

Ready Reckoner

Snapshot of India's Oil & Gas data

February, 2016



Analysis • Knowledge • Information

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

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Highlights

- Indigenous crude oil production during February, 2016 was marginally more at 0.7% (19 TMT) than that of February, 2015. On cumulative basis, the production was 1.1% (364 TMT) less than the April 2014 to February 2015 period.
- Production of petroleum products during February, 2016 saw a growth of 8.61% (1,516 TMT) over the corresponding month of the previous year. On cumulative basis during the period April 2015 to February 2016, there was a growth of 3.8% (7,697 TMT) in production as compared to the same period in the previous year.
- Except for IOCL's Haldia refinery CDU-1/VDU-1 units shutdown for 10 days starting from 27.2.2016 and MRPL's DHDT unit issues, there were no reported planned and unplanned shutdown of refinery units during February, 2016. This resulted in 106.8% capacity utilization during the month. Total product availability during the month from refineries/fractionators was 19,137 TMT against POL production of 17,621 TMT as compared to February 2015.
- IOCL's Paradip refinery was dedicated to the nation on 7th February, 2016 by Hon'ble Prime Minister. The installed capacity of the refinery is 15 MMTPA.
- Export of POL products improved during February, 2016 by 21.2% (1,010 TMT) as compared to February, 2015. On cumulative basis, POL exports were lower by 6.5% (3,858 TMT) as compared to April 2014 to February 2015 period.

- Petroleum product consumption registered a growth of 11.7% during February, 2016 as compared to 11.0% growth during February, 2015. Except for Kerosene and LDO, all other products registered positive growth during February, 2016. During the period April 2015 to February 2016 petroleum product consumption registered a growth of 10.0% (15.2 MMT) as compared to the same period last year.
- Gross production of natural gas for the month of February, 2016 was 2,565 MMSCM which was higher by 1.2% compared with the corresponding month of the previous year (2,534 MMSCM). The cumulative gross production for the current year till February, 2016 was 29,710 MMSCM which was lower by 3.6% compared with the corresponding period of the previous year (30,819 MMSCM)
- LNG import during the month was 1,788 MMSCM which was 62.6% higher than the corresponding month of the previous year (1,100 MMSCM). The cumulative import 19,563 MMSCM for the current year till February, 2016 was higher by 13.1% compared with the corresponding period of the previous year (17,299 MMSCM).
- The prices of Brent crude averaged \$32.48/bbl during February, 2016 as against \$30.69/bbl during January, 2016. Similarly the Indian basket crude averaged \$30.53/bbl during February, 2016 against \$28.08/bbl during the previous month.
- With the continuing downward trend in crude prices, the import bill of crude oil is estimated to reduce by 43% from \$113 billion in 2014-15 to \$64 billion in 2015-16 considering Indian basket crude oil price of \$ 36/bbl and \$/Rs=67 for the balance part of the financial year.

1. Selected Indicators of the Indian Economy

| Economic Indicators | | Unit/Base | 2012-13 | 2013-14 | 2014-15 | 2015-16 ^(P) |
|---------------------|---|-----------|-------------|----------------|-----------------------------|------------------------|
| 1 | Population (as on 1 st March 2011) | Billion | 1.2 | - | - | - |
| 2 | GDP at Factor Cost (Constant prices) | Growth % | 5.1 (NS) | 6.9 (NS) | 7.4 (AE) | - |
| 3 | Agricultural Production (Food grains) | MMT | 257.1 | 265.0 Final | 252.7 4 th AE | 253.16 2nd AE |
| | | Growth % | -0.8 | 3.1 | -4.6 | 0.5* |
| 4 | Gross Fiscal Deficit | % | -4.9 | -4.4 | -4.1 (Actuals) | -3.9 (RE) |

| Economic Indicators | Unit/Base | 2013-14 | 2014-15 | February | | April-February | | |
|---------------------|---|------------|---------|----------|-------|----------------|---------|--------|
| | | | | 2015 | 2016 | 2014-15 | 2015-16 | |
| 5 | Index of Industrial Production [@] | Growth % | -0.1 | 2.8 | 2.8 | -1.5 | 2.7 | 2.7 |
| 6 | Imports | \$ Billion | 450.2 | 448.0 | 28.7 | 27.3 | 412.6 | 351.8 |
| 7 | Exports | \$ Billion | 314.4 | 310.4 | 22.0 | 20.7 | 286.3 | 238.4 |
| 8 | Trade Balance | \$ Billion | -135.8 | -137.6 | -6.7 | -6.5 | -126.3 | -113.4 |
| 9 | Foreign Exchange Reserves | \$ Billion | 303.7 | 341.4 | 341.4 | 346.8 | | |

* Compared to first AE of 2014-15

@ IIP is for the month of December 2015 ; NS-New Series; PE-Provisional Estimates ; AE-Advanced Estimates; RE-Revised Estimates; BE-Budget Estimates

