# Ready Reckoner

## Snapshot of India’s Oil & Gas data

## April, 2017

**Petroleum Planning & Analysis Cell**

(Ministry of Petroleum & Natural Gas)

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# Highlights for the month

| | |
|---|---|
| • | Indigenous crude oil production during April, 2017 was marginally lower by 0.6% than that of April, 2016. The reduction in production was primarily contributed by PSC fields e.g. 26 TMT in Panna Mukta, 8 TMT in Ravva fields and 37 TMT in Mangala fields. PSU companies OIL and ONGC registered a growth of 4.5% and 2.5% respectively. |
| • | Total crude oil processed during April, 2017 was 20 MMT, a marginal decrease of 0.8% over April, 2016. There was a decrease of 4.5% in indigenous crude oil processed over April 2016. |
| • | Production of petroleum products during April, 2017 saw a marginal growth of 0.1% over April, 2016. BS IV Std. MS and HSD registered growth of 135.4% and 120.3% respectively during April 2017 as compared to April 2016. |
| • | Product imports decreased by 9.9% during April, 2017 over the corresponding period of 2016. LPG, Lubes and Pet-coke imports contributed to 80.7 % share of total POL imports during April, 2017. |
| • | Export of POL products increased by 6.0% during April, 2017 as compared to April, 2016 primarily due to higher production as well as higher surplus availability of POL products like Naphtha, Fuel oil and VGO. |

| | |
|---|---|
| • | Consumption of petroleum products recorded a positive growth of 3.3% during April 2017 after registering negative growth for three consecutive months in a row. During April 2017, growth was seen in LPG, Naphtha, MS, LDO, HSD, ATF, Pet Coke and other products consumption. In April 2016, total petroleum product consumption had recorded a growth of 10.3%. |
| • | SKO registered a major de-growth of -35.8% during the month, which was the highest ever degrowth since 1970-71. This was mainly because of reduced allocation to states and voluntary surrender of PDS SKO quota by some states. |
| • | Total LPG consumption for the last forty four months in a row had recorded positive growth and during April 2017 a growth of 3.9% was witnessed. In April 2016, total LPG consumption had recorded a growth of 7.5%. |
| • | Gross production of natural gas for the month of April, 2017 was 2,533 MMSCM which was higher by 1.8 % compared with the corresponding month of the previous year. |
| • | LNG import for the month of April, 2017 was 2,182 MMSCM which was 1.9 % higher than the corresponding month of the previous year. |
| • | The prices of Brent crude averaged $52.53/bbl during April 2017 as against $51.56 /bbl during March 2017. Indian basket crude averaged $52.49/bbl during April, 2017as against $51.47 /bbl during March 2017. |
| • | The import bill of crude oil is estimated to increase by 26% from $ 70 billion in 2016-17 to $88 billion in 2017-18 considering Indian basket crude oil price of $ 55/bbl and $/Rs=65 for the balance part of the financial year. |

## 1. Selected indicators of the Indian economy

| | Economic indicators | Unit/Base | 2013-14 | 2014-15 | 2015-16 (P) | 2016-17 (P) |
|---|---|---|---|---|---|---|
| 1 | Population (as on 1st March, 2011) | Billion | 1.2 | - | - | - |
| 2 | GDP at Factor Cost (Constant prices) | Growth % | 6.5 (3rd RE) | 7.2 (2nd RE ) | 7.9 (1st RE) | 7.1 (2nd AE) |
| 3 | Agricultural Production (Food grains) | MMT | 265.0 | 252.0 | 251.6 (Final) | 273.4 (3rd AE) |
| | | Growth % | | -4.9 | -0.2 | 8.7 |
| 4 | Gross Fiscal Deficit | % | -4.5 | -4.1 | -3.9 | -3.5 (RE) |

| | Economic indicators | Unit/ Base | 2013-14 | 2014-15 | 2015-16 | 2016-17(P) | April(P) | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | 2016 | 2017 |
| 5 | Index of Industrial Production* | Growth % | 3.3 | 4.1 | 3.4 | 5.0 | 6.5 | 2.7~ |
| 6 | Imports | $ Billion | 450.2 | 448.0 | 381.0 | 380.4 | 25.4 | 37.9 |
| 7 | Exports | $ Billion | 314.4 | 310.3 | 262.3 | 274.6 | 20.6 | 24.6 |
| 8 | Trade Balance | $ Billion | -135.8 | -137.7 | -118.7 | -105.7 | -4.8 | -13.2 |
| 9 | Foreign Exchange Reserves* | $ Billion | 303.7 | 341.4 | 355.6 | 380.0 | 363.1 | 372.7 |

*~IIP is for the month of March 2017;*Base year of IIP changed to 2011-12; AE-Advanced Estimates; RE-Revised Estimates; *2013-14 - As on March 28, 2014; 2014-15 - As on March 27, 2015; 2015-16 - as of March 25, 2016; 2016-17 - As of March 31, 2017; April 2016 - As of April 29, 2016; April 2017 - As on April 28, 2017.*

