# Ready Reckoner

## Snapshot of India's Oil & Gas data

## March, 2018

**(Revised on 02.05.2018)**

Analysis • Knowledge • Information

**Petroleum Planning & Analysis Cell**

(Ministry of Petroleum & Natural Gas)

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| Highlights for the month | |
|---|---|
| • | Indigenous crude oil and condensate production during March 2018 was lower by 1.6% than that of March 2017. While PSC fields registered a growth of 1.7% during the month over March 2017, PSU companies registered de-growth of 2.9%. On a cumulative basis, there was a decrease of 0.9% over the previous year 2016-17 in indigenous crude oil and condensate production. The percentage share of crude oil and condensate production of PSU companies increased to 71.8% during 2017-18 against 70.8% during the previous year. However, share of PSC fields reduced to 28.2% during 2017-18 from 29.2% during 2016-17. |
| • | Total refining capacity of the country increased from 234 MMTPA as on 01.04 2017 to 247.6 MMTPA as on 01.04.2018, resulting in an overall growth of 5.8%. There was growth of 3.5% in PSU/JV and 10.2% in private refineries capacities. |
| • | Total crude oil processed during March 2018 was 21.1 MMT, which is a decrease of 0.9% over March 2017. On cumulative basis crude oil processed was higher by 2.7% over the period April- March 2016-17 mainly due to increase in crude oil processed by PSU refineries. Indian refineries processed 74.8% high sulphur crude oil during 2017-18 over 72.3% during 2016-17. There was an increase of 3.5% in imported crude oil processed by refineries during 2017-18 as compared to 2016-17 due to reduction in indigenous crude oil production. |
| • | Production of petroleum products during March 2018 saw a marginal growth of 1.0% over March 2017. On cumulative basis a growth of 4.5% was recorded in production over the previous year 2016-17. Petcoke production increased by 7.4% and FO production decreased by 17.4% during 2017-18 as compared to 2016-17 due to increased operation of bottom up gradation units in refineries. Fractionators achieved highest monthly production of the year (442 TMT) during March 2018. |
| • | Crude oil import during March 2018 was 18.4 MMT, an increase of 1.1% as compared to March 2017. On cumulative basis, crude oil import was 220.4 MMT, an increase of 3.0% during 2017-18 as compared to 2016-17. |
| • | Product imports decreased by 3.0% during March 2018 as compared to March 2017. On cumulative basis, product imports decreased by 1.1% during 2017-18 as compared to 2016-17. |
| • | Export of POL products decreased by 19.8% during March 2018 as compared to March 2017. However, on cumulative basis, an increase of 1.9% was recorded in product exports during 2017-18 over the year 2016-17. HSD exports increased by 8.7% during 2017-18 as compared to 2016-17. |

| | |
|---|---|
| • | Petroleum product consumption registered a growth of 7.2% during March 2018 as compared to -0.6% de-growth during March 2017. Except for SKO and products in 'others' category all other products registered positive growth during March 2018. During the period April 2017 to March 2018, petroleum product consumption registered a growth of 5.3% as compared to 5.4% growth during the same period last year. During the period April 2017 to March 2018, SKO (-28.8%), naphtha (-5.2%) and FO/LSHS (-5.5%) witnessed high de-growth in consumption. |
| • | Total LPG consumption continuously for the last fifty five months in a row recorded a positive growth. Growth of 8.9% during March 2018 and a cumulative growth of 8.0 % for the period April 2017 to March 2018 was observed. Out of the five regions, Northern region had the highest share in consumption of 31.4% followed by Southern region at 28.5%, Western region at 22.2%, Eastern region at 15.5% and North Eastern region at 2.4% during the period April 2017 to March 2018. Eastern region had the highest growth of 14.7% in total LPG consumption during the period April 2017 to March 2018. This year during the period April 2017 to March 2018, 68.8 lakh DBCs and 284.7 lakh new connections were released out of which 155.7 lakh were released under PMUY. A total of 356 lakh connections were released under PMUY till 31.03.2018 since inception of the scheme. |
| • | SKO consumption registered a de-growth of -31.6 % during March 2018 and cumulative de-growth of -28.8% during the period April 2017 to March 2018. This was mainly because of reduced allocation to the states and voluntary surrender of PDS SKO quota by Haryana, Punjab, Dadra & Nagar Haveli, Daman & Diu, Puducherry and Andhra Pradesh. |
| • | Gross production of natural gas for the month of March, 2018 was 2782.6 MMSCM which was higher by 1.18% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 32649.3 MMSCM for the current financial year till March, 2018 was higher by 2.36% compared with the corresponding period of the previous year. The gross production of natural gas both during March 2018 and also for the financial year 2017-18 was the highest in the last three years. |
| • | LNG import for the month of March, 2018 was 2577.8 MMSCM which was 19.6% higher than the corresponding month of the previous year. The cumulative import of 26327.7 MMSCM for the current year till March, 2018 was higher by 6.7% compared with the corresponding period of the previous year. LNG import for the financial year 2017-18 was the highest ever import of LNG. |