2. Import Dependency

| Details | | Unit/ Base | 2013-14 | 2014-15 | February | | April-February | |
|--|--|---------------|---------|---------|----------|---------------------|----------------|------------------------|
| | | | | | 2015 | 2016 ^(P) | 2014-15 | 2015-16 ^(P) |
| 1 | Crude Oil Production In India | MMT | 37.8 | 37.5 | 2.9 | 2.9 | 34.2 | 33.9 |
| 2 | Consumption of Petroleum Products | MMT | 158.4 | 165.5 | 14.2 | 15.9 | 150.8 | 166.0 |
| 3 | Production of Petroleum Products | MMT | 220.3 | 220.7 | 17.6 | 19.1 | 201.7 | 209.4 |
| 4 | Imports & Exports: | | | | | | | |
| Crude Oil Imports | | MMT | 189.2 | 189.4 | 13.0 | 16.9 | 172.9 | 184.2 |
| | | \$ Billion | 143.0 | 112.7 | 4.8 | 3.3 | 106.6 | 59.6 |
| Petroleum Products (POL) Imports | | MMT | 16.7 | 21.3 | 1.8 | 2.1 | 19.1 | 25.6 |
| | | \$ Billion | 12.3 | 12.1 | 0.7 | 0.7 | 11.2 | 9.4 |
| Gross Petroleum Imports (Crude + POL) | | MMT | 206.0 | 210.7 | 14.8 | 19.0 | 192.0 | 209.8 |
| | | \$ Billion | 155.2 | 124.9 | 5.5 | 4.0 | 117.8 | 69.0 |
| Petroleum Products Exports | | MMT | 67.9 | 63.9 | 4.8 | 5.8 | 59.0 | 55.2 |
| | | \$ Billion | 60.7 | 47.3 | 2.6 | 1.8 | 44.7 | 25.1 |
| 5 | Petroleum Imports as % of India's Gross Imports | % | 34.5 | 27.9 | 19.2 | 14.7 | 28.6 | 19.6 |
| 6 | Petroleum Exports as % of India's Gross Exports | % | 19.3 | 15.2 | 11.8 | 8.7 | 15.6 | 10.5 |
| 7 | Import Dependency (On Consumption) | % | 77.6% | 78.5% | 80.4 | 83.1 | 78.4 | 80.6 |

Note : Some sub-totals/totals may not add up due to rounding off at individual levels.

3. Indigenous Crude Oil Production (Million Metric Tonne)

| Details | 2013-14 | 2014-15 | February | | | April-February | | |
|---|--------------|--------------|------------------|-------------------|---------------------|---------------------|----------------------|------------------------|
| | | | 2015 (Actual) | 2016 (Target)* | 2016 ^(P) | 2014-15 (Actual) | 2015-16 (Target)* | 2015-16 ^(P) |
| ONGC | 19.2 | 18.6 | 1.4 | 1.9 | 1.5 | 17.0 | 20.7 | 17.0 |
| Oil India Limited (OIL) | 3.5 | 3.4 | 0.3 | 0.3 | 0.2 | 3.1 | 3.3 | 3.0 |
| Private / Joint Ventures (JVs) | 12.0 | 11.7 | 0.9 | 0.9 | 0.9 | 10.8 | 9.8 | 10.4 |
| Total Crude Oil | 34.7 | 33.8 | 2.6 | 3.0 | 2.6 | 30.9 | 33.8 | 30.3 |
| Condensate | 3.1 | 3.7 | 0.3 | | 0.3 | 3.3 | | 3.5 |
| Total (Crude + Condensate) (MMT) | 37.8 | 37.5 | 2.9 | 3.0 | 2.9 | 34.2 | 33.8 | 33.9 |
| Total (Crude + Condensate) (Million Bbl) | 277.0 | 274.7 | 21.1 | 22.0 | 21.2 | 251.0 | 248.0 | 248.3 |

*Target is inclusive of condensate. Note: Some sub-totals/totals may not add-up due to rounding off at individual levels

4. Domestic Oil & Gas Production vis a vis Overseas Production

| Details | 2013-14 | 2014-15 | February | | April-February | |
|--------------------------------------|---------|---------|----------|---------------------|----------------|------------------------|
| | | | 2015 | 2016 ^(P) | 2014-15 | 2015-16 ^(P) |
| Total Domestic (MMTOE) | 73.2 | 71.2 | 5.4 | 5.5 | 65.0 | 63.6 |
| Overseas production (MMTOE) | 8.78 | 9.61 | 0.8 | 0.8 | 8.7 | 8.8 |
| Overseas Production as % of Domestic | 12.0% | 13.5% | 14.7% | 14.6% | 13.4% | 13.8% |

5. High Sulphur (HS) & Low Sulphur (LS) Crude Oil Processing (MMT)

| Type of crude | | 2013-14 | 2014-15 | February | | April-February | |
|--|--------------------|--------------|--------------|--------------|---------------------|----------------|------------------------|
| | | | | 2015 | 2016 ^(P) | 2014-15 | 2015-16 ^(P) |
| 1 | High Sulphur Crude | 160.2 | 161.4 | 12.6 | 13.7 | 147.3 | 149.8 |
| 2 | Low Sulphur Crude | 62.2 | 61.9 | 5.0 | 5.3 | 56.6 | 60.4 |
| Total Crude | | 222.5 | 223.3 | 17.6 | 19.0 | 204.0 | 210.2 |
| Share of HS Crude processing of total | | 72.0% | 72.3% | 71.5% | 72.0% | 72.2% | 71.3% |

6. Quantity and Value of Crude oil imports

| Year | Quantity (MMT) | \$ Million | Rs. Crore |
|---------------------|----------------|------------|-----------|
| 2014-15 (Actuals) | 189.43 | 1,12,744 | 6,87,416 |
| 2015-16 (Estimated) | 201.68 | 64,248 | 4,18,563 |

* Note: April-February 2016 imports are based on actuals and for March 2016, the imports are estimated at \$36/bbl and Rs. 67/\$:

Impact of variation in Crude oil price & Exchange rate on Crude oil imports for March, 2016:

If Crude prices increased by One \$/bbl - Net Import bill increases by Rs. 863 crores (\$ 0.13 bn)

If Exchange rate of \$ increases by Rs. 1/\$ - Net Import bill increases by Rs.464 crores (\$ 0.07 bn)

