of about 557 lakh metric tonnes during the last ten years.

(d): In India, First Generation (1G) Ethanol production technology is well-established, with two primary pathways: Starch-to-Ethanol and Sugar-to-Ethanol. Primary equipment needed for 1G Ethanol production including miller, fermenter, distillation/dehydration column, boiler etc. is manufactured by various equipment manufacturing companies within the country.

For Second Generation (2G) Ethanol, produced from agricultural and forestry residues pathway, Indian Oil Corporation Limited (IOCL) and Hindustan Petroleum Corporation Limited (HPCL) have developed their indigenous 2G Ethanol technology. Primary equipment for 2G Ethanol production including shredder, wet washer, pre-treatment unit, enzymatic hydrolysis unit, fermenter, co-fermenter, distillation/dehydration column, boiler etc. is also manufactured by various equipment manufacturing companies within the country.