## 2. Crude oil, LNG and petroleum products at a glance

| Details | | Unit/ Base | 2013-14 | 2014-15 | 2015-16 | 2016-17(P) | April(P) 2016 | April(P) 2017 |
|---|---|---|---|---|---|---|---|---|
| 1 | Crude oil production in India | MMT | 37.8 | 37.5 | 36.9 | 36.0 | 3.0 | 2.9 |
| 2 | Consumption of petroleum products | MMT | 158.4 | 165.5 | 184.7 | 194.2 | 16.3 | 16.8 |
| 3 | Production of petroleum products | MMT | 220.3 | 220.7 | 231.2 | 242.7 | 19.5 | 19.6 |
| 4 | Imports & exports: | | | | | | | |
| Crude oil imports | | MMT | 189.2 | 189.4 | 202.9 | 213.9 | 18.0 | 18.1 |
| | | $ Billion | 143.0 | 112.7 | 64.0 | 70.2 | 4.8 | 6.7 |
| Petroleum products (POL) imports | | MMT | 16.7 | 21.3 | 29.5 | 35.9 | 3.1 | 2.8 |
| | | $ Billion | 12.5 | 12.1 | 10.0 | 10.6 | 0.9 | 0.8 |
| Gross petroleum imports (Crude + POL) | | MMT | 205.9 | 210.7 | 232.3 | 249.8 | 21.0 | 20.9 |
| | | $ Billion | 155.4 | 124.9 | 73.9 | 80.8 | 5.7 | 7.4 |
| Petroleum products exports | | MMT | 67.9 | 63.9 | 60.5 | 65.5 | 4.9 | 5.2 |
| | | $ Billion | 60.7 | 47.3 | 27.1 | 29.1 | 1.9 | 2.5 |
| LNG imports | | $ Billion | 8.6 | 9.2 | 6.7 | 6.1 | 0.4 | 0.6 |
| 5 | Petroleum imports as % of India's gross imports (in value) | % | 34.5 | 27.9 | 19.4 | 21.3 | 22.4 | 19.6 |
| 6 | Petroleum exports as % of India's gross exports (in value) | % | 19.3 | 15.2 | 10.3 | 10.6 | 9.5 | 10.2 |
| 7 | Import dependency of crude (on consumption) | % | 77.6% | 78.5% | 80.9% | 82.1% | 82.1% | 83.4% |

## 3. Indigenous crude oil production (Million Metric Tonne)

| Details | 2013-14 | 2014-15 | 2015-16 | 2016-17 (P) | April (P) 2016 | April (P) 2017 (Target) | April (P) 2017 |
|---|---|---|---|---|---|---|---|
| ONGC | 19.2 | 18.6 | 18.5 | 18.3 | 1.5 | 1.8 | 1.5 |
| Oil India Limited (OIL) | 3.5 | 3.4 | 3.2 | 3.3 | 0.3 | 0.3 | 0.3 |
| Private / Joint Ventures (JVs) | 12.0 | 11.7 | 11.3 | 10.5 | 0.9 | 0.9 | 0.8 |
| **Total Crude Oil** | **34.7** | **33.8** | **33.1** | **32.0** | **2.7** | **3.0** | **2.6** |
| Condensate | 3.1 | 3.7 | 3.8 | 4.0 | 0.3 | | 0.3 |
| **Total (Crude + Condensate) (MMT)** | **37.8** | **37.5** | **36.9** | **36.0** | **3.0** | **3.0** | **2.9** |
| **Total (Crude + Condensate) (Million Bbl)** | **277.0** | **274.7** | **270.8** | **263.9** | **21.7** | **22.0** | **21.5** |

**Targets are inclusive of condensate. Some sub-totals/ totals may not add-up due to rounding off at individual levels*

## 4. Domestic oil & gas production vis-à-vis overseas production

| Details | 2013-14 | 2014-15 | 2015-16 | 2016-17 (P) | April (P) 2016 | April (P) 2017 |
|---|---|---|---|---|---|---|
| Total domestic production (MMTOE) | 73.2 | 71.1 | 69.2 | 67.9 | 5.1 | 5.1 |
| Overseas production (MMTOE) | 8.8 | 9.9 | 10.1 | 16.2 | 0.8 | 2.6 |
| Overseas production as % of domestic production | **12.1%** | **13.9%** | **14.6%** | **23.9%** | **15.8%** | **50.3%** |

*Source - ONGC Videsh, GAIL, OIL , IOCL & HPCL*

## 5. High Sulphur (HS) & Low Sulphur (LS) crude oil processing (MMT)

| | Details | 2013-14 | 2014-15 | 2015-16 | 2016-17 (P) | April (P) 2016 | April (P) 2017 |
|---|---|---|---|---|---|---|---|
| 1 | High Sulphur crude | 160.2 | 161.4 | 166.1 | 177.6 | 14.5 | 14.7 |
| 2 | Low Sulphur crude | 62.2 | 61.9 | 66.7 | 67.8 | 5.6 | 5.3 |
| **Total crude processed** | | **222.5** | **223.3** | **232.9** | **245.4** | **20.2** | **20.0** |
| **Share of HS crude in total crude oil processing** | | **72.0%** | **72.3%** | **71.3%** | **72.4%** | **72.0%** | **73.7%** |

## 6. Quantity and value of crude oil imports

| Year | Quantity (MMT) | $ Million | Rs. Crore |
|---|---|---|---|
| 2016-17(Provisional) | 213.93 | 70,217 | 4,70,589 |
| 2017-18 (Estimated) | 219.70 | 88,416 | 5,74,509 |

*Note: April 2017 imports are based on actuals and for May 2017 to March 2018, the imports are estimated at $55/bbl and Rs.65/$.*

Impact of variation in Crude oil price & Exchange rate on Crude oil imports for May- March 2018:

If crude prices increase by one $/bbl - Net Import bill increases by Rs. 9,661 crores ($ 1.49 bn)

If exchange rate of $ increases by Rs. 1/$ - Net Import bill increases by Rs. 8,175 crores ($ 1.21 bn)