7. Self Sufficiency in Petroleum Products (Million Metric Tonnes)

| Details | 2013-14 | 2014-15 | February | | April-February | |
|--|--------------|--------------|--------------|---------------------|----------------|------------------------|
| | | | 2015 | 2016 ^(P) | 2014-15 | 2015-16 ^(P) |
| 1. Indigenous Crude Oil Processing : | 33.9 | 34.2 | 2.7 | 2.6 | 31.4 | 31.2 |
| a) Products from Indigenous Crude (<i>93.3% of crude oil processed</i>) | 31.6 | 32.0 | 2.5 | 2.4 | 29.3 | 29.1 |
| b) Products from Fractionators (Including LPG and Gas) | 3.9 | 3.7 | 0.3 | 0.3 | 3.4 | 3.1 |
| 2. Total Production from Indigenous Crude & Condensate (a + b) | 35.5 | 35.6 | 2.8 | 2.7 | 32.6 | 32.2 |
| 3. Total Domestic Consumption | 158.4 | 165.5 | 14.2 | 15.9 | 150.8 | 166.0 |
| % Self Sufficiency (2 / 3) | 22.4% | 21.5% | 19.6% | 16.9% | 21.6% | 19.4% |

8. Refineries: Installed Capacity and Crude Oil Processing (MMTPA / MMT)

| Com-pany | Refinery | Installed Capacity (1.4.2015) | Crude Oil Processing | | | | | | | |
|----------|-------------------|-------------------------------|----------------------|-------------|---------------|---------------|------------|------------------|------------------|-------------|
| | | | 2013-14 | 2014-15 | February | | | April-February | | |
| | | | | | 2015 (Actual) | 2016 (Target) | 2016 (P) | 2014-15 (Actual) | 2015-16 (Target) | 2015-16 (P) |
| IOCL | Barauni (1964) | 6.0 | 6.5 | 5.9 | 0.5 | 0.5 | 0.5 | 5.4 | 5.8 | 6.0 |
| | Koyali (1965) | 13.7 | 13.0 | 13.3 | 1.0 | 1.1 | 1.2 | 12.3 | 12.1 | 12.6 |
| | Haldia (1975) | 7.5 | 8.0 | 7.7 | 0.6 | 0.6 | 0.6 | 7.0 | 7.1 | 7.1 |
| | Mathura (1982) | 8.0 | 6.6 | 8.5 | 0.6 | 0.7 | 0.7 | 7.7 | 7.7 | 8.0 |
| | Panipat (1998) | 15.0 | 15.1 | 14.2 | 1.1 | 1.2 | 1.3 | 12.9 | 13.9 | 13.9 |
| | Guwahati (1962) | 1.0 | 1.0 | 1.0 | 0.07 | 0.08 | 0.04 | 0.9 | 0.9 | 0.8 |
| | Digboi (1901) | 0.7 | 0.7 | 0.6 | 0.05 | 0.05 | 0.04 | 0.6 | 0.6 | 0.5 |
| | Bongaigaon(1979) | 2.4 | 2.3 | 2.4 | 0.2 | 0.2 | 0.2 | 2.2 | 2.1 | 2.2 |
| | Paradip (2016) | 15.0 * | - | - | - | - | ** | - | - | N.A. |
| | IOCL TOTAL | 69.2 | 53.1 | 53.6 | 4.2 | 4.4 | 4.6 | 48.9 | 50.2 | 51.2 |
| HPCL | Mumbai (1954) | 6.5 | 7.7 | 7.4 | 0.6 | 0.6 | 0.7 | 6.7 | 6.5 | 7.2 |
| | Visakh (1957) | 8.3 | 7.8 | 8.8 | 0.7 | 0.8 | 0.8 | 7.9 | 8.3 | 8.4 |
| HMEL | Bathinda (2012) | 9.0 | 9.3 | 7.3 | 0.5 | 0.7 | 0.7 | 6.4 | 8.2 | 9.8 |
| | HPCL-TOTAL | 23.8 | 24.8 | 23.5 | 1.9 | 2.1 | 2.2 | 21.1 | 23.0 | 25.4 |
| BPCL | Mumbai (1955) | 12.0 | 12.7 | 12.8 | 1.0 | 1.0 | 1.1 | 11.6 | 11.8 | 12.2 |
| | Kochi (1966) | 9.5 | 10.3 | 10.4 | 0.8 | 0.8 | 0.9 | 9.4 | 9.4 | 9.8 |
| BORL | Bina (2011) | 6.0 | 5.4 | 6.2 | 0.5 | 0.5 | 0.5 | 5.7 | 4.7 | 5.8 |
| | BPCL-TOTAL | 27.5 | 28.4 | 29.4 | 2.3 | 2.3 | 2.5 | 26.8 | 25.9 | 27.7 |

* - Capacity as on 1.3.2016 ; ** - During February 2016 approx. 0.5 MMT of crude oil was processed with approx.. 0.3 MMT POL production. ; N.A. - Not available

