



सत्यमेव जयते

# ECONOMIC EDITORS' CONFERENCE

NOVEMBER 4, 2009

MINISTRY OF PETROLEUM  
& NATURAL GAS

ECONOMIC & STATISTICS DIVISION

# **MINISTRY OF PETROLEUM & NATURAL GAS**

## **BACKGROUND MATERIAL FOR** **ECONOMIC EDITORS' CONFERENCE 2009**

### **BACKGROUND**

1.1 The energy needs of the country have been increasing at a rapid rate and are expected to further expand in the coming decades. At the same time, the energy resources that are indigenously available are limited and may not be sufficient in the long run to sustain the process of economic development. Oil and Gas constitute around 45% amongst the various energy sources. At the same time, the dependence on imports of petroleum and petroleum products continues to be around 80% of total oil consumption in the country. The Ministry of Petroleum & Natural Gas is mandated to take measures for exploration and exploitation of petroleum resources including natural gas and Coal Bed Methane (CBM), apart from distribution, marketing and pricing of petroleum products.

1.2 During the current financial year (2009-10), projected production for crude oil is 36.708 Million Metric Tonne (MMT), which is about 11% higher than the actual crude oil production of 33.508 MMT. The increase of about 3.2 MMT in crude oil production in 2009-10 is from Rajasthan (2.4 MMT) and KG deepwater (0.8 MMT). The projected production for natural gas (including CBM) for 2009-10 is 50.211 Billion Cubic Metre (BCM) which is 52.8% higher than the actual production of 32.847 BCM in 2008-09. The increase in natural gas production is from KG deepwater block.

1.3 There is increase in domestic refinery capacity by 5.17% in 2008-09 and by 19.46% in 2009-10 to reach 177.97 MMT during the current year. Refinery

production (crude throughput) during 2009-10 (April-September 2009) is 77.992 MMT against the target of 75.708 MMT for the period i.e. 103% achievement of target.

## 2. EXPLORATION OF DOMESTIC OIL AND GAS

2.1. India has an estimated sedimentary area of 3.14 million square kilometre, comprising 26 sedimentary basins. At present 1.171 million square kilometre are held under Petroleum Exploration Licenses. Before implementing the New Exploration Licensing Policy (NELP), only 11% of Indian sedimentary basins was under exploration. Under NELP, which was approved by the Government in 1997 and operationalised since January 1999, 72 oil and gas discoveries have been made by private/joint venture (JV) companies in 21 blocks. Under NELP, more than 600 million metric tonnes of oil equivalent hydrocarbon reserves have been added.

2.2 As on 1.4.2009, investment made by Indian and foreign companies was of the order of US \$ 11.9 billion, out of which, US \$ 5.5 billion was on hydrocarbon exploration and US\$ 6.4 billion on development of discoveries. At present, after concluding seven rounds of NELP, 203 production sharing contracts have been signed and area awarded under NELP for exploration was 46% of Indian Sedimentary basin area. During XI plan period, area under exploration has been targeted as 80% of total area of Indian sedimentary basins. By 2015, 100% of the Indian sedimentary basin area is likely to be under exploration.

2.3. The number of NELP blocks awarded in previous seven rounds is given below:

<b>Parameter</b>	<b>NELP I</b>	<b>NELP II</b>	<b>NELP III</b>	<b>NELP IV</b>	<b>NELP V</b>	<b>NELP VI</b>	<b>NELP VII</b>
No. of Blocks Offered	48	25	27	24	20	55	57
No. of Blocks Bid For	28	23	24	21	20	52	45
No. of Bids Received	45	44	52	44	69	165	181
No. of blocks	25	23	23	21	20	52	44

awarded							
No. of PSC signed	24	23	23	20	20	52	41
Area Awarded (Square KM)	1,94,735	2,63,050	2,04,588	1,92,810	1,15,180	3,06,200	1,17,000

### **OFFERING OF NELP AND CBM BLOCKS- NELP VIII**

2.4. In order to enhance the country's energy security, the Government of India launched the eighth bid round of New Exploration Licensing Policy (NELP-VIII) and fourth bid round of Coal Bed Methane Policy (CBM-IV) on 9th April, 2009. The Government had offered the highest number of exploration blocks ever i.e., 70 blocks covering a sedimentary area of about 1,63,535 Sq. Km. The offered blocks included – 24 deepwater blocks, 28 shallow water blocks, 8 onland blocks and 10 Type-S blocks. Government had also offered 10 blocks under CBM-IV covering an areas of about 5,000 sq. km. spread over seven states namely, Assam, Jharkhand, Orissa, Madhya Pradesh, Chhattisgarh, Maharashtra and Tamil Nadu.

2.5. The response of E&P industry has been encouraging in the context of the global financial situation and responses to similar offers in many other countries. The Government has received 76 bids for 36 blocks out of 70 blocks offered under NELP-VIII and 26 bids for 8 blocks out of 10 blocks offered under CBM-IV by the bid closing date i.e. 12<sup>th</sup> October 2009. In respect of 16 deep water blocks, 15 shallow water blocks and 3 on-land blocks, no bids were received. A total of 62 companies comprising of 10 foreign companies and 52 Indian companies have bid either on their own or as a part of consortia. The Government's desire to enhance the number of players in the E&P sector has been achieved as is evident from the fact that 36 new companies have given bids either on their own or in consortium.

2.6. As per the assessment carried out by DGH, on the basis of information provided by the bidders along with their formal bids, 36 blocks out of the offered

70 blocks are likely to be awarded to the bidders under NELP-VIII and 8 blocks out of 10 CBM blocks are likely to be awarded to the bidders.

### **DOMESTIC RESERVES AND PRODUCTION**

2.7. Balance recoverable crude oil and natural gas reserves in the country are 736.45 million metric tonne (MMT) and 1119.55 billion cubic metre (BCM) respectively. New oil and gas reserves found by Private/JV companies in Krishna Godavari deepwater and Rajasthan are on production.

2.8. The following tables give estimates of crude oil and natural gas production:

#### **Crude Oil Production**

	<b>(000 Metric Tonnes)</b>					
<b>State/Source</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10 * (Apr-Sep)</b>
<b>Onshore</b>						
Gujarat	6187	6251	6212	6178	5945	2967
Assam/ Nagaland	4703	4474	4400	4359	4674	2382
Tamil Nadu	391	385	353	299	265	124
Andhra Pradesh	226	216	252	280	289	151
Arunachal Pradesh	83	104	109	101	103	63
Rajasthan	-	-	-	-	-	28
<b>Total Onshore</b>	<b>11590</b>	<b>11430</b>	<b>11326</b>	<b>11217</b>	<b>11276</b>	<b>5715</b>
Share of PSUs	11516	11329	11165	11025	11033	5543
Share of Private/JV	74	101	161	192	243	172
<b>Offshore</b>						
Share of PSUs	18165	16309	17993	17994	17801	8609
Share of Private/JV	4226	4451	4669	4895	4431	2277
<b>Total Offshore</b>	<b>22391</b>	<b>20760</b>	<b>22662</b>	<b>22889</b>	<b>22232</b>	<b>10886</b>
<b>Grand Total</b>	<b>33981</b>	<b>32190</b>	<b>33988</b>	<b>34106</b>	<b>33508</b>	<b>16601</b>

\* = Provisional

## Natural Gas Production

(Million Cubic Metres)

State/Source	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10 (Apr-Sep)
<b>Onshore</b>						
Gujarat	3710	3831	3294	2931	2605	1263
Assam/Nagaland	2249	2408	2526	2601	2573	1356
Andhra Pradesh	1707	1663	1525	1567	1524	755
Tamil Nadu	678	906	1130	1169	1242	599
Tripura	497	480	520	533	553	277
Rajasthan	213	242	242	255	216	107
Arunachal Pr.	40	48	35	29	30	17
West Bengal	-	-	-	-	20	19
<b>Total Onshore</b>	<b>9094</b>	<b>9578</b>	<b>9272</b>	<b>9085</b>	<b>8763</b>	<b>4393</b>
Share of PSU	7668	8021	8141	8219	8021	4051
Share of Private/JV	1426	1557	1131	866	742	342
<b>Offshore</b>						
Share of PSU	17313	16823	16567	16459	16736	8760
Share of Private/JV	5356	5801	5908	6861	7348	8171
<b>Total Offshore</b>	<b>22669</b>	<b>22624</b>	<b>22475</b>	<b>23320</b>	<b>24084</b>	<b>16931</b>
<b>Grand Total</b>	<b>31763</b>	<b>32202</b>	<b>31747</b>	<b>32405</b>	<b>32847</b>	<b>21324</b>

\* Provisional

### ***CRUDE OIL PRODUCTION FROM RAJASTHAN***

2.9 On inauguration of crude oil production in Rajasthan by Hon'ble Prime Minister, Cairn Energy India Pty. Ltd. has commenced production in the block RJ-ON-90/1 w.e.f. 29<sup>th</sup> August 2009 at the initial production rate of 3,500 barrels per

day, which is likely to increase to 30,000 bopd in 2009. This production is further likely to increase at peak level of 1,75,000 barrels per day in 2011 on completion of transportation pipeline. Government has designated IOC, MRPL and HPCL for lifting part of crude oil production from this block after ascertaining the capacity of receiving refineries of the nominees. It may be relevant to state that the crude oil of this block is of very heavy quality, high viscosity and wax with a high pour point and residues. The refineries need to have a Coker for processing such type of heavy crude or else to mix with the lighter crude. The break-up of crude oil allocation to IOC, MRPL and HPCL is as under:

**Allocation of Crude Oil**

**(MMT)**

<b>Company</b>	<b>2009-10</b>	<b>2010-11</b>
HPCL	0.30	0.50
MRPL	0.20	0.40
IOCL	0.20	1.50
Total	0.70	2.40

2.10 However, the production expected from this block is 2.4 MMT during 2009-10 and 6.8 MMT during 2010-11. During the plateau phase, production would be 8.9 MMT.