## 7. Self-sufficiency in petroleum products (Million Metric Tonnes)

| | Details | 2013-14 | 2014-15 | 2015-16 | 2016-17(P) | April(P) 2016 | April(P) 2017 |
|---|---|---|---|---|---|---|---|
| 1 | Indigenous crude oil processing : | 33.9 | 34.2 | 34.1 | 33.5 | 2.8 | 2.7 |
| a) | Products from indigenous crude (93.3% of crude oil processed) | 31.6 | 32.0 | 31.8 | 31.3 | 2.6 | 2.5 |
| b) | Products from fractionators (Including LPG and Gas) | 3.9 | 3.7 | 3.4 | 3.5 | 0.3 | 0.3 |
| 2 | Total production from indigenous crude & condensate **(a + b )** | 35.5 | 35.6 | 35.2 | 34.8 | 2.9 | 2.8 |
| 3 | Total domestic consumption | 158.4 | 165.5 | 184.7 | 194.2 | 16.3 | 16.8 |
| | **% Self-sufficiency (2 / 3)** | **22.4%** | **21.5%** | **19.1%** | **17.9%** | **17.9%** | **16.6%** |

## 8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)

| Com-pany | Refinery | Installed capacity (1.4.2017) | 2013-14 | 2014-15 | 2015-16 | 2016-17(P) | Crude oil processing April(P) 2016 | 2017 (Target) | 2017 |
|---|---|---|---|---|---|---|---|---|---|
| IOCL | Barauni (1964) | 6.0 | 6.5 | 5.9 | 6.5 | 6.5 | 0.6 | 0.5 | 0.6 |
| | Koyali (1965) | 13.7 | 13.0 | 13.3 | 13.8 | 14.0 | 1.2 | 1.1 | 1.1 |
| | Haldia (1975) | 7.5 | 8.0 | 7.7 | 7.8 | 7.7 | 0.7 | 0.7 | 0.7 |
| | Mathura (1982) | 8.0 | 6.6 | 8.5 | 8.9 | 9.2 | 0.8 | 0.8 | 0.8 |
| | Panipat (1998) | 15.0 | 15.1 | 14.2 | 15.3 | 15.6 | 1.3 | 1.3 | 1.3 |
| | Guwahati (1962) | 1.0 | 1.0 | 1.0 | 0.9 | 0.9 | 0.08 | 0.07 | 0.09 |
| | Digboi (1901) | 0.65 | 0.7 | 0.6 | 0.6 | 0.5 | 0.05 | 0.04 | 0.05 |
| | Bongaigaon(1979) | 2.4 | 2.3 | 2.4 | 2.4 | 2.5 | 0.2 | 0.2 | 0.2 |
| | Paradip (2016) | 15.0 | - | - | 1.8 | 8.2 | 0.4 | 0.9 | 0.7 |
| | **IOCL TOTAL** | **69.2** | **53.1** | **53.6** | **58.0** | **65.2** | **5.3** | **5.5** | **5.5** |
| CPCL | Manali (1969) | 10.5 | 10.1 | 10.2 | 9.1 | 9.8 | 0.8 | 0.8 | 0.7 |
| | CBR (1993) | 1.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.06 | 0.04 | 0.04 |
| | **CPCL-TOTAL** | **12.0** | **10.6** | **10.8** | **9.6** | **10.3** | **0.9** | **0.9** | **0.7** |
| BPCL | Mumbai (1955) | 12.0 | 12.7 | 12.8 | 13.4 | 13.5 | 1.1 | 0.9 | 1.0 |
| | Kochi (1966) | 12.4 | 10.3 | 10.4 | 10.7 | 11.8 | 0.9 | 1.0 | 1.0 |
| BORL | Bina (2011) | 6.0 | 5.4 | 6.2 | 6.4 | 6.4 | 0.5 | 0.5 | 0.6 |
| NRL | Numaligarh (1999) | 3.0 | 2.6 | 2.8 | 2.5 | 2.7 | 0.2 | 0.2 | 0.2 |
| | **BPCL-TOTAL** | **33.4** | **31.0** | **32.2** | **33.0** | **34.4** | **2.8** | **2.7** | **2.8** |

| Com-pany | Refinery | Installed capacity (1.4.2017) | 2013-14 | 2014-15 | 2015-16 | 2016-17(P) | Crude oil processing April(P) 2016 | 2017 (Target) | 2017 |
|---|---|---|---|---|---|---|---|---|---|
| ONGC | Tatipaka (2001) | 0.1 | 0.07 | 0.05 | 0.07 | 0.09 | 0.007 | 0.005 | 0.006 |
| MRPL | Mangalore (1996) | 15.0 | 14.6 | 14.6 | 15.5 | 16.0 | 1.2 | 1.3 | 1.2 |
| | **ONGC TOTAL** | **15.1** | **14.7** | **14.7** | **15.6** | **16.1** | **1.2** | **1.3** | **1.2** |
| HPCL | Mumbai (1954) | 7.5 | 7.7 | 7.4 | 8.0 | 8.5 | 0.7 | 0.7 | 0.7 |
| | Visakh (1957) | 8.3 | 7.8 | 8.8 | 9.2 | 9.3 | 0.8 | 0.7 | 0.7 |
| HMEL | Bathinda (2012) | 9.0 | 9.3 | 7.3 | 10.7 | 10.5 | 0.9 | 0.7 | 0.8 |
| | **HPCL- TOTAL** | **24.8** | **24.8** | **23.5** | **27.9** | **28.4** | **2.4** | **2.1** | **2.3** |
| RIL* | Jamnagar (DTA) (1999) | 33.0 | 30.3 | 30.9 | 32.4 | 32.8 | 2.7 | 2.7 | 2.7 |
| | Jamnagar (SEZ) (2008) | 27.0 | 37.7 | 37.2 | 37.1 | 37.4 | 3.1 | 3.1 | 3.1 |
| EOL | Vadinar (2006) | 20.0 | 20.2 | 20.5 | 19.1 | 20.9 | 1.7 | 1.7 | 1.7 |
| **All India** | | **234.5** | **222.5** | **223.3** | **232.9** | **245.4** | **20.2** | **20.0** | **20.0** |