| | |
|---|---|
| • | The price of Brent crude averaged \$65.90/bbl during March, 2018 as against \$65.19/bbl during February,2018. The Indian basket crude averaged \$63.80/bbl during March, 2018 as against \$63.54/bbl during the previous month. During 2017-18, the average price of Brent crude and Indian basket crude was \$56.43/bbl and \$57.49/bbl respectively. |
| • | The import bill of crude oil is estimated to increase by 20% from \$88 billion in 2017-18 to \$105 billion in 2018-19 considering Indian basket crude oil price of \$65/bbl and exchange rate of \$/Rs = 65. |

| 1. Selected indicators of the Indian economy | | | | | | | |
|---|---|---|---|---|---|---|---|
| Economic indicators | | Unit/ Base | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
| 1 | Population (as on 1st May, 2011) | Billion | 1.2 | - | - | - | - |
| 2 | GDP at Factor Cost (Constant prices)* | Growth % | 6.4 | 7.4<br>3rd RE | 8.2<br>2nd RE | 7.1<br>1st RE | 6.6<br>2nd AE |
| 3 | Agricultural Production (Food grains) | MMT | 265.0 | 252.0 | 251.6 | 275.1<br>FE | 277.5<br>2nd AE |
| | | Growth % | 3.1 | -4.9 | -0.2 | 9.4 | 0.9 |
| 4 | Gross Fiscal Deficit | % | -4.5 | -4.1 | -3.9 | -3.5 | -3.5<br>RE |

| Economic indicators | | Unit/ Base | 2015-16 | 2016-17 | March (P) | | April-March (P) | |
|---|---|---|---|---|---|---|---|---|
| | | | | | 2017 | 2018 | 2016-17 | 2017-18 |
| 5 | Index of Industrial Production# | Growth % | 3.3 | 4.6 | 1.2 | 7.1 | 4.7 | 4.3 |
| 6 | Imports | $ Billion | 381.0 | 384.4 | 40.0 | 42.8 | 384.4 | 459.7 |
| 7 | Exports | $ Billion | 262.3 | 275.9 | 29.3 | 29.1 | 275.9 | 302.8 |
| 8 | Trade Balance | $ Billion | -118.7 | -108.5 | -10.7 | -13.7 | -108.5 | -156.8 |
| 9 | Foreign Exchange Reserves @ | $ Billion | 355.6 | 370.0 | 370.0 | 424.4 | - | - |

*Revised on account of using new series of IIP and WPI with base 2011-12; #IIP is for the month of February 2018 & cumulative for April 2017-February 2018; @2015-16-as on March 25, 2016; 2016-17-as on March 31, 2017, March 2017- as on March 31, 2017 and March 2018- as on March 30, 2018; AE-Advanced Estimates; BE-Budget Estimates; RE-Revised Estimates; FE-Final Estimates.