***NATURAL GAS PRODUCTION FROM KRISHNA GODAVARI DEEPWATER***

2.11 First natural gas production from Krishna Godavari basin deepwater block commenced in April 2009. Current natural gas production from KG D6 block is about 38.6 MMSCMD. Natural gas production is likely to further increase to 60 MMSCMD in December 2009, 70 MMSCMD in January 2010, 82 MMSCMD in March 2010 and maintaining natural gas production in the range of 82-89 MMSCMD upto March 2012.

***IMPROVED OIL RECOVERY/ ENHANCED OIL RECOVERY (IOR/EOR)***

2.12 Work programmes have been undertaken primarily by ONGC for IOR/EOR in its 15 largest fields, which account for 80% of ONGC's reserves and production. 18 schemes of IOR/EOR have already been approved to increase recovery factor from 14 ageing oil & gas fields of ONGC in Gujarat, Assam and Offshore at an estimated cost of about Rs.14,510 crore. The expected gain in oil from these schemes will be around 110 MMT by 2020. 14 schemes have been completed (5 in offshore and 9 in Gujarat). 4 schemes are under implementation (1 in Gujarat and 3 in Assam). The completion schedule of 4 schemes is as under:

<b>Sl. No.</b>	<b>Schemes</b>	<b>Anticipated Completion Date</b>
1	IOR Kalol	December 2009
2	IOR Rudrasagar	March 2010
3	IOR Lakwa-Lakhmani	March 2010
4	IOR Geleki	March 2011

2.13 ONGC has drilled 597 wells till March, 2009. The cumulative incremental oil gain was of the order of 46.26 MMT up to March, 2009. ONGC has made investment of Rs.14256 crore up to March, 2009.

#### ***DEVELOPMENT OF MARGINAL FIELDS OF ONGC***

2.14 Concerted efforts have been taken up to put new & marginal fields on production through in-house resources as well as through service contract. Out of total 165 marginal fields, ONGC has already monetized 56 fields (production started in 39 fields) and out of remaining 109 fields 68 are being monetized in-house by ONGC, 20 fields through service contracts and 21 fields are likely to be offered. During XI Plan period, a total incremental production of about 14 MMT of oil + condensate and 16 BCM of gas is envisaged from marginal fields of ONGC.

2.15 The marginal field policy is being finalized for early monetization of small size/isolated fields by providing fiscal incentives in order to make development of

marginal fields economically viable. The draft cabinet note for approval of Marginal field policy is being circulated to respective Ministries for their comments.

### **3. DOMESTIC EXPLORATION OF OTHER GASEOUS FUEL**

#### ***Coal Bed Methane (CBM)***

3.1. The Government had approved a comprehensive CBM policy in July, 1997 for exploration and production of CBM gas. As of now, 23 CBM Blocks were awarded through competitive international bidding under first three rounds of CBM policy, under which blocks are being operated by technically competent companies. Two blocks were awarded on nomination basis and one block through the FIPB route. The estimated resources of CBM gas in 26 blocks is about 1374 billion cubic metres (BCM). In last five years, 162 core holes, 30 test wells and 70 pilot wells have been drilled in awarded 26 blocks. 8 TCF (227 BCM) reserves have already been established in 5 CBM blocks. The commercial production of CBM is from Raniganj East in West Bengal at the rate of about 97,500 cubic metres per day. 8 CBM blocks are likely to be awarded in fourth round of CBM.

#### ***Underground Coal Gasification (UCG)***

3.2. ONGC entered into an Agreement of Collaboration (AOC-MOU) with National Mining Research Centre-Skochinsky Institute of Mining (NMRC-SIM) in Russia. In the selected Vastan mine block, seismic survey was carried out and 18 boreholes were drilled for detailed UCG site characterization. Based on geological, hydrological and geo-mechanical data analysis, Vastan in Gujarat and Hodu Sindri in Rajasthan have been found suitable for UCG stations. Pilot production of UCG at Vastan would commence by ONGC in 2010.

#### ***Gas Hydrate***

3.3. Gas Hydrate is at Research & Development (R&D) stage world over. India, U.S.A & Japan are one of the pioneers in the field of Gas Hydrate. In accordance with the roadmap for National Gas Hydrate Programme (NGHP), India has already acquired core samples with the help of the drill ship “JOIDES Resolution”, USA. In December 2008, an MOU was signed between the Directorate General of Hydrocarbons (DGH) and U. S. Geological Survey (USGS), USA for cooperation on exchange of scientific knowledge and technical personnel in the field of Gas Hydrate and research with the view to exploit the potential of the Gas Hydrate as an alternate source of energy. Second NGHP expedition has been planned in 2010 to map the prospects of Gas Hydrate in Krishna Godavari and Mahanadi deepwater areas.

#### **4. EQUITY OIL AND GAS FROM ABROAD**

4.1 In view of unfavourable demand – supply balance of hydrocarbons in the country, acquiring equity oil and gas assets overseas is one of the important components of enhancing energy security. The Government is encouraging national oil companies to aggressively pursue equity oil and gas opportunities overseas. Oil & Natural Gas Corporation Videsh Limited (OVL) produced about 8.75 Million Metric Tonnes (MMT) of oil and equivalent gas during the year 2008-09 from its assets abroad in Sudan, Vietnam, Venezuela, Russia, Syria and Colombia. OVL has a target to acquire 20 Million Metric Tonne Per Annum (MMTPA) of Oil and Oil Equivalent Gas (O+OEG) production by 2020 but efforts are on to achieve it even earlier.

4.2 In 2008-09, OVL has acquired 7 blocks in 5 countries comprising of two blocks each in Brazil and Columbia and one block each in Myanmar, Venezuela and Trinidad & Tobago. The largest ever acquisition of a foreign company, Imperial Energy Plc. U.K.(IEC) by an oil PSU, ONGC Videsh Limited at an acquisition cost of about 1.4 billion pound sterling has taken place. IEC has oil and gas production fields in Russia. In addition, OIL-IOC alliance has also

acquired one block in Timor Leste and two blocks in Egypt. BPCL along with Videocon has acquired participating interest in 10 blocks in Brazil.

## **5. IMPORT OF LIQUEFIED NATURAL GAS (LNG)**

5.1. Petronet LNG Limited (PLL) signed a contract with RasGas, Qatar in July 1999 for import of 7.5 million metric tonnes per annum (MMTPA) LNG for a period of 25 years. As per the contract, supply of 5 MMTPA LNG commenced in 2004 and the supply of balance 2.5 MMTPA LNG would commence later this year. In addition to the above term-contracts, LNG is also being sourced from spot market by PLL and Shell. During 2008-09, about 8.02 MMT LNG was imported in the country. Further, PLL has executed Sale & Purchase Agreement (SPA) in August 2009 for supply of 1.5 mmtpa LNG with a subsidiary of ExxonMobil from their share in Gorgon Project, Australia for 20-year term for Kochi LNG terminal.

5.2 In order to handle increased LNG import, additional infrastructure is being created in the country. Capacity of PLL's Dahej LNG terminal has been expanded from 5 MMTPA to 10 MMTPA. Dabhol LNG terminal is almost complete and is in a position to operate without breakwater. The terminal will, however, become fully operational only after completion of breakwater facilities in 2011.

## **6. IMPORT OF NATURAL GAS THROUGH TRANSNATIONAL PIPELINES**

6.1. The Government has approved the proposal of the Ministry of Petroleum and Natural Gas to pursue natural gas imports from Iran and Central Asian countries through on-land transnational pipelines. These are:

***Iran-Pakistan-India (IPI) Gas Pipeline Project***

6.2. Iran-Pakistan-India (IPI) Gas Pipeline Project is proposed to for supply of 60 MMSCMD of gas in Phase-I, to be shared equally between India and Pakistan and 90 MMSCMD of gas is likely to be supplied in Phase-II to India and Pakistan. Regular discussions through structured fora are being held. Subsequently, a Ministerial-level meeting between India and Pakistan on the IPI Project was held in Islamabad on April 25, 2008. During the meeting, issues relating to project structure, transportation tariff and transit fee were discussed.