*Note :* RIL target for 2017-18 is previous year crude processing. Some sub-totals/ totals may not add up due to rounding off at individual levels.*

## 9. Major crude oil and product pipeline network

| | | ONGC | OIL | Cairn | HMEL | IOCL | BPCL | HPCL | Other | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **Crude Oil** | Length (KM) | 1191 | 1193 | 660 | 1017 | 5301 | 937 | 0 | - | 10299 |
| (as on 1.5.2017) | Cap (MMTPA) | 70.1 | 8.4 | 8.7 | 9.0 | 48.6 | 6.0 | - | - | 150.8 |
| **Products** | Length (KM) | - | 654 | - | - | 7491 | 1936 | 3333 | 2688 | 16102 |
| (as on 1.5.2017) | Cap (MMTPA) | - | 1.7 | - | - | 45.1 | 14.9 | 34.6 | 9.3 | 105.6 |

**Other** includes GAIL and Petronet India.

| 10. Gross Refining Margins (GRM) of refineries ($/bbl) | | | | | |
|---|---|---|---|---|---|
| **Company** | **Refinery** | **2013-14** | **2014-15** | **2015-16** | **Apr-Dec`16** |
| **IOCL** | Barauni | 6.68 | -1.20 | 2.93 | 6.08 |
| | Koyali | 4.52 | 4.79 | 6.80 | 7.38 |
| | Haldia | 2.84 | -1.51 | 3.96 | 6.93 |
| | Mathura | 2.10 | -2.19 | 3.30 | 6.24 |
| | Panipat | 3.62 | -1.97 | 4.15 | 7.64 |
| | Guwahati | 6.38 | 8.68 | 15.88 | 22.11 |
| | Digboi | 15.41 | 13.73 | 16.17 | 23.89 |
| | Bongaigaon | 6.71 | -0.26 | 11.09 | 19.11 |
| | Paradip | - | - | -0.65 | 2.41 |
| | **Average** | **4.24** | **0.27** | **5.06** | **7.36** |
| **BPCL** | Kochi | 4.80 | 3.17 | 6.87 | 5.07 |
| | Mumbai | 3.95 | 3.97 | 6.37 | 5.01 |
| | **Average** | **4.33** | **3.62** | **6.59** | **5.03** |
| **HPCL** | Mumbai | 5.38 | 4.88 | 8.09 | 6.26 |
| | Visakhapatnam | 1.50 | 1.12 | 5.46 | 4.93 |
| | **Average** | **3.43** | **2.84** | **6.68** | **5.57** |
| **CPCL** | Chennai | 4.08 | 1.97 | 5.27 | 5.81 |
| **MRPL** | Mangalore | 2.67 | -0.64 | 5.20 | 7.23 |
| **NRL** | Numaligarh | 12.09 | 16.67 | 23.68 | 27.85 |
| **BORL** | Bina | 7.70 | 6.10 | 11.70 | 11.60 |
| **RIL** | Jamnagar | 8.10 | 8.60 | 10.80 | 10.80 |
| **Essar** | Vadinar | 7.98 | 8.37 | 10.81 | * |

**Being unlisted company, quarterly results not declared.*

## 11. GRM of North-East refineries excluding excise duty benefit ($/bbl)

| Company | Refinery | 2013-14 | 2014-15 | 2015-16 | Apr-Dec`16 |
|---|---|---|---|---|---|
| IOCL | Guwahati | 0.88 | 0.96 | 1.26 | 0.79 |
| | Digboi | 8.50 | 5.42 | 4.16 | 7.33 |
| | Bongaigaon | 2.34 | -6.51 | 0.08 | 5.32 |
| NRL | Numaligarh | 6.98 | 9.46 | 8.06 | 7.90 |

## 12. Production and consumption of petroleum products (Million Metric Tonnes)

| Products | April 2014-March 2015 | | April 2015-March 2016 | | April 2016-March 2017 (P) | | April 2016 | | April 2017 (P) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Prod$^n$ | Consump$^n$ | Prod$^n$ | Consump$^n$ | Prod$^n$ | Consump$^n$ | Prod$^n$ | Consump$^n$ | Prod$^n$ | Consump$^n$ |
| LPG | 9.8 | 18.0 | 10.6 | 19.6 | 11.3 | 21.5 | 0.8 | 1.6 | 0.9 | 1.7 |
| MS | 32.2 | 19.1 | 35.3 | 21.8 | 36.5 | 23.8 | 3.0 | 2.0 | 3.0 | 2.1 |
| NAPHTHA | 17.5 | 11.1 | 17.9 | 13.3 | 19.8 | 13.3 | 1.4 | 1.1 | 1.6 | 1.2 |
| ATF | 11.1 | 5.7 | 11.8 | 6.3 | 13.8 | 7.0 | 1.2 | 0.6 | 1.1 | 0.6 |
| SKO | 7.6 | 7.1 | 7.5 | 6.8 | 6.0 | 5.4 | 0.5 | 0.5 | 0.4 | 0.3 |
| HSD | 94.3 | 69.4 | 98.6 | 74.6 | 102.1 | 76.0 | 8.0 | 6.8 | 8.4 | 7.0 |
| LDO | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.4 | 0.035 | 0.03 | 0.025 | 0.04 |
| LUBES | 0.9 | 3.3 | 1.0 | 3.6 | 1.0 | 3.4 | 0.08 | 0.3 | 0.07 | 0.3 |
| FO/LSHS | 12.2 | 6.0 | 10.7 | 6.6 | 12.0 | 7.2 | 1.1 | 0.7 | 0.6 | 0.6 |
| BITUMEN | 4.7 | 5.1 | 5.2 | 5.9 | 5.2 | 5.9 | 0.6 | 0.7 | 0.5 | 0.6 |
| OTHERS | 30.0 | 20.4 | 32.2 | 25.6 | 34.4 | 30.3 | 2.9 | 2.1 | 2.8 | 2.5 |
| **ALL INDIA** | **220.7** | **165.5** | **231.2** | **184.7** | **242.7** | **194.2** | **19.5** | **16.3** | **19.6** | **16.8** |
| **Growth (%)** | **0.2%** | **4.5%** | **4.8%** | **11.6%** | **5.0%** | **5.2%** | **19.0%** | **10.3%** | **0.1%** | **3.3%** |