| Com- pany | Refinery | Installed Capacity (1.4.2015) | Crude Oil Processing | | | | | | | |
|--------------|-----------------------|-------------------------------------|----------------------|--------------|------------------|------------------|-------------|---------------------|---------------------|----------------|
| | | | 2013-14 | 2014-15 | February | | | April-February | | |
| | | | | | 2015 (Actual) | 2016 (Target) | 2016 (P) | 2014-15 (Actual) | 2015-16 (Target) | 2015-16 (P) |
| CPCL | Manali (1969) | 10.5 | 10.1 | 10.2 | 0.8 | 0.8 | 0.9 | 9.4 | 9.4 | 8.2 |
| | CBR (1993) | 1.0 | 0.6 | 0.5 | 0.04 | 0.04 | 0.05 | 0.5 | 0.5 | 0.5 |
| | CPCL-TOTAL | 11.5 | 10.6 | 10.8 | 0.8 | 0.9 | 0.9 | 9.8 | 9.9 | 8.7 |
| NRL | Numaligarh (1999) | 3.0 | 2.6 | 2.8 | 0.2 | 0.2 | 0.2 | 2.6 | 2.5 | 2.3 |
| ONGC | Tatipaka (2001) | 0.1 | 0.07 | 0.05 | 0.004 | 0.005 | 0.007 | 0.05 | 0.06 | 0.06 |
| MRPL | Mangalore (1996) | 15.0 | 14.6 | 14.6 | 1.2 | 1.3 | 1.3 | 13.1 | 13.8 | 14.0 |
| | ONGC TOTAL | 15.1 | 14.7 | 14.7 | 1.2 | 1.3 | 1.3 | 13.2 | 13.9 | 14.1 |
| RIL** | Jamnagar (DTA) (1999) | 33.0 | 30.3 | 30.9 | 2.5 | 2.5 | 2.6 | 28.9 | 28.9 | 29.6 |
| | Jamnagar (SEZ) (2008) | 27.0 | 37.7 | 37.2 | 2.8 | 2.8 | 3.0 | 34.0 | 34.0 | 33.9 |
| EOL | Vadinar (2006) | 20.0 | 20.2 | 20.5 | 1.6 | 1.7 | 1.7 | 18.7 | 17.1 | 17.3 |
| | All India | 230.1 | 222.5 | 223.3 | 17.6 | 18.3 | 19.0 | 204.0 | 205.3 | 210.2 |

** RIL target for 2015-16 is previous year crude processing. Note: Some sub-totals/totals may not add up due to rounding off at individual levels

| 9. Major Crude and Product Pipeline network | | | | | | | | | | |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| | | ONGC* | OIL | Cairn | HMEL | IOCL | BPCL | HPCL | Other | Total |
| Crude Oil (as on 1.4.2015) | Length (KM) | 1,214 | 1,193 | 670 | 1,017 | 4,448 | 937 | - | - | 9,479 |
| | Cap (MMTPA) | 60.06 | 8.4 | 8.7 | 9 | 40.4 | 6 | - | - | 132.56 |
| Products (as on 1.4.2015) | Length (KM) | - | 654 | - | - | 6,633 | 1,935 | 2,514 | 2,687 | 14,423 |
| | Cap (MMTPA) | - | 1.7 | - | - | 40.09 | 14.94 | 23.57 | 9.27 | 89.57 |

Other includes GAIL and Petronet India ; * 94 KM of ONGC's crude pipeline is either "not in use" or in "standby" and is not included above.

| 10. Gross Refining Margins (GRM) of Refineries (\$/bbl) | | | | | |
|---|----------------|-------------|-------------|-------------|-----------------|
| Company | Refinery | 2012-13 | 2013-14 | 2014-15 | April-Dec, 2015 |
| IOCL | Barauni | 2.40 | 6.68 | -1.20 | 4.33 |
| | Koyali | 4.61 | 4.52 | 4.79 | 7.36 |
| | Haldia | 0.85 | 2.84 | -1.51 | 4.53 |
| | Mathura | 0.55 | 2.10 | -2.19 | 4.23 |
| | Panipat | 3.34 | 3.62 | -1.97 | 4.84 |
| | Guwahati | 9.52 | 6.38 | 8.68 | 15.60 |
| | Digboi | 20.81 | 15.41 | 13.73 | 15.55 |
| | Bongaigaon | 5.26 | 6.71 | -0.26 | 11.10 |
| | Average | 3.16 | 4.24 | 0.27 | 5.83 |
| BPCL | Kochi | 5.36 | 4.80 | 3.17 | 7.17 |
| | Mumbai | 4.67 | 3.95 | 3.97 | 6.30 |
| | Average | 4.97 | 4.33 | 3.62 | 6.69 |
| HPCL | Mumbai | 2.08 | 5.38 | 4.88 | 7.46 |
| | Visakhapatnam | 2.08 | 1.50 | 1.12 | 5.40 |
| | Average | 2.08 | 3.43 | 2.84 | 6.35 |
| CPCL | Chennai | 0.99 | 4.08 | 1.97 | 5.36 |
| MRPL | Mangalore | 2.45 | 2.67 | -0.64 | 3.97 |
| NRL | Numaligarh | 10.52 | 12.09 | 16.67 | 23.66 |
| BORL | Bina | 7.00 | 7.70 | 6.10 | 12.70 |
| RIL | Jamnagar | 9.20 | 8.10 | 8.60 | 10.80 |
| Essar | Vadinar | 7.96 | 7.98 | 8.37 | 10.45 |

11. GRM of North East Refineries excluding Excise Duty Benefit (\$/bbl)

| Company | Refinery | 2012-13 | 2013-14 | 2014-15 | April-Dec, 2015 |
|---------|------------|---------|---------|---------|-----------------|
| IOCL | Guwahati | 3.43 | 0.88 | 0.96 | 1.37 |
| | Digboi | 13.25 | 8.50 | 5.42 | 4.20 |
| | Bongaigaon | 0.25 | 2.34 | -6.51 | 1.68 |
| NRL | Numaligarh | 4.86 | 6.98 | 9.46 | 9.63 |