6.3. India has proposed an early meeting of Indo-Iran Working Group on Oil & Gas. The meeting is proposed to be held in New Delhi, the dates for which are being finalized.

#### ***Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline projects***

6.4. The Cabinet in its meeting held on 18<sup>th</sup> May 2006, accorded 'in principle' approval to the proposal for India joining the Project. India has been admitted as an official member of the Project in the 10<sup>th</sup> Steering Committee Meeting (SCM) of the Project held on April 23-24, 2008 at Islamabad. The total capacity of the Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline project is about 90 MMSCMD and the length is about 1680 km. The length of pipeline in Turkmenistan, Afghanistan and Pakistan up to India border is 145 km, 735 km and 800 km respectively. 4<sup>th</sup> meeting of TWG was held during September 3-5, 2008 in Ashgabat, wherein further discussions were held on GSPA. Discussions were also held on technical specifications of gas.

#### ***Brahmaputra Cracker & Polymer Limited***

6.5. The Government had approved implementation of Assam Gas Cracker Project at a project cost of Rs.5460.61 crore. Joint Venture Company, with GAIL as the main promoter with equity participation of 70% and OIL, NRL and Assam Industrial Development Corporation (Government of Assam) holding 10% equity each, has been incorporated on 8.01.2007 as 'Brahmaputra Cracker and Polymer Limited' (BCPL). Implementation of the Project has commenced. The project is

expected to be completed by April 2012. Financial closure has been achieved on October 01, 2009. All critical orders are expected to be placed by March 2010. All materials are expected to be at site by September 2011. Installation and erection of major equipments/machines is expected to start from September 2011.

6.6. Gas Supply Agreement/Term Sheet for supply of Gas/Naphtha has been signed with ONGC, OIL and NRL. Sixty buildings, like control rooms, sub-station, product ware houses, etc are under construction. Piling job, construction of power systems and site development of Duliajan Compressor station is in progress.

## **7. DECISIONS ON COMMERCIAL UTILIZATION OF KG D-6 GAS**

7.1. The Empowered Group of Ministers (EGoM) has taken decisions regarding the priority sectors to which natural gas produced from KG D-6 field in KG-DWN-98/3 Block would be supplied. The EGoM has decided that this gas should be supplied to the following priority sectors:

- i) Existing gas-based urea plants, which are now getting gas below their full requirement, so as to enable their full capacity utilization.
- ii) Existing gas-based LPG plants (a maximum quantity of 3 mmscmd).
- iii) Gas-based power plants lying idle/under-utilized and likely to be commissioned during 2008-09, and liquid fuel plants, which are now running on liquid fuel and could switch over to natural gas, as also captive power plants (up to 18 mmscmd).
- iv) City Gas Distribution (CGD) projects for supply of Piped Natural Gas (PNG) to households and Compressed Natural Gas (CNG) in transport sector (a maximum quantity of 5 mmscmd).
- v) Gas-based steel plants, which had been given APM gas allocation earlier but are not getting gas supply in accordance with the commitments made.

7.2. The meeting of the EGoM to decide issues related to commercial utilisation of gas under NELP was held on 27<sup>th</sup> October, 2009. The decisions of the EGoM will be circulated during the meeting.

***Allotment of gas to various priority sectors***

7.3. In accordance with the above decisions of EGoM and in consultation with the concerned administrative Ministries, allocations of natural gas were made to the mentioned priority sectors as follows:-

- i) On the basis of information provided by Department of Fertilizers (DoF) and taking into account the Net Calorific Value (NCV) 8200 kcal/scm of gas produced from KG D-6, 15.33 mmscmd was allotted to existing gas-based urea plants, so as to enable their optimum operation.
- ii) 3 mmscmd was allotted to existing gas-based LPG plants of GAIL and ONGC.
- iii) 2.7 mmscmd was allotted to Ratnagiri Gas & Power Pvt. Ltd. (RGPPL) for the period from April to September 2009, as RGPPL was also taking Regasified Liquefied Natural Gas (RLNG). As regards existing gas-based power plants other than RGPPL, 15.28 mmscmd was allotted to them from April to September 2009, so as to ensure the functioning of power plants within Andhra Pradesh at 70% PLF and those outside Andhra Pradesh at 60.5% PLF. Thus, almost 18 mmscmd was allotted for the power sector.

Subsequently, the gas allocation to RGPPL was increased from 2.7 mmscmd to 5.67 mmscmd from 1.10.2009, since the LNG contract for supply to RGPPL was only till 30.9.2009. The period for supply of

gas to other existing gas-based power plants was extended beyond 30.09.2009 for a period of one month.

Further, the Contractor was asked to supply gas, available because of low offtake by certain customers, to existing gas-based power plants on fallback basis to increase their PLF. Allocations on fallback basis were also made new to power projects, viz., Lanco Kondapalli Extn. (366 MW), A.P and Utran CCPP 374 MW, Gujarat, which were covered under 100 days programme of capacity addition of MoP.

- iv) As regards the requirement of CGD projects for PNG and CNG, the EGoM in its meeting held on 28.05.2008 had inter alia approved the Guidelines for sale of natural gas by NELP Contractors, which did not provide for 'reservation' of gas, and, hence, gas could be allotted only for the existing requirement of CGD projects. Thus, 0.835 mmscmd gas was allotted to CGD projects of various cities.
- v) In accordance with the decision taken in the EGoM meeting held on 9.04.2009, 3.75 mmscmd was allotted to existing gas-based steel plants.

### ***Supply Position***

7.4. Presently around 40 mmscmd natural gas is being produced by the Contractor from KG D-6 field. The position regarding supply to various priority sectors is as follows:-

- i) All the existing gas-based urea plants have signed Gas Sales & Purchase Agreements (GSPAs) with the Contractor and Gas Transportation Agreements (GTAs) with the concerned transporters for supply of KG D-6 gas. The average offtake by existing gas-based urea plants is around 13 mmscmd.

- ii) GAIL has signed GSPAs with the Contractor for supply to its gas-based LPG plants and the average offtake is around 2 mmscmd.
- iii) The EGoM in its meeting held on 9.4.2009 had allotted gas to inter alia NTPC's existing gas-based plants in Faridabad (0.13 mmscmd), Anta (0.03 mmscmd), Dadri (0.45 mmscmd), Kawas (1.75 mmscmd) and Gandhar (0.30 mmscmd), in order to enable them to operate at 60.5% PLF. However, NTPC has signed GSPA with the Contractor only for its plants in Faridabad, Anta, & Dadri, and not for Kawas & Gandhar. All the other power plants have signed GSPAs and GTAs.

As mentioned above, power plants have been allotted gas on fallback basis, beyond their firm allocation, in order to enable them to operate at a higher PLF. Accordingly, many power plants are presently operating at an optimum PLF. The present utilization of gas by power sector is around 22 mmscmd.

- iv) The CGD Projects to whom gas has been allotted are presently utilizing less than 0.5 mmscmd.
- v) The existing gas-based steel plants are presently utilizing around 2.5 mmscmd.

In brief, the position regarding allotment and off-take is as follows:

(in MMSCMD)

<b>Sector</b>	<b>Original EGoM Decision</b>	<b>Allotment</b>	<b>Supply Position</b>
Fertilizer (Urea)	Entire requirement (estimated 14)	15.33	All GSPAs & GTAs signed (present supply around 13)
Power	18	RGPPL- 5.67 Others - 15.28 Total- 20.95	All GSPAs & GTAs signed except for NTPC's Kawas & Gandhar Plants (present supply around 22)

Gas based LPG Plants	3	3 (ONGC & GAIL)	GAIL has signed GSPA (present supply around 2)
City Gas Distribution Project (CGD)	5	0.87	Less than 0.5
Gas Based Steel Plant	Out of unutilized	3.75	Around 2.5
<b>Total</b>	<b>40</b>	<b>43.9</b>	<b>40</b>

## 8. REFINING OF OIL & GAS

### *Refining Capacity and Performance*

8.1. The domestic refining capacity was 148.97 million tonnes per annum as on April 1, 2008. During the year 2008-09, with the commissioning of Reliance Petroleum Ltd. (SEZ) Refinery at Jamnagar, Gujarat during the last week of December 2008, the total installed capacity of India refineries has increased from 148.97 Metric Million Tonne Per Annum (MMTPA) to 177.97 MMTPA. By the end of XI Plan, refinery capacity is expected to reach 255.78 MMTPA. The refinery throughput during 2008-09 (April-March) at 160.77 MMT showed an increase of 3.0% compared to 2007-08 (April-March). The details of throughput and capacity utilization of refineries are given below:

### **Capacity Utilisation**

Year	Installed Capacity (MMTPA)	Actual Crude Throughput (MMT)	Capacity Utilisation (%)
2005-06	129.91	130.11	100
2006-07	137.25	146.55	107
2007-08	148.97	156.10	105

2008-09	148.97	160.77	108
2009-10 (Apr-Sep. 09) *	75.71	77.99	103

\* Provisional, Applicable capacity for the period.