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

| | Details | Unit/ Base | 2014-15 | 2015-16 | March | | April-March | |
|---|---|---|---|---|---|---|---|---|
| | | | | | 2017 | 2018 (P) | 2016-17 | 2017-18 (P) |
| 1 | Crude oil production in India | MMT | 37.5 | 36.9 | 3.1 | 3.0 | 36.0 | 35.7 |
| 2 | Consumption of petroleum products | MMT | 165.5 | 184.7 | 17.4 | 18.6 | 194.6 | 204.9 |
| 3 | Production of petroleum products | MMT | 221.1 | 231.9 | 21.8 | 22.0 | 243.5 | 254.4 |
| 4 | Imports & exports: | | | | | | | |
| | Crude oil imports | MMT | 189.4 | 202.9 | 18.2 | 18.4 | 213.9 | 220.4 |
| | | $ Billion | 112.7 | 64.0 | 6.6 | 8.3 | 70.2 | 87.8 |
| | Petroleum products (POL) imports | MMT | 21.3 | 29.5 | 3.2 | 3.1 | 36.3 | 35.9 |
| | | $ Billion | 12.1 | 10.0 | 1.2 | 1.2 | 10.6 | 13.4 |
| | Gross petroleum imports (Crude + POL) | MMT | 210.7 | 232.3 | 21.4 | 21.5 | 250.2 | 256.3 |
| | | $ Billion | 124.9 | 73.9 | 7.8 | 9.5 | 80.8 | 101.2 |
| | Petroleum products exports | MMT | 63.9 | 60.5 | 6.6 | 5.3 | 65.5 | 66.8 |
| | | $ Billion | 47.3 | 27.1 | 3.1 | 3.1 | 29.0 | 34.9 |
| | LNG imports | $ Billion | 9.2 | 6.7 | 0.6 | 0.9 | 6.1 | 7.7 |
| 5 | Petroleum imports as percentage (%) of India's gross imports (in value) | % | 32.8 | 19.4 | 19.6 | 22.1 | 21.0 | 22.0 |
| 6 | Petroleum exports as percentage (%) of India's gross exports (in value) | % | 18.0 | 10.3 | 10.7 | 10.7 | 10.5 | 11.5 |
| 7 | Import dependency of crude (on consumption basis) | % | 78.3% | 80.6% | 82.1% | 82.8% | 81.7% | 82.8% |

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

| Details | 2014-15 | 2015-16 | March | | | April-March | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2017 (Actual) | 2018 (Target)* | 2018 (P) | 2016-17 (Actual) | 2017-18 (Target)* | 2017-18 (P) |
| ONGC | 20.8 | 21.1 | 1.8 | 2.0 | 1.7 | 20.9 | 23.1 | 20.8 |
| Oil India Limited (OIL) | 3.4 | 3.2 | 0.3 | 0.3 | 0.3 | 3.3 | 3.7 | 3.4 |
| Private / Joint Ventures (JVs) | 11.7 | 11.2 | 0.9 | 0.9 | 0.9 | 10.4 | 10.6 | 9.9 |
| **Total Crude Oil** | **35.9** | **35.5** | **3.0** | **3.2** | **2.9** | **34.5** | **37.4** | **34.0** |
| Condensate | 1.6 | 1.4 | 0.1 | | 0.2 | 1.5 | | 1.6 |
| **Total (Crude + Condensate) (MMT)** | **37.5** | **36.9** | **3.1** | **3.2** | **3.0** | **36.0** | **37.4** | **35.7** |
| **Total (Crude + Condensate) (Million Bbl)** | **274.6** | **270.8** | **22.7** | **23.7** | **22.3** | **263.9** | **274.4** | **261.6** |

*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-à-vis overseas production

| Details | 2014-15 | 2015-16 | March | | April-March | |
|---|---|---|---|---|---|---|
| | | | 2017 | 2018 (P) | 2016-17 | 2017-18 (P) |
| Total domestic production (MMTOE) | 71.1 | 69.2 | 5.8 | 5.8 | 67.9 | 68.3 |
| Overseas production (MMTOE) | 9.9 | 10.1 | 2.0 | 1.8 | 16.1 | 19.6 |
| **Overseas production as percentage (%) of domestic production** | **13.8%** | **14.6%** | **33.4%** | **30.3%** | **23.8%** | **28.7%** |

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

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

| Details | | 2014-15 | 2015-16 | March | | April-March | |
|---|---|---|---|---|---|---|---|
| | | | | 2017 | 2018 (P) | 2016-17 | 2017-18 (P) |
| 1 | High Sulphur crude | 161.4 | 166.1 | 15.3 | 15.5 | 177.4 | 188.4 |
| 2 | Low Sulphur crude | 61.9 | 66.7 | 6.0 | 5.7 | 67.9 | 63.6 |
| **Total crude processed** | | **223.3** | **232.9** | **21.3** | **21.1** | **245.4** | **251.9** |
| **Share of HS crude in total crude oil processing** | | **72.3%** | **71.3%** | **71.9%** | **73.2%** | **72.3%** | **74.8%** |