*Note: Prod$^n$ - Production; Consump$^n$ - Consumption*

## 13. LPG consumption (Thousand Metric Tonne)

| LPG category | 2013-14 | 2014-15 | 2015-16 | 2016-2017(P) | April(P) 2016 | April(P) 2017 | Gr (%) |
|---|---|---|---|---|---|---|---|
| **1. PSU Sales :** | | | | | | | |
| LPG-Packed Domestic | 14,412 | 16,040.4 | 17,181.7 | 18,870.3 | 1392.1 | 1441.6 | 3.6 |
| LPG-Packed Non-Domestic | 1,073.6 | 1,051.0 | 1,464.4 | 1,775.7 | 130.2 | 141.5 | 8.7 |
| LPG-Bulk | 245.7 | 315.7 | 317.2 | 364.2 | 30.5 | 21.2 | -30.5 |
| Auto LPG | 194.3 | 163.8 | 170.9 | 167.2 | 13.2 | 14.4 | 8.7 |
| **Sub-Total (PSU Sales)** | **15925.2** | **17,570.9** | **19,134.2** | **21,177.5** | **1,566.1** | **1,618.7** | **3.4** |
| **2. Direct Private Imports** | 368.5 | 429.2 | 489.0 | 370.7 | 25.0 | 34.0 | **36.1** |
| **Total (1+2)** | **16,293.6** | **18,000.1** | **19,623.2** | **21,548.2** | **1,591.0** | **1,652.7** | **3.9** |

## 14. Kerosene allocation vs upliftment (Kilo Litres)

| Product | 2014-15 | | 2015-16 | | 2016-17 (P) | |
|---|---|---|---|---|---|---|
| | Allocation | Upliftment | Allocation | Upliftment | Allocation | Upliftment |
| Kerosene | 89,75,538 | 88,78,352 | 86,85,384 | 85,36,752 | 69,33,030 | 66,78,447 |

## 15. Industry marketing infrastructure (as on 1.4.2017) (Provisional)

| Particulars | IOCL | BPCL | HPCL | RIL | ESSAR | SHELL | Others | Total |
|---|---|---|---|---|---|---|---|---|
| POL Terminal/ Depots **(Nos.)** | 131 | 83 | 82 | 18$ | 2 | | 6* | 322 |
| Aviation Fuel Stations **(Nos.)** | 104 | 42 | 37 | 27 | | | 1@ | 211 |
| Retail Outlets (total) **(Nos.)** | 26,212 | 13,983 | 14,412 | 1,400 | 3,499 | 85 | 4^ | 59,595 |
| LPG Distributors (total) **(Nos.) (PSUs only)** | 9,570 | 4,684 | 4,532 | | | | | 18,786 |
| SKO/LDO agencies **(Nos.)** | 3,904 | 1,001 | 1,638 | | | | | 6,543 |
| LPG Bottling plants **(Nos.) (PSUs only)** | 91 | 50 | 47 | | | | 1# | 189 |
| LPG Bottling capacity **(TMTPA) (PSUs only)** | 8,905 | 3,663 | 3,672 | | | | 24~ | 16,264 |
| Rural ROs **(Nos.)** | 7,051 | 2,492 | 3,056 | 127 | 1,168 | 11 | | 13,905 |
| RGGLVY **(Nos.)** | 2,899 | 1,455 | 1,407 | | | | | 5,761 |
| LPG registered domestic consumers **(Nos. crore) (PSUs only)** | 11.39 | 5.95 | 6.12 | | | | | 23.5 |

*$ RIL= 5 Terminals & 13 Mini Depots; *4 MRPL & 2 NRL; @ShellMRPL -1, ^MRPL-4 #NRL-1; ~NRL-24*

## 16. Natural gas at a glance

(MMSCM)

| Details | 2013-14 | 2014-15 | 2015-16 | 2016-2017 (P) | April (P) 2016 | April (P) 2017 (Target) | April (P) 2017 |
|---|---|---|---|---|---|---|---|
| (a) Gross production | 35,407 | 33,657 | 32,249 | 31,897 | 2,488 | 2,781 | 2,533 |
| - ONGC | 23,284 | 22,023 | 21,177 | 22,088 | 1,631 | 1,899 | 1,790 |
| - Oil India Limited (OIL) | 2,626 | 2,722 | 2,838 | 2,937 | 250 | 236 | 241 |
| - Private / Joint Ventures (JVs) | 9,497 | 8,912 | 8,235 | 6,872 | 607 | 646 | 501 |
| (b) Net production | 34,574 | 32,693 | 31,138 | 30,848 | 2,400 | | 2,455 |
| (c) LNG import | 17,728 | 18,536 | 21,309 | 24,686 | 2,142 | | 2,182 |
| (d) Total consumption including internal consumption (Net production+Import) (b+c) | 52,302 | 51,229 | 52,448 | 55,534 | 4,542 | | 4,637 |
| (e) Total consumption (in BCM) | 52.30 | 51.23 | 52.45 | 55.53 | 4.54 | | 4.64 |
| (f) Import dependency based on consumption {c/d*100} | 33.90 | 36.18 | 40.63 | 44.45 | 47.16 | | 47.06 |