The following table shows undertaking-wise performance of Refinery Sector:

### Throughput of Refineries

Undertaking	Installed Capacity as on 1.4.2009	(000 Metric Tonnes) Actual Crude Throughput				2009-10* (Apr-Sep)
		2005-06	2006-07	2007-08	2008-09 *	
<b>Public Sector</b>	<b>105468</b>	<b>96946</b>	<b>108172</b>	<b>112541</b>	<b>112223</b>	<b>55030</b>
IOCL (7 Refineries)	47350	38522	44001	47401	49204	24878
HPCL (2 Refineries)	13000	14229	16796	16818	15807	8118
BPCL(2 Refineries)	19500	10298	19772	20880	20001	9118
CPCL (2 Refineries)	10500	10362	10402	10266	10136	5463
KRL		6939				
BRPL	2350	2356	2067	2020	2163	#
NRL	3000	2133	2504	2568	2251	1366
ONGCL-Tatipaka	78	93	94	63	84	34
MRPL	9690	12014	12536	12525	12577	6053
<b>Private Sector</b>	<b>43500</b>	<b>33163</b>	<b>38379</b>	<b>43562</b>	<b>48549</b>	<b>22962</b>
RIL	33000	33163	36616	36931	35636	16575
RIL(SEZ)	29000				@	@
EOL	10500		1763	6631	12913	6387
<b>Total (19 Refineries)</b>	<b>177968</b>	<b>130109</b>	<b>146551</b>	<b>156103</b>	<b>160772</b>	<b>77992</b>

\* Provisional

@: Not reported by the refinery

#: Merged with IOCL

## 9. DISTRIBUTION AND MARKETING OF PETROLEUM PRODUCTS

### *Pipeline Network as on 1<sup>st</sup> October 2009*

9.1. As on 1<sup>st</sup> October 2009, the country has a network of 24 product pipelines with a length of 10514 Kms. & capacity to carry 62.91 MMT of products and 3 LPG pipelines with a length of 2197 Kms. & capacity to carry 4.50 MMT of LPG. Over and above this, there are 6 crude oil pipelines of 5795 Kms, with capacity of transporting 52.75 MMT. The details are as follows:

### **Pipelines Network as on 1<sup>st</sup> October 2009- Length & Capacity**

<b>Company/ Type of Pipeline</b>	<b>Capacity (MMTPA)</b>	<b>Length (KM)</b>
<b>Products Pipelines</b>		
IOC (17 stretches)	33.54	5682
HPC (3 stretches)	14.05	2134
BPC	6.00	1384
Petronet (2 stretches)	7.60	654
OIL	1.72	660
<b>Total Product Pipelines</b>	<b>62.91</b>	<b>10514</b>
<b>LPG Pipelines</b>		
GAIL	3.80	1922
IOCL	0.70	275
<b>Total LPG Pipeline</b>	<b>4.50</b>	<b>2197</b>
<b>Crude Pipelines</b>		
OIL	7.25	1478
IOC (4 Stretches)	45.50	4317
<b>Total Crude Pipelines</b>	<b>52.75</b>	<b>5795</b>
<b>GRAND TOTAL</b>	<b>120.16</b>	<b>18506</b>

### ***Liquid Petroleum Gas (LPG)***

9.2. There has been substantial expansion of LPG in the country. As of 1.10.2009 there are:

- 4457 LPG markets

- 9422 LPG Distributors
- 8913 TMT of bottling capacity
- 1113 lakh LPG customers (Domestic & Non-domestic)
- 540.5 lakh DBC (double connection) consumers

9.3. Oil Marketing Companies (OMCs) are in the process of setting up 1340 new LPG distributorship mainly in rural locations, out of which 60 have already been commissioned. The setting up of LPG distributorships is a continuous process and involves identifying of a suitable location, arranging land for setting up of godown and other statutory clearances.

9.4. A new scheme called Rajiv Gandhi Gramin LPG Vitrak (RGGLV) was launched for setting up small size LPG distribution agencies in order to increase rural penetration and to cover remote as well as low potential areas for all the locations having potential of 600 refill sales per month. The Scheme was launched in 8 States covering over 1200 locations where the reach of LPG is very low. The Scheme will also provide new employment opportunities for the rural population leading to overall economic prosperity.

9.5. As per the "Vision-2015" adopted for the LPG sector, target of overall 75% LPG population coverage has been fixed. However to ensure that growth of LPG usage is evenly spread, Oil Marketing Companies will be assessing/identifying location under the new scheme in rural/low potential areas in all States/Union Territories so as to achieve target growth of at least 50% LPG population coverage in each district and at least 60% overall LPG coverage in each State over the next five years.

9.6. Apart from existing 14.2 Kg cylinder for domestic customers, industry has introduced 5-Kg cylinders for low-income group customers. About 3.66 lakh customers have been enrolled in the category as on 01.10.2009. As on 01.10.2009, LPG customer population covers approximately 56% of country's total population as per census of India, 2001.

### ***Measures to check adulteration***

9.7. The initiatives taken by the Government / Public Sector Oil Marketing Companies (OMCs) in containing the menace of adulteration including diversion of PDS Kerosene, include, inter alia, (a) Automation of retail outlets, (b) Information Technology (IT) solutions like monitoring movement of tank trucks (TT) through Global Positioning System (GPS), and (c) third party certification of retail outlets.

9.8. OMCs have been directed to complete automation of retail outlets (ROs) selling more than 200 KL per month. IOCL has already automated 1233 such retail outlets. HPCL has completed automation in 1674 such ROs and BPCL in 1944 ROs.

9.9. As on 31.07.09, IOCL has completed GPS system in 19600 Tank Trucks (TTs), HPCL in 5412 TTs and BPCL in 4800 TTs.

9.10. Oil Marketing Companies (OMCs) have initiated Third Party Certification ROs. As on 30.09.2009, OMCs have completed 72% of Target ROs.

9.11. A Marker System of detection of adulteration was implemented from October, 2006 to December, 2008. During the period 1,75,472 nos. of inspections were carried out through Marker System at Retail Outlets across the country out of which 577 nos of cases were detected proven cases of Adulteration with the strike rate of 0.33%. Whereas, through the conventional system, during the corresponding period Industry had inspected 1,54,294 ROs out of which 82 ROs were detected as proven cases of adulteration. The strike rate through conventional system of inspection of ROs was 0.05%. The contract with the Marker Supplier expired on 31.12.2008. The process for selection of replacement of this Marker with a new and efficient marker is under progress by Public Sector OMCs.

### ***Composite Cylinders***

9.12. Government has conveyed “in principle” approval to the Public Sector Oil Marketing Companies (OMCs) for expanding the product line by way of introduction of composite cylinders for marketing domestic LPG, subject to there being no subsidy element in the LPG to be marketed through these composite cylinders. The composite cylinders are translucent and will show the level of LPG present in the cylinder. The capacity of composite cylinders presently being considered for marketing of LPG is approximately 10.5 Kg. LPG gas as against the present capacity of 14.2 Kg. in the domestic cylinders. Global tender has been floated on Industry basis for procurement of composite cylinders.

### ***Public Grievances Redressal System in OMCs***

9.13. In the light of numerous complaints tickling in regarding supply and distribution of petroleum products / LPG across the country it was felt that public grievances redressal system in the Public Sector Oil Marketing Companies needs to be streamlined. Following initiatives have been taken for prompt and effective redressal of grievances of the customers.

9.14. **Toll Free Numbers:** In order to have a more convenient, easy and effective way for the customer to register their complaint and follow it up, OMCs have started the service of using following Unique Toll Free telephone Numbers.

Indian Oil Corporation Ltd. (IOC)	18002333555
Bharat Petroleum Corporation Ltd. (BPC)	18002227255
Hindustan Petroleum Corporation Ltd. (HPC)	18002333777 (LPG) 1800233999 (MS/HSD)

9.15. These numbers will be available across the country for the registration of complaint through call centres on 24x7 basis. On registration of a complaint, customers are given a registration number by the call centre. Subsequently, the status of complaint can be reviewed by the customer by citing this number to call centre.

9.16. The complaints through the service provider of call centre is uploaded in a website for review and initiating action by officers of the company.

The complaint normally will be redressed by the respective offices within 2 working days and thereafter will be closed on the web portal mentioning the action taken. The call centre will then given feed back to the complainant whenever the customer calls again.

