

**GOVERNMENT OF INDIA  
PETROLEUM AND NATURAL GAS  
LOK SABHA**

UNSTARRED QUESTION NO:3774  
ANSWERED ON:17.04.2008  
TECHNOLOGY FOR BLENDING ETHANOL WITH PETROL  
Singh Shri Sugrib

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

- (a) whether the Government shares the technology for blending ethanol with petrol and the related technology with Brazil;
- (b) if so, the details in this regard;
- (c) whether consultants appointed for the said purpose have submitted their findings;
- (d) if so, the details thereof;
- (e) the details of action so far taken by the Government on such findings: and
- (f) the time by which MoU signed with Brazil in 2002 in this regard will be operational?

**Answer**

MINISTER of STATE for PETROLEUM & NATURAL GAS(SHRI DINSHA PATEL)

(a) to (f) A team of BPCL visited Brazil in September 2006 to explore the possibilities of acquiring sugarcane acreage and putting up ethanol manufacturing units in Brazil. The team's report was discussed during the meeting of Monitoring Committee of Ethanol on 15.11.2006 chaired by Secretary, P&NG, when it was decided that following action be taken by the Industry with BPCL as the coordinator:

(i) Feasibility study for Ethanol operations in/from Brazil: the experience of private companies including Reliance Industries may be shared.

(ii) Industry task force comprising of all three Oil PSUs VIZ BPC/IOC/HPC to be constituted to finalize the various related modalities.

(iii) The Ethanol project in Brazil may be implemented by forming a joint venture with public sector oil marketing companies, viz, IOC, BPCL and HPCL (with equal shares) and a local partner engaged in the sugar/ethanol industry. Based on the above, an industry task force comprising of the three PSU OMCs i.e. BPC, IOC & HPC was formed in December, 2006 and a feasibility study for ethanol investment in Brazil was commissioned in January 2007 for which report was finalized in May 2007. The consultant concluded in their feasibility report that Ethanol investments in Brazil are feasible, attractive, and highly strategic for Indian Oil Industry. The major findings of the Feasibility Study inter alia are as under:

i. Brazil is highly suited for ethanol investments due to its leadership in ethanol production driven by structural advantages like ideal weather, soil & water conditions for sugar cane growing, abundant availability of arable land, improved productivity & technology in ethanol/sugar industry and also the high domestic demand for fuel ethanol.

ii. The recommended investment strategy comprising of a mix of Greenfield & Acquisition investments delivers most attractive financial pay offs. The Oil Industry team subsequently carried out a Partner Search Study in November 2007 to identify suitable local partners in Brazil. Following the discussions held with top partnership candidates as identified in the study, broad MOUs were signed. Indian Oil Industry is presently considering the possibility of acquiring a Sugar mill and setting up a Greenfield distillery along with a Brazilian partner for Ethanol production in Brazil. This is subject to necessary approvals.

Additionally an MOU with Brazil's National Company, Petroleo Brasileiro S.A- Petrobras was also signed by BPCL on 30.8.2007 at the HQ of M/s. Petrobras in Rio-de-Janeiro. Under the objects of MOU both the parties endeavor jointly undertake studies in matters related to:-

# The use and trading of fuel Ethanol globally.

# Cooperation in areas of ethanol plant investments in Brazil in order to meet global demand of fuel ethanol.

# Extending cooperation to biodiesel production and manufacturing process as well as R&D technology, including transfer of technology for ethanol. Conduct joint studies on efficient means of transportation and joint investment in Logistics Infrastructure for ethanol in Brazil.