12. Production and Consumption of Petroleum Products (Million Metric Tonnes)

| Products | April-March 2014-15 | | February 2015 | | February 2016 ^(P) | | April-February 2014-15 | | April-February 2015-16 ^(P) | |
|-------------------|---------------------|--------------|---------------|--------------|------------------------------|--------------|------------------------|--------------|---------------------------------------|--------------|
| | Production | Consumption | Production | Consumption | Production | Consumption | Production | Consumption | Production | Consumption |
| LPG | 9.8 | 18.0 | 0.8 | 1.5 | 0.9 | 1.7 | 8.9 | 16.4 | 9.6 | 17.7 |
| MS | 32.2 | 19.1 | 2.6 | 1.6 | 3.0 | 1.8 | 29.7 | 17.4 | 32.1 | 19.8 |
| NAPHTHA | 17.5 | 11.1 | 1.3 | 1.0 | 1.4 | 1.1 | 15.9 | 9.9 | 16.0 | 12.1 |
| ATF | 11.1 | 5.7 | 1.0 | 0.5 | 1.1 | 0.5 | 10.1 | 5.2 | 10.5 | 5.7 |
| SKO | 7.6 | 7.1 | 0.6 | 0.6 | 0.6 | 0.6 | 7.0 | 6.5 | 6.8 | 6.3 |
| HSD | 94.3 | 69.4 | 7.3 | 5.8 | 7.8 | 6.4 | 86.3 | 63.5 | 89.2 | 67.9 |
| LDO | 0.4 | 0.4 | 0.03 | 0.03 | 0.03 | 0.03 | 0.3 | 0.3 | 0.4 | 0.4 |
| LUBES | 0.9 | 3.3 | 0.08 | 0.3 | 0.09 | 0.3 | 0.8 | 2.9 | 0.9 | 2.9 |
| FO/LSHS | 12.2 | 6.0 | 0.9 | 0.5 | 0.8 | 0.6 | 11.1 | 5.5 | 9.9 | 5.9 |
| BITUMEN | 4.7 | 5.1 | 0.4 | 0.6 | 0.6 | 0.7 | 4.2 | 4.4 | 4.5 | 5.1 |
| OTHERS | 30.0 | 20.4 | 2.6 | 1.9 | 2.8 | 2.1 | 27.4 | 18.7 | 29.6 | 22.2 |
| ALL INDIA | 220.7 | 165.5 | 17.6 | 14.2 | 19.1 | 15.9 | 201.7 | 150.8 | 209.4 | 166.0 |
| Growth (%) | 0.2% | 4.5% | -0.1% | 11.0% | 8.6% | 11.7% | 0.4% | 4.7% | 3.8% | 10.0% |

13. LPG Consumption (Thousand Metric Tonne)

| LPG Category | 2013-14 | 2014-15 | February | | | April-February | | |
|-----------------------------------|-----------------|-----------------|---------------|---------------------|-------------|----------------|------------------------|------------|
| | | | 2015 | 2016 ^(P) | Gr (%) | 2014-15 | 2015-16 ^(P) | Gr (%) |
| 1. PSU Sales : | | | | | | | | |
| LPG-Packed Domestic | 14,411.6 | 16,040.4 | 1317.9 | 1519.4 | 15.3 | 14617.9 | 15572.4 | 6.5 |
| LPG-Packed Non-Domestic | 1,073.6 | 1,051.0 | 111.4 | 136.0 | 22.1 | 946.0 | 1322.2 | 39.8 |
| LPG-Bulk | 245.7 | 315.7 | 28.9 | 24.4 | -15.6 | 286.0 | 282.5 | -1.2 |
| Auto LPG | 194.3 | 163.8 | 15.0 | 14.2 | -5.3 | 149.7 | 156.1 | 4.3 |
| Sub-Total (PSU Sales) | 15,925.2 | 17,570.9 | 1473.2 | 1694.0 | 15.0 | 15999.6 | 17333.2 | 8.3 |
| 2. Direct Private Imports* | 368.5 | 429.2 | 23.5 | 34.7 | 47.7 | 392.8 | 381.4 | -2.9 |
| Total (1+2) | 16,293.6 | 18,000.0 | 1496.7 | 1728.7 | 15.5 | 16392.4 | 17714.6 | 8.1 |

Note: April-December 2015 data as per DGCIS. January 2016-February 2016 data prorated on the basis of 2015-16 (April-December) data.

14. Industry Marketing Infrastructure (as on 31.3.2015) (Provisional)

| Particulars | IOCL | BPCL | HPCL | RIL | ESSAR | SHELL | Others | Total |
|---|--------|--------|--------|-------|-------|-------|--------|---------------|
| Terminal/ Depots (Nos.) | 136 | 83 | 105 | 5 | 1 | 0 | 6 | 336 |
| Aviation Fuel Stations (Nos.) | 98 | 40 | 35 | 27 | 3 | 0 | 1 | 204 |
| Retail Outlets (total) (Nos.) | 24,405 | 12,809 | 13,233 | 1,400 | 1,491 | 76 | 4 | 53,418 |
| LPG Distributors (total) (Nos.) ^(PSU only) | 7,934 | 4,044 | 3,952 | 0 | 0 | 0 | 0 | 15,930 |
| SKO/LDO Agencies (Nos.) | 3,919 | 1,001 | 1,638 | 0 | 0 | 0 | 0 | 6,558 |
| LPG Bottling Plants (Nos.) ^(PSU only) | 91 | 50 | 45 | 0 | 0 | 0 | 1 | 187 |
| LPG Bottling capacity (TMTPA) ^(PSU only) | 7,812 | 3,165 | 3,057 | 0 | 0 | 0 | 10 | 14,044 |
| Rural ROs (Nos.) | 6,230 | 2,184 | 2,664 | 108 | 385 | 9 | 0 | 11,580 |
| RGGLVY (Nos.) | 2,096 | 1,182 | 1,164 | 0 | 0 | 0 | 0 | 4,442 |
| LPG Consumers (Nos. crore) ^(PSU only) | 8.88 | 4.58 | 4.73 | 0 | 0 | 0 | 0 | 18.19 |