9.17.. If the complaint remains unresolved for 2 working days (after uploading on the web portal), the same gets forwarded to next higher office for reviewing at their end. After the complaint is forwarded to next higher office if it still remains unresolved for another 2 working days then the same shall be forwarded to next office in the hierarchy.

9.18. The above system has been put in place by OMCs from 2<sup>nd</sup> October, 2008 and nationwide advertisement in leading print media has been published. The same is also displayed in respective corporate website. The Toll Free Number is also being displayed in all retail outlets and distributorships.

The complaints registered by the consumers at these toll free numbers are being addressed by the OMCs and eventually are being closed within a given period of time.

9.19. **Customer Contact** : To facilitate personal redressal of complaints, at Head Office, customers can meet senior officials on the 1<sup>st</sup> and 15<sup>th</sup> of every month between 3 and 4 pm. All field officers covering both retail and LPG in various revenue districts will also be available on the 1<sup>st</sup> and 15<sup>th</sup> of every month between 3 and 4 pm at designated retail outlets/LPG distributorships so that customers can visit the location and meet the field officers for prompt and immediate redressal of complaints.

9.20. The performance of the above system will be constantly reviewed and the required resources will be enhanced so that all the systems for registering complaints are easily accessible to the customers and their grievances are attended promptly in a definite time bound manner.

9.21. **SMS/IVRS BOOKING:** For obtaining refill cylinders, customers are required to register their requests, either through telephone or through a personal visit to the LPG distributor. However, with progress in technology and exponential growth in mobile coverage and the declining cost of mobile usage, refill booking through SMS has emerged as a faster and cheaper option, which the 3 oil companies have rolled out to the customers.

9.23. Indian Oil Corporation Limited (IOC) and Bharat Petroleum Corporation Limited (BPCL) have currently introduced booking through SMS and USSD Protocol (Un-structured supplementary data), refill booking with return SMS for refill call acknowledgement, registration and delivery confirmation to the customer. While Hindustan Petroleum Corporation Limited (HPCL) will be introducing an exclusive IVRS refill booking system. The booking can be made to 54625 for IOC and 52725 for BPCL.

9.24. Booking through the SMS/IVRS have a lot of advantages in the sense that the customer is sure about his booking as he is provided with a booking reference number and can enquire on the status citing the number anytime after booking. If customer does not get the refill but receives a message that refill has been delivered such customers can contact/complain for non-delivery of the refill. This method can check wrong deliveries of refill. Also, booking for the refill is possible 24x7.

9.25. SMS/IVRS based facility for LPG Refill Booking has been started for Delhi based customers from 31st Aug'09. This is progressively being extended in phases to the customers in other parts of the country.

***Rajiv Gandhi Gramin LPG Vitrak Yojana***

9.26. The Ministry of Petroleum & Natural Gas has formulated a Vision for the year 2015 'Customers Satisfaction & Beyond' wherein it is targeted to cover 75% of the population with LPG by the year 2015. The LPG customer base is targeted to increase from 10.57 crore on 1.4.2009 to 16.00 crore by the year 2015. The focus would be on States and regions where the LPG coverage is below the national average. A new low cost LPG distributor scheme called 'Rajiv Gandhi Gramin LPG Vitrak Yojana' has been launched so that the LPG connections can be released in rural areas where operations with the present norms are economically unviable. The scheme has been launched at locations having potential of upto 600 refills per month and the proprietor himself/herself would operate it with the help of two staff. The total capital investment will be about Rs.3.21 lakh and there will be a potential for a net monthly earning of Rs.7664/- after indicative revenue expenditure.

## 10. CONSUMPTION OF PETROLEUM PRODUCTS

10.1. The consumption of petroleum products during the year 2008-09 was 133.40 MMT with a growth rate of 3.5%. The consumption and growth rate since 2002-03 are as given below:

Year	Consumption (TMT)	Growth Rate (%)
2002-03	104126	3.7
2003-04	107751	3.5
2004-05	111634	3.6
2005-06	113214	1.4
2006-07	120749	6.7
2007-08	128947	6.8
2008-09	133400	3.5
2009-10 (April-Sept.*)	67267	3.6

\*Provisional. Growth rate for April-September 2009-10 is over April-September 2008-09.

## 11. IMPORTS/ EXPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS

11.1. India imports over 80% of its crude oil requirement. The country is, however, a net exporter of petroleum products. The details of import bill for last three years, both in terms of quantity and value are given below:

### Imports of Crude Oil & Petroleum Products

Year	Crude Oil Import			Petroleum Product Import			Total Imports		
	Quantity	Value		Quantity	Value		Quantity	Value	
		MMT	Rs. Crore		US\$ Million	MMT		Rs. Crore	US\$ Million
2006-07	111.50	219029	48389	17.66	41160	9068	129.16	260189	57457
2007-08	121.67 (9.12)	272699 (24.50)	67988 (40.50)	22.46 (27.19)	61000 (48.20)	15127 (66.81)	144.13 (11.59)	333699 (28.25)	83115 (44.66)
2008-09*	132.78 (9.13)	348288 (27.72)	76974 (13.22)	18.30 (-18.54)	60624 (-0.62)	13418 (-11.30)	151071 (4.81)	408911 (22.54)	90392 (8.76)
2008-09* (Apr-Sep.)	64.84	233535	53779	9.99	40861	9444	74.83	274396	63223
2009-10* (Apr-Sep.)	69.61 (7.7)	153245 (-34.4)	31601 (-41.2)	7.17 (-30.0)	17638 (-56.8)	3618 (-61.7)	76.78 (2.7)	170883 (-37.7)	35218 (-44.3)

\*Provisional

Note:- Figures in brackets are % change over previous year.

### Exports of Petroleum Products

Year	Product Export			Net Import		
	Quantity	Value		Quantity	Value	
		MMT	Rs. Crore		US\$ Million	MMT
2006-07	33.62	81094	17908	95.54	179095	39549
2007-08	40.78 (21.28)	110789 (26.62)	27555 (53.87)	103.36 (8.18)	222911 (24.46)	55560 (40.48)
2008-09*	38.57 (-5.41)	121086 (9.29)	27028 (-1.91)	112.50 (8.85)	287825 (29.12)	63364 (14.05)
2008-09* (Apr-Sep.)	19.17	80519	18779	55.65	193878	44444
2009-10* (Apr-Sep.)	14.39 (-24.21)	35368 (-56.07)	7291 (-61.17)	62.38 (11.43)	135515 (-30.10)	27927 (-37.16)

\*Provisional

Note:- Figures in bracket are % change over previous year.

## 12. EMPOWERING OIL PSUs IN MATTERS OF IMPORT

12.1. The Cabinet in its meeting held on 8.04.2005 has decided to allow Indian Oil Corporation Limited (IOCL) to charter their ships for import/export of petroleum products directly instead of going through Transchart for a period of one year. After one year, this arrangement was reviewed and on the basis of experience of IOCL, the Cabinet in its meeting held on 29<sup>th</sup> March, 2007 allowed IOCL to continue the system and extended this facility to other OMCs viz. HPCL and BPCL. All the companies were directed to follow all applicable regulations relating to hiring of ships, including those relating to Indian Flag and Shipping on FOB basis.

12.2. Also, effective 2007-08, on a pilot basis for one year, the Boards of the oil PSUs have been empowered to approve the strategy papers for import of crude oil subject to guidelines issued by the Ministry of Petroleum and Natural Gas from time to time, instead of the earlier practice of seeking Ministry's prior approval of the strategy papers for import. Keeping in view the experience, the Ministry has decided to continue the present system of import of crude oil and held that the strategy papers for import of crude oil by Oil Marketing Companies shall be sent to the Ministry of P&NG at the end of each financial year along with projected imports of the coming year.