## 17. Coal Bed Methane (CBM) gas development in India

| | | | |
|---|---|---|---|
| Prognosticated CBM resources | | 92 | TCF |
| Established CBM resources | | 9.9 | TCF |
| Total available coal bearing areas | | 26,000 | Sq. KM |
| Exploration initiated | | 17,200 | Sq. KM |
| Blocks awarded | | 33 | Nos. |
| Production of CBM gas | April, 2017 | 46.263 | MMSCM |
| Production of CBM gas-Cumulative | April 2017-April, 2017 | 46.263 | MMSCM |

## 18. Gas pipelines under execution / construction as on 01.04.2017

| Network/ Region | Entity | Length (KM) | Design Cap. (MMSCMD) | Pipeline Size |
|---|---|---|---|---|
| Kochi-Kottanad-Bengaluru-Mangalore | GAIL (India) Ltd | 1,063 | 16 | 24"/18"/12" |
| Dabhol - Bengaluru (DBPL) | GAIL (India) Ltd | 315 | 16 | 36"/30"/24"/18" |
| Surat - Paradip | GAIL (India) Ltd | 2,112 | 74.81 | 36"/24"/18" |
| Jagdishpur- Haldia-Bokaro Dhamra | GAIL (India) Ltd | 2,539 | 16 | 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 | 250 | 36 | 24”/18” |
| Ennore-Thiruvallur-Bengaluru-Puducherry-Nagapattinam-Madurai-Tuticorin | Indian Oil Corporation Limited | 1,385 | 84.67 | 28”/24”/16”/12” /10” |
| Jaigarh-Mangalore | H-Energy Pvt..Ltd. | 635 | 17 | 24" |
| **Total** | | **13,821** | | |

## 19. Existing LNG terminals as on 01.04.2017

| Existing | Promoters | Capacity (MMTPA) | Capacity Utilisation in % (2016-17) |
|---|---|---|---|
| Dahej | Petronet LNG Ltd (PLL) | 15 MMTPA | 105.31 (Average utilization for 2016-17) |
| Hazira | Hazira LNG Pvt Ltd (HLPL) | 5 MMTPA | 69.6 |
| Dabhol | RGPPL (GAIL - NTPC JV) | 1.692 MMTPA in phase-1 without break water to be increased to 5 MMTPA | 57.1 |
| Kochi | Petronet LNG Ltd (PLL) | 5 MMTPA | 5.46 |
| **Total Capacity** | | **26.692 MMTPA** | |

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

| State | Entity operating | Geographical region | CNG stations | PNG connections | | | No. of CNG vehicles |
|---|---|---|---|---|---|---|---|
| | | | | Domestic | Industrial | Commercial | |
| | | | As on 1.4.2017 | As on 1.4.2017 | As on 1.4.2017 | As on 1.4.2017 | As on 1.4.2017 |
| **Haryana** | Haryana City Gas, Adani Gas Limited, GAIL Gas Ltd. | Sonepat, Faridabad, Gurgaon | 31 | 54,414 | 241 | 166 | 1,25,227 |
| **Andhra Pradesh** | Bhagyanagar Gas Ltd | Kakinada, Vijayawada | 16 | 3,902 | 0 | 41 | 15,711 |
| **Telangana** | Bhagyanagar Gas Ltd | Hyderabad | 26 | 2,706 | 5 | 5 | 23,570 |
| **Assam** | Assam Gas Co. Ltd | Tinsukia, Dibrugarh, Sibsagar, Jorhat, Golaghat | 0 | 30,023 | 400 | 1,002 | 0 |
| **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, Karjan-Palej, Valsad, Navsari, Surendernagar, Vadodara, Ahmedabad, Surat, Ankleshwar, Bharuch & surrounding areas, Bhavnagar, Jamnagar, Vapi, Anand | 396 | 16,53,663 | 4,200 | 14,766 | 10,94,973 |
| **Madhya Pradesh** | Aavantika Gas Ltd, GAIL Gas Ltd | Dewas, Vijaipur, Indore including Ujjain, Gwalior, Pithampura | 24 | 13,888 | 99 | 63 | 23,310 |
| **Rajasthan** | GAIL Gas Ltd | Kota | 3 | 157 | 16 | 1 | 5,688 |

| 20. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) | | | | | | | |
|---|---|---|---|---|---|---|---|
| State | Entity operating | Geographical region | CNG stations | PNG connections | | | No. of CNG vehicles |
| | | | | Domestic | Industrial | Commercial | |
| | | | As on 1.4.2017 | As on 1.4.2017 | As on 1.4.2017 | As on 1.4.2017 | As on 1.4.2017 |
| **Maharashtra** | Mahanagar Gas Ltd, Maharashtra Natural Gas Ltd, GAIL Gas Ltd, Gujarat Gas Limited | Mumbai, Greater Mumbai, 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 adjoining contiguous areas of Chakan, Hinjewadi & Talegaon GA, Thane Rural. | 245 | 9,99,868 | 191 | 3,387 | 6,85,883 |
| **Tripura** | Tripura Natural Gas Co. Ltd | Agartala | 5 | 28,669 | 50 | 366 | 9,438 |
| **West Bengal** | Great Eastern Energy Corporation Ltd | Kolkata | 7 | 0 | 0 | 0 | 3,172 |
| **Uttar Pradesh** | GAIL Gas Ltd, Sanwariya Gas, Green Gas, Central U.P. Gas, Siti Energy Ltd | | 54 | 51,195 | 500 | 272 | 1,17,686 |