15. Natural Gas at a Glance

(MMSCM)

| | 2013-14 | 2014-15 (P) | February | | | April-February | | |
|---|---------|----------------|------------------|------------------|---------------------|---------------------|---------------------|----------------|
| | | | 2015 (Actual) | 2016 (Target) | 2016 ^(P) | 2014-15 (Actual) | 2015-16 (Target) | 2015-16 (P) |
| Gross Production | 35,407 | 33,657 | 2,534 | 2,845 | 2,565 | 30,819 | 32,234 | 29,710 |
| Net Production (Excluding Flare Gas) | 34,574 | 32,693 | 2,458 | | 2,499 | 29,955 | | 28,699 |
| LNG Import | 17,728 | 18,536 | 1,100 | | 1,788 | 17,299 | | 19,563 |
| Total Consumption including Internal consumption (Net Production + Import) | 52,302 | 51,230 | 3,558 | | 4,287 | 47,254 | | 48,262 |
| Total Consumption (in BCM) | 52.30 | 51.23 | 3.56 | | 4.29 | 47.25 | | 48.26 |

16. Coal Bed Methane (CBM) Gas development in India

| | | |
|--|---------------|--------------|
| Prognosticated CBM Resources | 92 | TCF |
| Established CBM resources | 9.9 | TCF |
| Total available Coal bearing area | 26,000 | Sq. KM |
| Exploration Initiated | 17,200 | Sq. KM |
| Blocks Awarded | 33 | Nos. |
| Commercial production of CBM gas (February, 2016) | 32.821 | MMSCM |

17. Major Natural Gas Pipeline network

| Nature of Pipeline | | GAIL | Reliance | GSPCL | AGC | IOCL | ONGC | Total |
|---|--------------|--------|----------|-------|-------|------|------|---------------|
| Natural Gas (as on 1.10.2015) | Length (KM) | 11,077 | 1,469 | 2,355 | 1,000 | 140 | 24 | 16,065 |
| | Cap (MMSCMD) | 206 | 80 | 43 | 6 | 9.5 | 6 | 350.50 |

18. Gas Pipelines under execution / construction as on 30.9.2015

| Network/ Region | Entity | Length (KM) | Design Cap. (MMSCMD) | Pipeline Size |
|------------------------------------|---------------------------------|---------------|----------------------|-------------------------|
| Kochi-Kottanad-Bengaluru-Mangalore | GAIL (India) Ltd | 1,063 | 16 | 30"/24"/18"/8"/4" |
| Dabhol - Bengaluru (DBPL) | GAIL (India) Ltd | 315 | 16 | 8"/4" |
| Surat - Paradip | GAIL (India) Ltd | 2,112 | 76.81 | 36"/24"/18" |
| Jagdishpur- Haldia | GAIL (India) Ltd | 1,860 | 32 | 30"/24"/18"/12"/8"/4" |
| Mallavaram – Bhopal - Bhilwara | GSPC India Transco Ltd | 2,042 | 78.25 | 42"/36"/30"/24"/18"/12" |
| Mehsana - Bathinda | GSPC India Gasnet Ltd | 2,052 | 77.11 | 36"/24"/18"/12" |
| Bathinda - Jammu - Srinagar | GSPC India Gasnet Ltd | 725 | 42.42 | 24"/18"/16"/12"/8"/6" |
| Kakinada - Vizag - Srikakulam | AP Gas Distribution Co. | 391 | 90 | 24"/18"/8"/4" |
| Shahdol - Phulpur | Reliance Gas Pipelines Ltd | 312 | 3.5 | 16" |
| Ennore - Nellore | Gas Transmission India Pvt. Ltd | 430 | 36 | 24"/12"/8" |
| Total | | 11,302 | | |

19. Existing and upcoming LNG Terminals as on 30.9.2015

| Existing/ Upcoming Terminals | Promoters | Capacity (MMTPA) | Expected Timelines | Capacity Utilisation in % in 2015-16 (April-September) |
|-------------------------------|-------------------------------|--|--------------------|--|
| Dahej | Petronet LNG Ltd (PLL) | Existing 10 MMTPA to be increased to 15 MMTPA by 2016 | Existing | 108.90 |
| Hazira | Hazira LNG Pvt Ltd (HLPL) | 5 MMTPA | Existing | 67 |
| Dabhol | RGPPL (GAIL - NTPC JV) | 1.24 MMTPA in phase-1 without break water to be increased to 5 MMTPA | Existing | 75 |
| Kochi | Petronet LNG Ltd (PLL) | 5 MMTPA | Existing | 3.41 |
| Kakinada East Godavari (FSRU) | GAIL + AP Govt. (JV) Proposed | 3.5 MMTPA | - | - |
| Ennore | IOCL | 5 MMTPA in phase 1 to be increased to 10 MMTPA | - | - |
| Mangalore | ONGC + BPCL | 2.5 MMTPA | - | - |
| Dhamra | Dhamra LNG Terminal Pvt. Ltd | 5 MMTPA | - | - |