## 6. Quantity and value of crude oil imports

| Year | Quantity (MMT) | $ Million | Rs. Crore |
|---|---|---|---|
| 2016-17 | 213.93 | 70,196 | 4,70,159 |
| 2017-18 (P) | 220.40 | 87,776 | 5,65,951 |

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

| Particulars | | 2014-15 | 2015-16 | March | | April-March | |
|---|---|---|---|---|---|---|---|
| | | | | 2017 | 2018 (P) | 2016-17 | 2017-18 (P) |
| 1 | Indigenous crude oil processing | 34.2 | 34.1 | 2.9 | 3.0 | 33.5 | 32.8 |
| 2 | Products from indigenous crude (93.3% of crude oil processed) | 32.0 | 31.8 | 2.7 | 2.8 | 31.3 | 30.6 |
| 3 | Products from fractionators (Including LPG and Gas) | 4.0 | 4.0 | 0.4 | 0.4 | 4.3 | 4.6 |
| 4 | Total production from indigenous crude & condensate **(2 + 3)** | 35.9 | 35.8 | 3.1 | 3.2 | 35.6 | 35.2 |
| 5 | Total domestic consumption | 165.5 | 184.7 | 17.4 | 18.6 | 194.6 | 204.9 |
| **% Self-sufficiency (4 / 5)** | | **21.7%** | **19.4%** | **17.9%** | **17.2%** | **18.3%** | **17.2%** |

| 8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Company** | **Refinery** | **Installed capacity (1.4.2018) (MMTPA)** | **Crude oil processing (MMT)** | | | | | | | |
| | | | **2014-15** | **2015-16** | **March** | | | **April-March** | | |
| | | | | | **2017 (Actual)** | **2018 (Target)** | **2018 (P)** | **2016-17 (Actual)** | **2017-18 (Target)** | **2017-18 (P)** |
| IOCL | Barauni (1964) | 6.0 | 5.9 | 6.5 | 0.6 | 0.6 | 0.6 | 6.5 | 5.8 | 5.8 |
| | Koyali (1965) | 13.7 | 13.3 | 13.8 | 1.2 | 1.2 | 1.3 | 14.0 | 12.8 | 13.8 |
| | Haldia (1975) | 7.5 | 7.7 | 7.8 | 0.7 | 0.7 | 0.7 | 7.7 | 7.4 | 7.7 |
| | Mathura (1982) | 8.0 | 8.5 | 8.9 | 0.8 | 0.8 | 0.9 | 9.2 | 8.5 | 9.2 |
| | Panipat (1998) | 15.0 | 14.2 | 15.3 | 1.4 | 1.3 | 1.4 | 15.6 | 15.2 | 15.7 |
| | Guwahati (1962) | 1.0 | 1.0 | 0.9 | 0.08 | 0.07 | 0.09 | 0.9 | 0.9 | 1.0 |
| | Digboi (1901) | 0.65 | 0.6 | 0.6 | 0.05 | 0.04 | 0.06 | 0.5 | 0.5 | 0.7 |
| | Bongaigaon(1979) | 2.35 | 2.4 | 2.4 | 0.2 | 0.2 | 0.2 | 2.5 | 2.3 | 2.4 |
| | Paradip (2016) | 15.0 | - | 1.8 | 1.2 | 1.3 | 0.4 | 8.2 | 13.0 | 12.7 |
| | **IOCL TOTAL** | **69.2** | **53.6** | **58.0** | **6.3** | **6.2** | **5.6** | **65.2** | **66.3** | **69.0** |
| CPCL | Manali (1969) | 10.5 | 10.2 | 9.1 | 0.7 | 0.9 | 0.9 | 9.8 | 9.8 | 10.3 |
| | CBR (1993) | 1.0 | 0.5 | 0.5 | 0.05 | 0.04 | 0.05 | 0.5 | 0.5 | 0.5 |
| | **CPCL-TOTAL** | **11.5** | **10.8** | **9.6** | **0.8** | **0.9** | **1.0** | **10.3** | **10.3** | **10.8** |
| BPCL | Mumbai (1955) | 12.0 | 12.8 | 13.4 | 0.7 | 1.3 | 1.3 | 13.5 | 13.3 | 14.1 |
| | Kochi (1966) | 15.5 | 10.4 | 10.7 | 1.1 | 1.3 | 1.4 | 11.8 | 13.7 | 14.1 |
| BORL | Bina (2011) | 6.0 | 6.2 | 6.4 | 0.6 | 0.5 | 0.6 | 6.4 | 6.0 | 6.7 |
| NRL | Numaligarh (1999) | 3.0 | 2.8 | 2.5 | 0.2 | 0.2 | 0.2 | 2.7 | 2.7 | 2.8 |
| | **BPCL-TOTAL** | **36.5** | **32.2** | **33.0** | **2.7** | **3.3** | **3.5** | **34.4** | **35.7** | **37.7** |