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

| State | Entity operating | Geographical region | CNG stations | PNG connections | | | No. of CNG vehicles |
|---|---|---|---|---|---|---|---|
| | | | | Domestic | Industrial | Commercial | |
| | | | As on 1.4.2017 | As on 1.4.2017 | As on 1.4.2017 | As on 1.4.2017 | As on 1.4.2017 |
| **New Delhi** | Indraprastha Gas Ltd | NCT of Delhi (Including Noida & Ghaziabad) | 421 | 7,42,205 | 962 | 1,903 | 9,39,475 |
| **Karnataka** | Gail Gas Ltd. | Bengaluru | 3 | 2,446 | 3 | 17 | 135 |
| **Chandigarh** | Indian Oil- Adani Gas Pvt. Ltd. | Chandigarh | 2 | 2,350 | 0 | 0 | 1,000 |
| **Kerala** | Indian Oil- Adani Gas Pvt. Ltd. | Ernakulam | 0 | 102 | 0 | 2 | 0 |
| **Dadra & Nagar Haveli** | Gujarat Gas Ltd. | Dadra & Nagar Haveli | 0 | 58 | 3 | 5 | 0 |
| **Total** | | | **1,233** | **35,85,646** | **6,670** | **21,996** | **30,45,268** |

## 21. Major natural gas pipeline network

| Nature of pipeline | | GAIL | Reliance | GSPL | ARN | IOCL | ONGC | Total |
|---|---|---|---|---|---|---|---|---|
| **Natural gas (as on 01.04.2017)** | Length (KM) | 11,077 | 1,480 | 2,612 | 811 | 140 | 24 | **16,145** |
| | Cap (MMSCMD) | 206 | 80 | 43 | 3.26 | 9.5 | 6 | **347.8** |

## 22. Domestic natural gas price and gas price ceiling

| Period | Domestic Natural Gas price in US$/MMBTU (GCV basis) | Gas price ceiling in US$/MMBTU (GCV Basis) |
|---|---|---|
| November 2014 - March 2015 | 5.05 | - |
| April 2015 - September 2015 | 4.66 | - |
| October 2015 - March 2016 | 3.82 | - |
| April 2016 - September 2016 | 3.06 | 6.61 |
| October 2016 - March 2017 | 2.50 | 5.30 |
| April 2017 - September 2017 | 2.48 | 5.56 |

# 23. Information on Prices, Taxes and Under-recoveries

## International prices/ Exchange rates ($/bbl)

| | 2015-16 | 2016-17 | April 2017 |
|---|---|---|---|
| Crude (Indian Basket) | 46.17 | 47.16 | 52.49 |
| Petrol | 61.72 | 57.71 | 64.81 |
| Diesel | 55.02 | 56.12 | 63.70 |
| Kerosene | 55.71 | 56.46 | 62.51 |
| LPG ($/MT) | 394.71 | 377.52 | 466.00 |
| FO ($/MT) | 235.13 | 255.92 | 301.34 |
| Naphtha ($/MT) | 420.14 | 412.09 | 458.94 |
| Exchange (Rs./$ ) | 65.46 | 67.21 | 64.51 |

## Customs & excise duty rates (w.e.f. 1.3.2016)

| | Basic customs duty | Excise duty |
|---|---|---|
| Petrol | 2.50% | Rs 21.48/Ltr |
| Diesel | 2.50% | Rs 17.33/Ltr |
| PDS SKO | Nil | NIL |
| Non-PDS SKO | 5.00% | 14.00% |
| Sub. Dom LPG | NIL | NIL |
| Non Domestic LPG | 5.00% | 8.00% |
| Furnace Oil (Non-Fert) | 5.00% | 14.00% |
| Naphtha (Non-Fert) | 5.00% | 14.00% |
| ATF | NIL | 14% * |
| Crude Oil | NIL+Rs.50/ -MT as NCCD | NIL+ Cess@ 20%+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 commission | 26.85 | 27.29 |
| Central taxes | 22.03 | 17.84 |
| State taxes | 13.89 | 8.13 |
| Dealer commission | 2.55 | 1.64 |
| Retail selling price (RSP) | 65.32 | 54.9 |

| | PDS SKO* | Sub. Dom LPG* |
|---|---|---|
| Price before taxes and dealer commission | 17.28 | 583.73 |
| Central taxes | 0 | 0 |
| State taxes | 0.57 | 0 |
| Dealer commission | 1.70 | 47.75 |
| Retail Selling Price | 19.55 | 631.00 |
| Less cash compensation (CC) under DBTL | | 159.64 |
| CC by OMCs towards uncompensated cost | | 28.59 |
| Effective cost to consumer after subsidy | | 442.77 |

* SKO at Mumbai as on 1st May, 2017,. Petrol and diesel at Delhi as on 16th May, 2017 and LPG as on 1st May, 2017 at Delhi. RSP of Subsidized Dom LPG rounded.

## Change in Ex. Rate/ Crude price : Impact on under-recoveries

| (Rs. Crores) | Rs.1/$ Ex. Rate | $1/bbl Crude |
|---|---|---|
| Impact on under-recovery | 1,250 | 1,510 |

Note: The above calculation for SKO & LPG are based on RTP for 1st May 2017 at level of Crude Price $52.62/bbl & Ex. Rate Rs.64.59/USD

# 23. Information on Prices, Taxes and Under-recoveries

## Under-recoveries & burden sharing

| | 2014-15 | 2015-16 | 2016-17 |
|---|---|---|---|
| **Per unit under-recovery (Rs./litre/Cylinder)** | | | |
| Diesel | 2.70^ | Deregulated | Deregulated |
| PDS SKO | 27.93 | 13.47 | 11.39 |
| Sub. Dom LPG | 409.72 | 150.82* | 108.78* |
| **Total under-recoveries including DBTL (Rs. Crores)** | | | |
| Diesel | 10,935^ | Deregulated | Deregulated |
| PDS SKO | 24,799 | 11,496 | 7,595 |
| Sub. Dom LPG# | 40,551 | 16,074 | 12,133 |
| Total | 76,285 | 27,570 | 19,728 |