### **13. Foreign Direct Investment (FDI)**

13.1. There is continued need for foreign investment and technical know-how in the field of exploration and production of petroleum. Hence, this sector is fully open to foreign direct investment with 100 per cent equity through automatic route, subject to sectoral regulation that are equally applicable to domestic and foreign players. There are some restrictions on refining and marketing services due to a vast existing network in the economy. The trade and distribution of petroleum products is given complete market access and national treatment to FDI projects, subject to minimum investment of Rs.2000 crore. The Foreign Direct Investment (FDI) policy for the petroleum sector is laid down by Press Note No 4 (2006) Series dated 10.2.2006, as amended vide

Press Note No 5 (2008) Series dated 12.3.2008 of the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry. The Policy is as follows

Item	Approval Route	General Conditions
All activities other than refining and including market study and formulation,; investment/financing, setting up infrastructure for marketing in Petroleum and Natural Gas Sector  FDI up to 100%	Automatic	Subject to sectoral policy and regulations
<b>Refining</b>  FDI up to 49% in case of Public Sector Undertakings, without involving any divestment or dilution of domestic equity in existing public sector undertakings  FDI up to 100% in case of private companies	Through Foreign Investment Promotion Board (FIPB)  Automatic	Subject to sectoral policy and regulations  -do-

13.2 Since Government of India's liberalisation policy domestic as well as foreign companies have been invested Rs.86434 Million during 2004-05 to 2008-09 in oil & gas sector. The year-wise FDI inflows under oil & gas sector is given below:

#### FDI Inflows under Petroleum & Natural Gas Sector

(Rs. in Million)

Sl. No.	Year	FDI Inflows		% of FDI in P&NG to Total FDI
		Total All Sectors	Petroleum & Natural Gas Sector (P&NG)	
1	2	3	4	5
1	2004-05	146530	5182	3.54
2	2005-06	246130	636	0.26
3	2006-07	706300	4015	0.57
4	2007-08	986640	57291	5.81
5	2008-09	1229190	19310	1.57

#### **14. CREATION OF STRATEGIC PETROLEUM RESERVE**

14.1. Taking into account the oil security concerns of India, the Government has decided to set up Strategic Crude Oil Storage of 5 million metric tons (MMT) at three locations in the country viz. Visakhapatnam (1.0 MMT), Mangalore (1.5 MMT) and Padur (2.5 MMT). The capacity of Visakhapatnam site has been enhanced to 1.33 MMT. The proposed Strategic Crude Oil Storage would be in underground rock cavern / concrete structures. A special purpose vehicle namely Indian Strategic Petroleum Reserve Limited (ISPRL) as a subsidiary of OIDB has been created for implementation and management of strategic storage of crude oil. Crude oil from the reserves will be released by Government-appointed High Powered Committee, in the event of any short-term disruption in supplies, a natural calamity or any unforeseen global event leading to an abnormal increase in prices. The project is likely to be completed by the end of 2012.

#### **15. PETROLEUM AND NATURAL GAS REGULATORY BOARD**

15.1. The Central Government has brought into force the provisions of Petroleum & Natural Gas Regulatory Board (PNGRB) Act, 2006, except section 16 thereof, with effect from 1<sup>st</sup> October, 2007. The PNGRB comprises Chairman and four Members, including one Member (Legal) in the rank of Secretary and Additional Secretary to Government of India respectively. The Chairman and all the Members has already joined the Board. It is envisaged that the board will regulate the refining, processing, storage, transportation, distribution, marketing and sale of petroleum, petroleum products and natural gas excluding production of crude oil and natural gas so as to protect the interest of consumers and entities engaged in specific activities relating to petroleum, petroleum products and natural gas and to ensure uninterrupted and adequate supply of these

products in all parts of the country and to promote competitive markets and for matters connected therewith or incidental thereto.

## 16. PRICE AND SUBSIDY ISSUES

16.1. Global prices of crude oil and petroleum products have remained high and volatile since 2003-04. The Indian basket of crude oil, which averaged \$79.25 / bbl during 2007-08, had gone up to an unprecedented level of \$142.04 per barrel on 3rd July'2008 before declining sharply due to fall in demand. The average price of Indian basket of crude oil for 2008-09 was \$83.57/bbl. The crude oil price has again started rising sharply crossing US\$80//bbl in October 2009. The average price of Indian basket of crude oil for 2009-10 (Up to 23rd October'09) is \$64.80/bbl

16.2. The trend in the international prices of crude oil and major petroleum products since March 2002 is given below:

### International prices of crude oil and major petroleum Products

Period	Crude Oil (Indian Basket) \$/bbl.	Petrol \$/bbl.	Diesel \$/bbl.	Kerosene \$/bbl.	LPG \$/MT
Mar-02	23.31	26.43	23.27	23.65	194.00
2002-03	26.65	30.04	28.86	29.24	279.67
2003-04	27.97	35.01	30.39	31.11	277.02
2004-05	39.21	48.97	46.91	49.51	368.57
2005-06	55.72	64.51	64.70	69.43	481.04
2006-07	62.46	72.62	74.12	77.03	499.67
2007-08	79.25	90.76	92.91	94.33	683.49
2008-09	83.57	89.42	101.75	104.37	688.00
2009-10 (Upto 23.10.09)	64.80	71.09	69.42	69.92	487.34

April-09	50.14	58.27	56.69	57.77	401.00
May-09	58.00	65.48	62.46	62.56	392.00
June-09	69.12	75.01	74.25	74.51	431.00
July-09	64.83	70.84	69.06	70.47	524.00
August-09	71.98	80.13	76.83	76.60	508.00
September-09	67.70	73.84	72.14	72.22	583.00
October'09 (Up to 23.10.09)	72.03	74.74	75.53	76.25	587.00

- Composition of Indian Basket of Crude represents average of Oman & Dubai for sour grades and Brent (Dated) for sweet grade in the ratio of 63.5:36.5 for 2009-10, 62.3:37.7 for 2008-09, 61.4:38.6 for 2007-08, 59.8:40.2 for the year 2006-07, 58:42 for the year 2005-06 and 57:43 for the prior periods.
- Price of kerosene & Diesel (0.5% sulphur) is for Arab Gulf Market.
- LPG Price is Saudi Aramco CP based on 60:40 butane / propane ratio.
- Price of Petrol is 92 RON unleaded for Singapore market.

### ***Impact on Oil Marketing Companies***

16.3. The oil marketing companies have incurred under-recoveries owing to non-revision of selling prices in line with the prevailing international prices. The year-wise under-recovery incurred by oil marketing companies is as follows:

### **Under Recoveries Incurred**

	(Rs. in crore)				
Under-recovery *	2005-06	2006-07	2007-08	2008-09	Apr-Sep'09
Petrol	2723	2027	7332	5181	2197
Diesel	12647	18776	35166	52286	1806
Domestic LPG	10246	10701	15523	17600	4094
PDS Kerosene	14384	17883	19102	28225	7759
Total	40000	49387	77123	103292	15856

\*Gross under-recoveries before sharing by upstream oil companies/ oil bonds/ refinery discounts etc.

### ***Equitable Burden Sharing***

16.4. To insulate the consumer from the volatile international oil prices, Government has been following the equitable burden sharing principle under which the major burden of the under-recoveries incurred by the OMCs on the sale of the sensitive petroleum products is borne by the Government, Upstream Oil Companies and the OMCs with only a small portion of the burden being passed on to the consumer through minimal price increases. The burden sharing over the past few years has been as follows:

### **Sharing of Burden**

(Rs. Crore)

	2005-06	2006-07	2007-08	2008-09	Apr-Sep'09
Upstream Sharing	14,000	20,507	25,708	32000*	4,003**
Oil Bonds	11,500	24,121	35,290	71292	Nil
Absorbed by OMCs	14,500	4,759	16,125	Nil	11,853
<b>Total</b>	<b>40,000</b>	<b>49,387</b>	<b>77,123</b>	<b>103,292</b>	<b>15,856</b>

\*For the year 2008-09, OMCs have been additionally compensated against Import Losses of Rs.943 Crore in form of upstream assistance.

\*\* Upstream sharing is only for under recoveries against Petrol & Diesel.

The prices of the sensitive petroleum products were raised on 2<sup>nd</sup> July 2009 by Rs.4/litre for petrol, Rs.2/litre for diesel.

### ***Upstream contribution***

16.5. The amounts contributed by upstream oil companies for the last three financial years and during the period April-September'09 are tabulated below:

### **Contribution by Upstream Companies**

(Rs. Crore)

Year	ONGC	GAIL	OIL	Total
2005-06	11958	1064	978	14000
2006-07	17025	1488	1994	20507
2007-08	22000	1401	2307	25708

2008-09*	27374	1694	2932	32000
April-Sept.'09	3059	533	411	4003

\* OMCs have been additionally compensated against Import Losses of Rs.943 Crore.  
ONGC :Rs.852 Crore & OIL :Rs.91 Crore.

### **Oil Bonds**

16.6. During the year 2008-09, the Central Government sanctioned bonds worth Rs. 71,292 crore to Public Sector Oil Marketing Companies (IOCL, BPCL & HPCL) in respect of under recoveries on marketing of sensitive petroleum products.