20. Status of PNG connections and CNG stations across India (Nos.)

| State | Entity Operating | Geographical Region | CNG Stations | PNG Connections |
|----------------------------------|--|---|-------------------|------------------|
| | | | (as on 30.9.2015) | (as on 1.2.2016) |
| Haryana | Haryana City Gas, Adani Gas Limited, Gail Gas Ltd. | Sonepat, Faridabad, Gurgaon | 20 | 28,121 |
| Andhra Pradesh, Telangana | Bhagyanagar Gas Ltd | Kakinada, Hyderabad, Vijaywada, Rajamundry | 32 | 3,985 |
| Assam | Assam Gas Co. Ltd | Tinsukia, Dibrugarh, Sibsagar, Jorhat, Golaghat | 0 | 29,076 |
| Gujarat | Sabarmati Gas Ltd, Gujarat Gas Ltd, Adani Energy Ltd , Vadodara Gas Ltd, Hindustan Petroleum Corporation Ltd, Charotar Gas Sahakari Mandal Ltd | Gandhinagar, Mehsana, Sabarkantha, Nadiad, Halol, Hazira, Rajkot, Khambhat, Palej, Valsad, Navsari, Surendernagar, Vadodara, Ahmedabad, Surat, Ankleshwar, Bhavnagar, Anand | 361 | 14,73,523 |
| Madhya Pradesh | Avantika Gas Ltd, GAIL Gas Ltd | Dewas, Vijaipur, Indore including Ujjain, Gwalior | 21 | 5,418 |
| Delhi | Indraprastha Gas Ltd | National Capital Territory of Delhi (Including Noida & Ghaziabad) | 324 | 6,20,493 |
| Rajasthan | GAIL Gas Ltd | Kota | 3 | 189 |

| State | Entity Operating | Geographical Region | CNG Stations (as on 30.9.2015) | PNG Connections (as on 1.02.2016) |
|----------------------|---|--|-----------------------------------|--------------------------------------|
| Maharashtra | Mahanagar Gas Ltd, Maharashtra Natural Gas Ltd, GAIL Gas Ltd | Thane & adjoining contiguous areas including Mira Bhayender, Navi Mumbai, Thane City, Ambernath, Bhiwandi, Kalyan, Dombivily, Badlapur, Ulhasnagar, Panvel, Kharghar & Taloja, Pune City including Pimpri Chinchwad and along with adjoining contiguous areas of Chakan, Hinjewadi & Talegaon GA, Panvel | 212 | 8,76,823 |
| Tripura | Tripura Natural Gas Co. Ltd | Agartala | 5 | 20,870 |
| West Bengal | Great Eastern Energy Corporation Ltd | Kolkata | 7 | 0 |
| Uttar Pradesh | GAIL Gas Ltd, Sanwariya Gas, Green Gas, Central U.P. Gas, Siti Energy Ltd | Meerut, Mathura, Agra, Kanpur, Bareilly, Lucknow, Moradabad, Ferozabad | 41 | 30,896 |
| | | Total | 1,026 | 30,89,394 |

21. Information on Prices, Taxes and Under-recoveries

| International Prices/ Exchange rates (\$/bbl) | | | |
|---|------------------------|-------------------------------------|------------|
| | 2013-14 | 2014-15 | Apr-Feb'16 |
| Crude (Indian Basket) | 105.52 | 84.16 | 47.09 |
| Petrol | 114.31 | 95.45 | 62.89 |
| Diesel | 119.41 | 96.64 | 56.14 |
| Kerosene | 118.80 | 96.98 | 56.71 |
| LPG (\$/MT) | 880.49 | 683.87 | 403.15 |
| FO (\$/MT) | 595.79 | 471.99 | 242.37 |
| Naphtha (\$/MT) | 881.30 | 717.44 | 427.68 |
| Exchange (Rs./\$) | 60.50 | 61.15 | 65.32 |
| Customs & Excise Duty rates (w.e.f. 1.3.2016) | | | |
| | Basic Customs duty | Excise duty | |
| Petrol | 2.50% | Rs. 21.48/Litre | |
| Diesel | 2.50% | Rs. 17.33/Litre | |
| PDS SKO | Nil | NIL | |
| Non-PDS SKO | 5% | 14% | |
| Sub. Dom LPG | NIL | NIL | |
| Non Domestic LPG | 5% | 8% | |
| Furnace Oil(Non-Fert) | 5% | 14% | |
| Naphtha(Non-Fert) | 5% | 14% | |
| ATF | NIL | 14% * | |
| Crude Oil | NIL+Rs.50/ -MT as NCCD | NIL+Rs.4,500/MT Cess+Rs.50/-MT NCCD | |

* 8% for scheduled commuter airlines from regional connectivity scheme airports

| Price buildup of Petroleum products (Rs./litre/Cylinder) | | |
|--|--------|--------|
| | Petrol | Diesel |
| Price before taxes and dealer comm. | 22.85 | 21.55 |
| Central taxes | 21.89 | 17.72 |
| State taxes | 12.69 | 7.62 |
| Dealer comm. | 2.25 | 1.44 |
| Retail Selling Price | 59.68 | 48.33 |
| PDS SKO* Sub. Dom LPG | | |
| Price before taxes and dealer commission | 13.56 | 467.73 |
| Central taxes | 0 | 0 |
| State taxes | 0.44 | 0 |
| Dealer commission | 1.24 | 45.96 |
| Retail Selling Price | 15.24 | 513.50 |
| Less cash compensation (CC) under DBTL | | 46.71 |
| CC by OMCs towards uncompensated cost | | 47.66 |
| Effective cost to consumer after subsidy | | 419.13 |

* SKO at Mumbai as on 1st Mach, 2016. Petrol and diesel at Delhi as on 17th March, 2016 and LPG as on 1st March, 2016 at Delhi.