| Company | Refinery | Installed capacity (1.4.2018) (MMTPA) | Crude oil processing (MMT) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2014-15 | 2015-16 | March | | | April-March | | |
| | | | | | 2017 (Actual) | 2018 (Target) | 2018 (P) | 2016-17 (Actual) | 2017-18 (Target) | 2017-18 (P) |
| ONGC | Tatipaka (2001) | 0.1 | 0.05 | 0.07 | 0.007 | 0.005 | 0.006 | 0.09 | 0.06 | 0.08 |
| MRPL | Mangalore (1996) | 15.0 | 14.6 | 15.5 | 1.4 | 1.4 | 1.5 | 16.0 | 16.0 | 16.1 |
| | **ONGC TOTAL** | **15.1** | **14.7** | **15.6** | **1.5** | **1.4** | **1.5** | **16.1** | **16.1** | **16.2** |
| HPCL | Mumbai (1954) | 7.5 | 7.4 | 8.0 | 0.8 | 0.7 | 0.7 | 8.5 | 8.4 | 8.6 |
| | Visakh (1957) | 8.3 | 8.8 | 9.2 | 0.9 | 0.8 | 0.9 | 9.3 | 9.6 | 9.6 |
| HMEL | Bathinda (2012) | 11.3 | 7.3 | 10.7 | 0.7 | 0.9 | 1.0 | 10.5 | 9.2 | 8.8 |
| | **HPCL- TOTAL** | **27.1** | **23.5** | **27.9** | **2.3** | **2.4** | **2.6** | **28.3** | **27.2** | **27.1** |
| RIL* | Jamnagar (DTA) (1999) | 33.0 | 30.9 | 32.4 | 2.8 | 2.8 | 2.8 | 32.8 | 32.8 | 33.2 |
| | Jamnagar (SEZ) (2008) | 35.2 | 37.2 | 37.1 | 3.3 | 3.3 | 2.4 | 37.4 | 37.4 | 37.3 |
| EOL | Vadinar (2006) | 20.0 | 20.5 | 19.1 | 1.8 | 1.7 | 1.8 | 20.9 | 20.3 | 20.7 |
| **All India** | | **247.6** | **223.3** | **232.9** | **21.3** | **22.0** | **21.1** | **245.4** | **246.0** | **251.9** |

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

## 9. Major crude oil and product pipeline network

| Details | | ONGC | OIL | Cairn | HMEL | IOCL | BPCL | HPCL | Others* | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Crude Oil | Length (KM) | 1,191 | 1,193 | 660 | 1,017 | 5,301 | 937 | - | - | **10299** |
| (as on 1.4.2018) | Cap (MMTPA) | 58.5 | 8.4 | 8.7 | 9.0 | 48.6 | 6.0 | - | - | **139.2** |
| Products | Length (KM) | - | 654 | - | - | 7,950 | 1,948 | 3,371 | 2,688 | **16611** |
| (as on 1.4.2018) | Cap (MMTPA) | - | 1.7 | - | - | 46.2 | 16.2 | 37.1 | 9.3 | **110.5** |

