

**SETTING UP OF NEW REFINERY**

1188. SHRI P.P. CHAUDHARY:

SHRI NARANBHAI KACHHADIYA:

पेट्रोलियम और प्राकृतिक गैस मंत्री

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

- (a) whether the Government proposes to set up new refinery and modernise/upgrade the existing refineries in the country and equip them with the latest technology;
- (b) if so, the details thereof and places identified for setting up of new refineries/modernisation and upgradation of existing refineries in the country along with investment likely to be made in such refineries, State/UT/Refinery-wise;
- (c) the details of the benefits likely to be accrued to the country; and
- (d) the details of refineries functioning in the country at present along with their installed capacity/utilization and steps taken by the Government for optimum utilisation, OMC/State/UT-wise?

**ANSWER**

पेट्रोलियम और प्राकृतिक गैस मंत्रालय में राज्य मंत्री (स्वतंत्र प्रभार) (श्री धर्मेन्द्र प्रधान)

MINISTER OF STATE (INDEPENDENT CHARGE) IN THE MINISTRY OF PETROLEUM AND NATURAL GAS (SHRI DHARMENDRA PRADHAN)

(a) & (b): The refinery sector in the country is de-licensed and Oil Public Sector Undertakings (PSUs) take appropriate decisions to implement new refinery projects and also to expand and modernize the existing Refineries.

Government has accorded approval on 20.09.2013 to Hindustan Petroleum Corporation Ltd. (HPCL) to set up a 9 MMTPA Refinery-cum-Petrochemical Complex in Barmer, Rajasthan in collaboration with Government of Rajasthan (GoR). Further, Oil PSUs namely, Indian Oil Corporation Limited (IOCL), Bharat Petroleum Corporation Limited (BPCL) and Hindustan Petroleum Corporation Limited (HPCL) have announced the plan to jointly set up in phased manner an integrated refinery-cum-petrochemical complex with a refining capacity of 60 MMTPA in Maharashtra.

Indian Refineries have adopted modern technologies for production of petroleum products and continuously upgrade the technologies in line with their requirements and international trends.

The major modern process technologies employed by PSU refineries for producing petroleum products include:-

- i) Secondary/Upgradation Technologies for yield improvement:
  - Thermal cracking processes, viz., Visbreaking, Delayed Coking.

- Fluidised Catalytic Cracking, INDMAX Technology.
- Hydrocracking.

ii) Quality Upgradation Technologies:

- Catalytic Reforming, Isomerisation, Alkylation, Prime G for meeting the quality specifications of Petrol w.r.t. octane number, benzene content, aromatics, olefins, sulphur, distillation etc.
- Diesel Hydro-desulphurisation (DHDS), Diesel Hydro-treating (DHDT) for diesel for reduction of sulphur & PAH (Poly Aromatic Hydrocarbons) and cetane number improvement.

The details of capacity expansion plan of Oil PSU refineries are given at **Annexure-I.**

(c) The expansion and modernization of Refineries will help in implementation of BS-IV emission norms across the country by 01.04.2017 and BS-VI by 01.04.2020. Presently, the refining capacity in the Country is more than the demand and the surplus product is being exported. Additional capacity and the quality improvement will enable the Country to continue to export the surplus and earn foreign exchange.

(d) The installed capacity and the Capacity utilization of various Refineries in the Country during 2015-16 is at **Annexure-II.** PSU Refineries in India have been achieving average capacity utilization of over 100 % for last three years.

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**Annexure-I**

**Annexure referred to in reply to part (a) & (b) of Lok Sabha Unstarred Question No. 1188 to be answered on 2<sup>nd</sup> May, 2016.**

**Details of Capacity expansion of Oil PSUs Refineries**

| <b>S.No.</b> | <b>Name of the Company</b>                                                                                  | <b>Location of the Refinery</b> | <b>Present capacity, MTPA</b> | <b>Increase in Capacity, MTPA</b> |
|--------------|-------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------|-----------------------------------|
| 1            | Indian Oil Corporation Limited (IOCL)                                                                       | Barauni                         | 6.000                         | 3.000                             |
| 2            | Hindustan Petroleum Corporation Limited (HPCL)                                                              | Visakhapatnam, Andhra Pradesh   | 8.300                         | 6.700                             |
| 3.           | Numaligarh Refinery Limited (NRL)                                                                           | Numaligarh, Assam               | 3.000                         | 6.000                             |
| 4            | Bharat Oman Refinery Limited (Bharat Petroleum Corporation Limited & Oman Oil Company, Joint Venture), Bina | Bina, Madhya Pradesh            | 6.000                         | 1.800                             |
| 5.           | Bharat Petroleum Corporation Limited                                                                        | Kochi, Kerala                   | 9.500                         | 6.000                             |

**Annexure referred to in reply to part (d) of Lok Sabha Unstarred Question No. 1188 to be answered on 2<sup>nd</sup> May, 2016.**

**Refineries functioning in the country, their installed capacities & capacity utilisation**

| Name of the Company                         | Refinery Location  | Installed capacity (MMTPA) | 2015-16                  |
|---------------------------------------------|--------------------|----------------------------|--------------------------|
|                                             |                    |                            | Capacity utilization (%) |
| Indian Oil Corporation Limited              | Guwahati           | 1.000                      | 90.4                     |
|                                             | Barauni            | 6.000                      | 109.1                    |
|                                             | Gujarat            | 13.700                     | 100.9                    |
|                                             | Haldia             | 7.500                      | 103.7                    |
|                                             | Mathura            | 8.000                      | 110.8                    |
|                                             | Digboi             | 0.650                      | 86.4                     |
|                                             | Panipat            | 15.000                     | 101.9                    |
|                                             | Bongaigaon         | 2.350                      | 103.9                    |
|                                             | Paradip            | 15.000                     | **                       |
| Bharat Petroleum Corporation Limited        | Mumbai             | 12.000                     | 111.4                    |
|                                             | Kochi              | 9.500                      | 112.8                    |
| Hindustan Petroleum Corporation Limited     | Mumbai             | 6.500                      | 123.3                    |
|                                             | Visakh             | 8.300                      | 111.1                    |
| Chennai Petroleum Corporation Limited       | Manali             | 10.500                     | 86.6                     |
|                                             | Nagapattinam       | 1.000                      | 54.4                     |
| Mangalore Refinery & Petrochemicals Limited | Mangalore          | 15.000                     | 103.5                    |
| Oil & Natural Gas Commission                | Tatipaka           | 0.066                      | 102.1                    |
| Numaligarh Refinery Limited                 | Numaligarh         | 3.000                      | 84.0                     |
| Bharat Oman Refineries Limited              | Bina               | 6.000                      | 106.7                    |
| Hindustan Mittal Energy Limited             | Bhatinda           | 9.000                      | 119.0                    |
| Reliance Industries Limited                 | DTA-Jamnagar       | 33.000                     | 97.9                     |
|                                             | SEZ-Jamnagar       | 27.000                     | 137.5                    |
| Essar Oil Limited                           | Vadinar            | 20.000                     | 95.5                     |
|                                             | <b>Grand total</b> | <b>230.066</b>             |                          |

\*\* Since IOCL Paradip refinery has been commissioned recently (on 7.2.2016), its capacity was not considered while calculating capacity utilization for the year 2015-16.