| Change in Ex. Rate/ Crude price : Impact on Under-recoveries | | |
|--|------------------|--------------|
| (Rs. Crores) | Rs.1/\$ Ex. Rate | \$/bbl Crude |
| Impact on Under-recovery | 740 | 1,640 |

21. Information on Prices, Taxes and Under-recoveries

| Under-recoveries & Burden Sharing | | | |
|--|---------|--------------------------|-------------|
| | 2013-14 | 2014-15 | Apr-Dec`15 |
| Per unit under-recovery (Rs./litre/Cylinder) | | | |
| Diesel | 8.39 | 2.70^ | Deregulated |
| PDS SKO | 33.98 | 27.93 | 15.54 |
| Sub. Dom LPG | 499.52 | 409.72 | *153.62 |
| Total Under-recoveries including DBTL (Rs. Crores) | | | |
| Diesel | 62,837 | 10,935^ | Deregulated |
| PDS SKO | 30,574 | 24,799 | 9,993 |
| Sub. Dom LPG# | 50,327 | 40,551 | 12,092 |
| Total | 143,738 | 76,285 | 22,085 |
| Burden Sharing (Rs. Crores) | | | |
| | 2013-14 | 2014-15 | Apr-Dec`15 |
| Government | 74,610 | 31,279 | 18,232** |
| Upstream | 67,021 | 42,822 | 1,980 |
| OMCs | 2,107 | 2,184 | 1,873 |
| Fiscal Subsidy under Govt. Schemes (Rs. Crores) | | | |
| PDS SKO | 681 | Scheme was extended till | |
| Sub. Dom LPG | 1,920 | 31.3.2015 | |
| *Average of DBTL and under-recovery towards non-DBTL; #Includes subsidy under DBTL (2013-14: Rs.3,869 crore, 2014-15: Rs.3,971 crore, Apr-Dec`15: Rs.12,084 crore; ** Govt. compensation pending disbursement: Rs.4,942 crore; ^up to 18.10.2014 only. | | | |
| Subsidy as a % of GDP | | | |
| | 2011-12 | 2012-13 | 2013-14 |
| Petroleum Subsidy | 1.70 | 1.75 | 1.37 |

| Sales & profit of Petroleum Sector (Rs. Crores) | | |
|---|----------|--------|
| April-Dec 2015 | Turnover | PAT |
| Upstream Companies(PSU) | 109,009 | 14,977 |
| Downstream Companies(PSU) | 551,410 | 16,356 |
| Standalone Refineries(PSU) | 58,041 | 1,228 |
| Private (RIL&EOL) | 271,763 | 21,860 |

| Borrowings of OMCs (Rs. Crores) | | | |
|---|----------------|----------------|----------------|
| | 2013-14 | 2014-15 | Apr-Dec`15 |
| IOCL | 86,263 | 55,248 | 49,121 |
| BPCL | 20,322 | 13,098 | 16,686 |
| HPCL | 32,164 | 20,335 | 19,969 |
| Petroleum Sector Contribution to Central/State Govt. | | | |
| | 2013-14 | 2014-15 | Apr-Sep`15 |
| Central Government | 152,900 | 172,066 | 105,744 |
| % to total Revenue receipt | 15% | 15% | NA |
| State Governments | 152,460 | 160,554 | 79,205 |
| % to total Revenue receipt | 10% | 9% | NA |
| Total (Rs. Crores) | 305,360 | 332,620 | 184,949 |

22. Conversion Factors and Volume Conversion

| Weight to Volume Conversion | | | |
|-----------------------------|-------------|-------------|--------------|
| Product | Weight (MT) | Volume (KL) | Barrel (bbl) |
| LPG | 1 | 1.8440 | 11.60 |
| Petrol (MS) | 1 | 1.4110 | 8.50 |
| Diesel (HSD) | 1 | 1.2100 | 7.45 |
| Kerosene (SKO) | 1 | 1.2850 | 7.90 |
| ATF | 1 | 1.2880 | 8.10 |
| Light Diesel Oil (LDO) | 1 | 1.1720 | 7.37 |
| Furnace Oil (FO) | 1 | 1.0710 | 6.74 |
| Crude Oil | 1 | 1.1700 | 7.33 |

| Volume Conversion | |
|---------------------------|---------------|
| From | To |
| 1 US Barrel (bbl) | 159 litres |
| 1 US Barrel (bbl) | 42 US Gallons |
| 1 US Gallon | 3.78 litres |
| 1 Kilo litre (KL) | 6.29 bbl |
| 1 million barrels per day | 49.8 MMTPA |
| Energy Conversion | |
| 1 Kilocalorie (kcal) | 4.187 kJ |
| 1 Kilocalorie (kcal) | 3.968 Btu |
| 1 Kilowatt-hour (kWh) | 860 kcal |
| 1 Kilowatt-hour (kWh) | 3412 Btu |

| Exclusive Economic Zone | |
|-------------------------|------------------|
| 200 Nautical Miles | 370.4 Kilometers |

| Natural Gas Conversions | | | |
|-------------------------|------------------|--|--------------------------|
| 1 Standard Cubic Metre | 35.31 Cubic Feet | 1 MMBTU | 25.2 SCM @10000 kcal/SCM |
| 1 BCM/year of Gas | 2.74 MMSCMD | GCV (Gross Calorific Value) | 10000 kcal/SCM |
| 1 TCF of Gas Reserve | 3.88 MMSCMD | NCV (Net Calorific Value) | 90% of GCV |
| 1 MMTPA of LNG | 3.60 MMSCMD | Gas required for 1 MW power generation | 4541 SCM/day |
| 1 MT of LNG | 1314 SCM | Power generation from 1 MMSCMD of gas | 220 MW |