***Others** includes GAIL and Petronet India. HPCL and BPCL lubes pipeline included in products pipeline data

| 10. Gross Refining Margins (GRM) of refineries ($/bbl) | | | | | |
|---|---|---|---|---|---|
| **Company** | **Refinery** | **2014-15** | **2015-16** | **2016-17** | **Apr-Dec'2017** |
| IOCL | Barauni | -1.20 | 2.93 | 6.52 | 6.10 |
| | Koyali | 4.79 | 6.80 | 7.55 | 9.44 |
| | Haldia | -1.51 | 3.96 | 6.80 | 6.12 |
| | Mathura | -2.19 | 3.30 | 7.01 | 6.72 |
| | Panipat | -1.97 | 4.15 | 7.95 | 7.59 |
| | Guwahati ** | 8.68 | 15.88 | 22.14 | 22.04 |
| | Digboi ** | 13.73 | 16.17 | 24.49 | 25.00 |
| | Bongaigaon ** | -0.26 | 11.09 | 20.15 | 20.19 |
| | Paradip # | - | -0.65 | 4.22 | 7.14 |
| | **Weighted average** | **0.27** | **5.06** | **7.77** | **8.28** |
| BPCL | Kochi | 3.17 | 6.87 | 5.16 | 6.49 |
| | Mumbai | 3.97 | 6.37 | 5.36 | 7.44 |
| | **Weighted average** | **3.62** | **6.59** | **5.26** | **6.97** |
| HPCL | Mumbai | 4.88 | 8.09 | 6.95 | 8.40 |
| | Visakhapatnam | 1.12 | 5.46 | 5.51 | 6.71 |
| | **Weighted average** | **2.84** | **6.68** | **6.20** | **7.51** |
| CPCL | Chennai | 1.97 | 5.27 | 6.05 | 6.64 |
| MRPL | Mangalore | -0.64 | 5.20 | 7.75 | 7.42 |
| NRL | Numaligarh ** | 16.67 | 23.68 | 28.56 | 31.20 |
| BORL | Bina | 6.10 | 11.70 | 11.80 | 11.60 |
| RIL | Jamnagar | 8.60 | 10.80 | 11.00 | 11.90 |
| Essar | Vadinar | 8.37 | 10.81 | 9.14 | * |

*Being unlisted company, quarterly results are not declared; ** GRM of North Eastern refineries are including excise duty benefit. For GRM excluding excise duty benefit, refer table 11; # Commissioned in February, 2016.

| 11. GRM of North-East refineries excluding excise duty benefit ($/bbl) | | | | | |
|---|---|---|---|---|---|
| **Company** | **Refinery** | **2014-15** | **2015-16** | **2016-17** | **Apr-Dec'2017** |
| IOCL | Guwahati | 0.96 | 1.26 | 1.12 | 3.76 |
| | Digboi | 5.42 | 4.16 | 7.73 | 7.68 |
| | Bongaigaon | -6.51 | 0.08 | 6.03 | 5.81 |
| NRL | Numaligarh | 9.46 | 8.06 | 8.50 | 10.69 |