### **SUBSIDY ON PDS KEROSENE AND DOMESTIC LPG**

16.7. The year-wise subsidy on PDS Kerosene and Domestic LPG for the years 2002-03, 2003-04, 2004-05, 2006-07, 2007-08 and the period April-Sep'2009 (estimated) is tabulated below:

#### **Subsidy on LPG (Domestic)**

Year	Per Unit Subsidy (Rs./Cylinder)		
	From Govt. (Budget)	By Oil Companies	Total
2002-03	67.75	62.27	130.02
2003-04	45.18	89.54	134.72
2004-05	22.58	124.89	147.47
2005-06	22.58	152.46	175.04
2006-07	22.58	156.08	178.66
2007-08	22.58	214.05	236.63
2008-09	22.58	234.88	257.46
April-Sept.'09 (estimated)	22.58	109.03	131.61

**Subsidy on SKO (PDS)**

Year	Per Unit Subsidy (Rs./litre)		
	From Govt. (Budget)	By Oil Companies	Total
2002-03	2.45	1.69	4.14
2003-04	1.63	3.12	4.75
2004-05	0.82	7.96	8.78
2005-06	0.82	12.10	12.92
2006-07	0.82	15.17	15.99
2007-08	0.82	16.23	17.05
2008-09	0.82	24.06	24.88
April-Sept.'09 (estimated)	0.82	13.30	14.12

16.8. The average subsidy per unit of selling price on Domestic LPG and PDS Kerosene, and actual payments from the Exchequer were as follows:-

From Govt. (Budget)	Level	Domestic LPG	PDS Kerosene	Payments released from Union Budget (Rs. Crore)
2002-03		67.75	2.45	4495.80
2003-04	At 2/3 <sup>rd</sup> Level	45.18	1.63	6292.44
2004-05	At 1/3 <sup>rd</sup> Level	22.58	0.82	2930.31
2005-06	At 1/3 <sup>rd</sup> Level	22.58	0.82	2661.99
2006-07	At 1/3 <sup>rd</sup> Level	22.58	0.82	2523.76
2007-08	At 1/3 <sup>rd</sup> Level	22.58	0.82	2640.60
2008-09	At 1/3 <sup>rd</sup> Level	22.58	0.82	2688.42

***FREIGHT SUBSIDY (FOR FAR FLUNG AREAS) SCHEME 2002***

16.9. Freight subsidy for supplies and sales of products in the notified far flung areas is provided for PDS Kerosene and Domestic LPG. The subsidy for the year 2004-05 to 2009-2010 is to be paid at 1/3<sup>rd</sup> level of the rates for 2002-03. The actual payments released from the Union Budget under this scheme are as under:

**Payments for Freight Subsidy**

Year	(Rs. In crore)
	Payments Released
2002-03	62.35
2003-04	58.74

2004-05	26.07
2005-06	20.97
2006-07	25.27
2007-08	28.27
2008-09	22.22

16.10. Constitution of Expert Committee to make recommendations for a viable and sustainable pricing policy for sensitive petroleum products. The Finance Minister, in his Budget Speech on 06.07.2009, had announced the setting up of an Expert Group to advise on a viable and sustainable system of pricing petroleum products. Accordingly, the Government has constituted an Expert Group under the Chairmanship of Dr. Kirit S. Parikh, former member Planning Commission to examine the current pricing policy of the four sensitive petroleum products namely Petrol, Diesel, PDS Kerosene and Domestic LPG and make recommendations for a viable and sustainable pricing policy for these products. This may, inter-alia include:

- (a) Examination of the current taxation structure on the sensitive petroleum products, with particular reference to Petrol and Diesel and make recommendations to rationalize the taxes levied by the Central and State Governments.
- (b) Examination of the financial health of the Public Sector Oil Marketing Companies and to recommend ways of compensating them for their under-recoveries in case they are not permitted to charge market prices as a result of Government's intervention, in order to protect consumers.
- (c) Any other matter, which the Expert Group may consider necessary.

The committee is likely to give its recommendations by December 2009.

## **17. FINANCIAL POSITION OF OIL MARKETING COMPANIES**

### ***FINANCIAL PERFORMANCE***

17.1. The profitability trend of oil marketing companies is given as under:

Company	2006-07	2007-08	2008-09	(Rs. Crore)
				April – June'09
IOC	7499	6963	2950	3683
BPC	1806	1581	736	614
HPC	1571	1135	575	649
Total	10876	9679	4261	4946

\*April-September'09 results are yet to be announced by OMCs

### **GROWTH IN CONSUMPTION**

17.2. Apart from the spiralling international oil prices, the high growth in the consumption of Diesel, Petrol and Domestic LPG in the country is also leading to substantial increase in under-recoveries of OMCs. The growth in OMCs' sale of Diesel, which was already high at 14.3% during 2007-08, increased to 16.6% during April-September 2008. Bulk consumers have been substituting Naphtha and Furnace Oil with Diesel as the retail selling price of Diesel was lower than that of Naphtha and Furnace Oil. Due to abnormal growth in consumption, Diesel alone is contributing over 50% of the total under-recoveries of OMCs during the current year, as against 32% in 2005-06. The growth in OMCs' sale of Petrol is also high at 14% during April-Sept 08. The abnormal growth in demand for these products has resulted in increase of product imports by OMCs. The higher cost of imports, in the face of the Government-modulated domestic retail prices, has resulted in additional losses to OMCs.

### **HIGHER BORROWINGS & INTEREST BURDEN**

17.3. The OMCs have had to borrow heavily during 2008-09. Their combined borrowings increased to Rs.88,898 crore, at the end of March 2009 from Rs.67,332 crore in March 2008. The current position of borrowings as on 30<sup>th</sup> September '09 is Rs.91,157 crore. Not only have the OMCs had to borrow heavily, they have done so at much higher rates of interest. The combined interest burden of OMCs during 2008-09 was Rs.8,201 crore as against Rs.3,016 crore in the previous year.

Initial Public Offer (IPO) of Oil India Limited

17.4. Following the decision of CCEA and the Empowered Group of Ministers, the IPO of Oil India Limited was opened for subscription between 7<sup>th</sup> September, 2009 and 10<sup>th</sup> September, 2009 in order to obtain the listing of OIL's shares on the Stock Exchanges and also divest a portion of Government's stake in the Company. At the Issue Price of Rs.1050/- per share, the IPO was oversubscribed by 31 times.

17.5. OIL was successfully listed in the Stock Exchanges on 30<sup>th</sup> September, 2009. In the post-issue share holding pattern, Government holding in OIL is 78.43%. The Government also disinvested 10% of its holding in the pre-issue paid-up capital of OIL in favour of IOCL, BPCL & HPCL. At the issue price of Rs. 1050/- per share, the realisation to the Government was Rs. 2247.04 crore and for OIL was Rs. 2777.25 crore..

## **18. ENERGY CONSERVATION**

### ***BIO-FUELS***

18.1. Ministry of Petroleum & Natural Gas vide its notification dated 20<sup>th</sup> September, 2006 has directed the Oil Marketing Companies (OMCs) to sell 5% Ethanol Blended Petrol (EBP) subject to commercial viability as per Bureau of Indian Standards specifications in entire country except North-Eastern States, Jammu & Kashmir, Andaman & Nicobar Islands and Lakshdweep with effect from 1<sup>st</sup> November, 2006.

18.2. At present 5% EBP programme is being implemented in 14 States and 3 UTs. OMCs have finalised tenders for ethanol in all these States. The requirement of ethanol for the three year period is estimated about 180 crore litres. The OMCs have been able to contract 146.6 crore litres. They have so far procured 58.42 crore litres under the programme (as on 15.10.2009).

18.3. With regard to increasing the ratio of 10% blending of ethanol optional from 2007 and making it mandatory from October, 2008, specifications for 10%

blending of ethanol with petrol have been finalized by the Bureau of Indian Standards (BIS). Also, the Society for Indian Automobile manufacturers (SIAM) has raised certain concerns with regard to 10% blended petrol which need to be considered in consultation with all the stakeholders. SIAM is also of the view that unless there is confirmation about sufficient uninterrupted availability, 10% EBP may not be implemented. Upon stabilization of the 5% EBP programme, further steps for optional and mandatory blending at 10% EBP can be taken, subject to the factors mentioned earlier. Ministry of Petroleum & Natural Gas has taken note of this concern and has directed IOC and OMCs to take up a pilot project study using 10% ethanol to assess the suitability and evaluation of 10% ethanol blend on Gasoline vehicle. This pilot project has already commenced at Aonla & Desur locations on pilot project basis from 15.12.2008 and 20.12.2008 respectively. The final report from these studies is expected to be available by 15.12.2009.

### ***Ethanol***

18.4. On 20.9.2006, the Government notified that with effect from 1 November 2006, subject to commercial viability, 5 per cent ethanol blended petrol will be sold countrywide, except North East, J&K, Lakshadweep and Andaman & Nicobar Islands. For the purpose, the landed cost of ethanol is compared with benchmark price of landed cost of petrol at a particular location, including transportation, all taxes and duties paid etc. At present, Oil Manufacturing Companies (OMC) is procuring ethanol at a basic price of Rs.21500 per kilo litre. As on 15.10.2009, against a requirement of 180 crore litre of ethanol for 3 years, OMC have contracted for 146.6 crore litre. So far, 58.42 crore litre Ethanol has been procured till 15.10.2009.

### ***Bio-diesel***

18.5. On 9.10.2005, the Ministry of Petroleum and Natural Gas had announced a bio-diesel purchase policy which came into effect from 1.1.2006. The policy prescribes that the oil marketing companies in the public sector shall purchase bio-diesel of prescribed BIS specification from registered authorized suppliers through 20 purchase centres at a uniform price of Rs. 25 per litre. The purchase

price can be reviewed by the oil companies every six months with due consideration to market conditions. In accordance with this policy, the revised procurement price was fixed at Rs.26.50 litre, delivered at purchase locations and inclusive of all taxes. However, so far, no bio-diesel has been offered for purchase under the policy.