**Burden sharing (Rs. Crores)**

| | 2014-15 | 2015-16 | 2016-17 |
|---|---|---|---|
| Government | 31,279 | 26301** | 19,728** |
| Upstream | 42,822 | 1,251 | 0 |
| OMCs | 2,184 | 18 | 0 |

**Fiscal subsidy under Govt. schemes (Rs. Crores)**

| | | |
|---|---|---|
| PDS SKO | 681 | Scheme was extended till 31.3.2015 |
| Sub. Dom LPG | 1,920 | |

*Average of DBTL and under-recovery towards non-DBTL; #Includes subsidy under DBTL ( 2014-15: Rs.3,971 cr, 2015-16: Rs.16,056 cr ,2016-17 Rs.12,133 cr; ** Govt. compensation pending disbursement for PDS SKO(2016-17 Rs.5,269 cr); ^up to 18.10.2014 only.

## Sales & profit of petroleum sector (Rs. Crores)

| Apr-Dec`16 | Turnover | PAT |
|---|---|---|
| Upstream Companies (PSU) | 97,788 | 18,332 |
| Downstream Companies (PSU) | 6,48,793 | 25,973 |
| Standalone Refineries (PSU) | 82,223 | 4,062 |
| Private-RIL | 2,37,291 | 21,825 |

## Borrowings of OMCs (Rs. Crores)

| | As on Mar`15 | As on Mar`16 | As on December, 2016 |
|---|---|---|---|
| IOCL | 55,248 | 52,469 | 37,811 |
| BPCL | 13,098 | 15,976 | 16,274 |
| HPCL | 20,335 | 21,337 | 15,313 |

## Petroleum sector contribution to Central/State Govt.

| | 2014-15 | 2015-16 | Apr-Dec`16 |
|---|---|---|---|
| Central Government | 1,72,066 | 2,58,443 | 2,20,313 |
| % to total revenue receipt | 16% | 21% | N.A |
| State Governments | 1,60,554 | 1,60,209 | 1,29,937 |
| % to total revenue receipt | 9% | 8% | NA |
| **Total (Rs. Crores)** | **3,32,620** | **4,18,652** | **3,50,250** |

## Subsidy as a % of GDP(at current prices)

| | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|
| Petroleum subsidy | 1.30 | 0.62 | 0.25 |

Note - GDP figure for 2013-14 are 2nd RE, 2014-15 are RE and 2015-16 are PE

## 24. Capital expenditure of PSU oil companies

| Company | 2013-14 | 2014-15 | 2015-16(P) | 2016-17(P) | April-March | |
|---|---|---|---|---|---|---|
| | | | | | Target* | 2017(P) |
| ONGC Videsh Ltd (OVL) | 35,357 | 7,172 | 6,783 | 18,360 | 7,088 | 677 |
| ONGC Ltd | 32,470 | 29,997 | 29,502 | 28,010 | 29,968 | 1,301 |
| Oil India Ltd (OIL) | 9,351 | 3,774 | 3,550 | 10,514 | 9,252 | 220 |
| GAIL (India) Ltd | 4,070 | 1,632 | 1,880 | 2,180 | 3,253 | 80 |
| Indian Oil Corp. Ltd. (IOCL) | 16,661 | 14,314 | 14,368 | 21,918 | 20,162 | 804 |
| Hindustan Petroleum Corp. Ltd (HPCL) | 2,642 | 2,670 | 5,459 | 5,861 | 7,110 | 185 |
| Bharat Petroleum Corp. Ltd (BPCL) | 4,374 | 6,875 | 10,926 | 16,810 | 7,101 | 291 |
| Mangalore Refinery & Petrochem Ltd (MRPL) | 1,449 | 2,747 | 1,550 | 614 | 1,138 | 10 |
| Chennai Petroleum Corp. Ltd (CPCL) | 229 | 466 | 1,318 | 1,293 | 845 | 15 |
| Numaligarh Refinery Ltd (NRL) | 372 | 103 | 237 | 500 | 1,261 | 5 |
| Balmer Lawrie Co. Ltd (BL) | 120 | 80 | 38 | 73 | 50 | 11 |
| **TOTAL** | **1,07,095** | **69,830** | **75,611** | **1,06,133** | **87,227** | **3,599** |

*Targets are for full financial year 2017-18 and actual is for April 2017.

## 25. Conversion factors and volume conversion

### Weight to volume conversion

| Product | Weight (MT) | Volume (KL) | Barrel (bbl) |
|---|---|---|---|
| LPG | 1 | 1.844 | 11.60 |
| Petrol (MS) | 1 | 1.411 | 8.50 |
| Diesel (HSD) | 1 | 1.210 | 7.45 |
| Kerosene (SKO) | 1 | 1.285 | 7.90 |
| ATF | 1 | 1.288 | 8.10 |
| Light Diesel Oil (LDO) | 1 | 1.172 | 7.37 |
| Furnace Oil (FO) | 1 | 1.071 | 6.74 |
| Crude Oil | 1 | 1.170 | 7.33 |

### Exclusive Economic Zone

| | |
|---|---|
| 200 Nautical Miles | 370.4 Kilometers |

### 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) | 3,412 Btu |

### 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 | 10,000 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 | 4,541 SCM/day |
| 1 MT of LNG | 1,314 SCM | Power generation from 1 MMSCMD of gas | 220 MW |