## **19. INTERNATIONAL CO-OPERATION**

19.1. To enhance its energy security, India is engaged in bilateral cooperation with foreign countries as well as interaction at regional and global level. During the current financial year the important events/meetings/ MOUs have been taken place:

### ***India-Kazakhstan Inter-Governmental Commission in Astana in March 2009.***

19.2. A high power delegation led by Hon'ble Minister(P&NG) alongwith officers of MOP&NG, Ministry of External Affairs, Department of Commerce, Ministry of Chemical and Fertilizers, NTPC and OVL visited Astana, Kazakhstan to attend the 7<sup>th</sup> Meeting of the India-Kazakhstan Inter-Governmental Commission on Trade, Economic, Scientific and Technical, Industrial and Cultural Cooperation held on 12-13 March 2009. The meeting was co-chaired by Minister(P&NG) and Minister of Energy and Mineral, Kazakhstan. During the meeting a protocol was signed on 13<sup>th</sup> March, 2009 to enhance further bilateral cooperation between the two countries in various sectors including Oil & Gas.

### ***4<sup>th</sup> OPEC International Seminar, Vienna, 18-19 March, 2009.***

19.3. Hon'ble Minister (P&NG) led a High Power delegation consisting of the officials of the Ministry and Oil PSUs to Vienna from March, 18-19, 2009 to attend 4<sup>th</sup> OPEC International Seminar. The theme for the Seminar was Petroleum: Future Stability and Sustainability. Energy/Petroleum Ministers from Angola, Iran, Nigeria, Saudi Arabia, Venezuela, Iraq, Libya, Kuwait, Qatar and Brazil had participated in the Seminar. CEOs of Royal Dutch Shell, Chevron and

ENI also participated in these events. Seminar offered an excellent opportunities for Minister to meet his counterparts from various countries which India has close bilateral ties in the oil and gas sector.

***Turkey- Israel Ceyhan-Red Sea Project :***

19.4. Joint Secretary (International Cooperation) alongwith Chief Manager (Business Development), Indian Oil Corporation Limited participated in the second trilateral meeting of Turkey-Israel Ceyhan Red Sea Project was held on 27-28 April 2009 in Tel Aviv, Israel. This project envisages transport of crude oil from Ceyhan port in Turkey to Ashkelon port in Israel in the Mediterranean Sea, initially through very large crude carries (VLCCs) and eventually by laying a sub-sea pipeline. Thereafter, crude oil will be transported through the existing Ashkelon-Eilat pipeline in Israel to Eilat port on the Red Sea. From there, crude oil may be carried to India/other parts of Asia.

***G-8 Energy Minister's Meeting - Rome***

19.5. Secretary (P&NG) and Chairman and Managing Director,ONGC participated in the G-8 Energy Minister's Meeting held on 24-25 May 2009 in Rome, Italy. The important themes covered at the meeting were investment for energy security, sustainable energy strategies to cope with global climate change and acting against energy poverty.

***ASEM (Asia-Europe Meeting) Ministerial Conference on Energy Security Brussels, 17-18 June 2009***

19.6. A delegation led by Minister of State(P&NG) alongwith Additional Secretary(P&NG) and Additional Secretary(Energy Security), Ministry of External Affairs participated in the ASEM Ministerial Conference on Energy Security Brussels, 17-18 June 2009. The issues relating to energy security were addressed in the said conference. ASEM was set up in 1996 to bridge the communication gap between Asia and Europe and to strengthen further interaction and mutual understanding between the two continents. India was formally admitted as an ASEM member in 2007. Hon'ble Prime Minister attended

the 7th ASEM Summit in Beijing in October 2008. ASEM has 45 partners/countries as members including Brunei, China, Indonesia, Malaysia, Myanmar, Pakistan, Singapore, UK and Vietnam.

***International Conference – “Reliable and Stable Transit of Energy and its Role in Ensuring Sustainable Development and International Cooperation”.***

19.7. Secretary (P&NG) led a 5 member delegation to Ashgabat, Turkmenistan on 23-24 April 2009 to represent India at a High Level International Conference, “Reliable and Stable Transit of Energy and its Role in Ensuring Sustainable Development and International Cooperation”. The delegation included officials from Department of Fertilizers, ONGC Videsh Ltd and GAIL. Secretary met H.E. Mr. Tachberdi Tagiev, Deputy Prime Minister in charge of Oil and Gas and Mr. Annaguly Deryaev, Minister of Oil and Gas to discuss issues of bilateral interest. India joined the TAPI gas pipeline project in April 2008. During the meetings, Secretary(P&NG) reiterated India’s commitment for comprehensive engagement with Turkmenistan in energy sphere. India proposed the idea of an International Gas Highway built, owned and operated by International community. A proposal was also made to set up an 1-2 million tone gas-based fertilizer plant in Turkmenistan with Indian investment. The Indian side showed its willingness to set up petrochemical project in Turkmenistan and exchange expertise on use of CNG in transport sector.

***3<sup>rd</sup> Asian Ministerial Energy Round Table 25-27 April 2009, Tokyo, Japan.***

19.8. A delegation led by Additional Secretary(P&NG) with Director(S&P), MoP&NG participated in 3<sup>rd</sup> Asian Ministerial Energy Round Table held on 25-27 April 2009 in Tokyo, Japan. The Round table was attended by 20 oil and gas producing and consuming countries namely, UAE, Turkey, Singapore, South Korea, Philippines, Pakistan, Oman, Malaysia, Kuwait, Iraq, Iran, Indonesia, India, China, Brunei, Bahrain, Qatar, Japan, Vietnam and Saudi Arabia. Besides, the International Energy Forum(IEF) and the International Energy Agency were also represented. The Round Table meeting was chaired by Minister of Economy, Trade and Industry, Japan and co-chaired by Deputy Premier and Minister of Energy & Industry, Qatar. The issues related to Energy

Security oil prices and climate change were discussed. It was decided that the Fourth Asian Energy Ministerial Round Table would be hosted by Qatar in 2011, by South Korea in 2013 and by Kuwait in 2015.

***SCO Head of Government Council meeting , Beijing on 14 October 2009.***

19.9. Minister (P&NG) represented India at the Head of Government Council meeting of the Shanghai Cooperation Organization(SCO), held in Beijing on 14 October, 2009 on behalf Hon'ble PM. The delegation included officials from Ministry of P&NG and Ministry of External Affairs. The Premier of the State Council of the People's Republic of China chaired the meeting. PM, Russian Federation and PM of Kazakhstan, took part. In the meeting Minister(P&NG) said that the Shanghai Cooperation Organization(SCO) can play an important role in strengthening the linkages in the areas of trade, business exchanges and investment while also adopting mutually reinforcing monetary and fiscal policies in the context of global financial situation witnessed recently. Making a statement as leader of Indian delegation at SCO Head of Government (HOG) Meeting in Beijing, Minister (P&NG) underlined that most of the developing countries have been affected by the global financial and economic crisis in varying degrees. Referring to terrorism, Minister (P&NG) asserted that the time has come to adopt a policy of zero tolerance to terrorism and that the need of the hour is to have greater cooperation and exchange of information and coordination. On the energy front, Minister (P&NG) has stated that the energy security figure very high on our national agenda. The Minister called for ensuring stability and predictability of world energy markets as it represents a mix of energy producing and consuming countries. He expressed hope for SCO Energy Club taking a concrete shape early.

***2<sup>nd</sup> India-Africa Hydrocarbons Conference, New Delhi, 7-8 December 2009***

19.10. The Ministry of Petroleum and Natural Gas, Government of India, in association with the Federation of Indian Chambers of Commerce and Industry (FICCI), is organizing the 2<sup>nd</sup> India-Africa Hydrocarbons Conference in New Delhi on 7-8 December 2009. The main objective of the Conference is to bring together

Ministers in-charge of oil and gas, top Government officers and captains of the industry for common benefit. Invitation has been extended to 22 African countries.

***MOU between PPAC and IEA***

19.11. Petroleum Planning and Analysis Cell (PPAC) and International Energy Agency, Paris (IEA) have signed an MOU on 23 October, 2009 on cooperation in the Oil and Gas sector. This MOU provides a cooperative framework between the two agencies for exchange of oil and gas market data and statistics, and of technical experience and expertise in data management and analysis and for conduct of joint studies on global and regional oil and gas markets. The recurring oil market volatility and resultant uncertainties require accurate analysis. IEA has expertise in data gathering and analysis on oil markets since its inception in 1974. By entering into this MOU, PPAC will enrich its knowledge and understanding of the functioning of the oil and gas markets at regional and global level and develop sound analytical techniques.

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