| 12. Production and consumption of petroleum products (Million Metric Tonnes) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Products** | **2015-16** | | **March 2017** | | **March 2018 (P)** | | **April 2016-March 2017** | | **April 2017-March 2018 (P)** | |
| | **Prod$^n$** | **Consump$^n$** | **Prod$^n$** | **Consump$^n$** | **Prod$^n$** | **Consump$^n$** | **Prod$^n$** | **Consump$^n$** | **Prod$^n$** | **Consump$^n$** |
| LPG | 10.6 | 19.6 | 1.1 | 1.9 | 1.1 | 2.1 | 11.3 | 21.6 | 12.4 | 23.3 |
| MS | 35.3 | 21.8 | 3.4 | 2.1 | 3.3 | 2.4 | 36.6 | 23.8 | 37.8 | 26.2 |
| NAPHTHA | 17.9 | 13.3 | 1.8 | 1.1 | 1.7 | 1.1 | 19.7 | 13.2 | 19.9 | 12.5 |
| ATF | 11.8 | 6.3 | 1.3 | 0.6 | 1.4 | 0.7 | 13.8 | 7.0 | 14.7 | 7.6 |
| SKO | 7.5 | 6.8 | 0.4 | 0.4 | 0.4 | 0.3 | 6.0 | 5.4 | 4.3 | 3.8 |
| HSD | 98.6 | 74.6 | 9.2 | 6.8 | 9.2 | 7.3 | 102.1 | 76.0 | 107.9 | 81.1 |
| LDO | 0.4 | 0.4 | 0.06 | 0.04 | 0.06 | 0.05 | 0.6 | 0.4 | 0.6 | 0.5 |
| LUBES | 1.0 | 3.6 | 0.08 | 0.3 | 0.11 | 0.4 | 1.0 | 3.5 | 1.0 | 3.8 |
| FO/LSHS | 10.7 | 6.6 | 0.7 | 0.6 | 0.7 | 0.6 | 12.0 | 7.2 | 10.3 | 6.8 |
| BITUMEN | 5.2 | 5.9 | 0.5 | 0.7 | 0.6 | 0.8 | 5.2 | 5.9 | 5.3 | 6.0 |
| PET COKE | 13.3 | 19.3 | 1.2 | 2.2 | 1.1 | 2.3 | 12.9 | 24.0 | 13.9 | 26.2 |
| OTHERS | 19.6 | 6.4 | 2.0 | 0.7 | 2.4 | 0.6 | 22.3 | 6.6 | 26.3 | 7.1 |
| **ALL INDIA** | **231.9** | **184.7** | **21.8** | **17.4** | **22.0** | **18.6** | **243.5** | **194.6** | **254.4** | **204.9** |
| **Growth (%)** | **4.9%** | **11.6%** | **2.0%** | **-0.6%** | **1.0%** | **7.2%** | **5.0%** | **5.4%** | **4.5%** | **5.3%** |

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

## 13. LPG consumption (Thousand Metric Tonne)

| LPG category | 2014-15 | 2015-16 | March | | | April-March | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2017 | 2018 (P) | Gr (%) | 2016-17 | 2017-18 (P) | Gr (%) |
| **1. PSU Sales** : | | | | | | | | |
| LPG-Packed Domestic | 16,040.4 | 17,181.7 | 1664.1 | 1795.0 | 7.9 | 18,871.4 | 20,351.8 | 7.8 |
| LPG-Packed Non-Domestic | 1,051.0 | 1,464.4 | 145.9 | 181.5 | 24.4 | 1,775.9 | 2,085.8 | 17.5 |
| LPG-Bulk | 315.7 | 317.2 | 28.1 | 32.4 | 15.2 | 364.3 | 354.4 | -2.7 |
| Auto LPG | 163.8 | 170.9 | 14.8 | 15.5 | 4.7 | 167.3 | 184.3 | 10.2 |
| **Sub-Total (PSU Sales)** | **17,570.9** | **19,134.2** | **1,852.8** | **2,024.3** | **9.3** | **21,178.9** | **22,976.4** | **8.5** |
| **2. Direct Private Imports** | 429.2 | 489.0 | 35.2 | 30.9 | -12.2 | 429.3 | 367.0 | -14.5 |
| **Total (1+2)** | **18,000.1** | **19,623.2** | **1,888.0** | **2,055.2** | **8.9** | **21,608.2** | **23,343.3** | **8.0** |

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

| Product | 2013-14 | | 2014-15 | | 2015-16 | | 2016-17 | | 2017-18 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Allocation | Upliftment | Allocation | Upliftment | Allocation | Upliftment | Allocation | Upliftment | Allocation | Upliftment |
| **Kerosene** | 90,55,068 | 89,96,251 | 89,75,538 | 88,78,352 | 86,85,384 | 85,36,752 | 69,33,030 | 66,78,447 | 50,21,828 | 46,69,164 |

## 15. Industry marketing infrastructure (as on 01.04.2018) (Provisional)

| Particulars | IOCL | BPCL | HPCL | RIL | ESSAR | SHELL | Others | Total |
|---|---|---|---|---|---|---|---|---|
| POL Terminal/ Depots **(Nos.)** | 125 | 78 | 82 | 18 | 2 | - | 6* | **311** |
| Aviation Fuel Stations **(Nos.)** | 107 | 51 | 41 | 28 | - | - | 1@ | **228** |
| Retail Outlets (total) **(Nos.)** | 27,089 | 14,447 | 15,062 | 1400 | 4,473 | 108 | 6^ | **62,585** |
| out of which, Rural ROs | 7,529 | 2,621 | 3,310 | 127 | 1,570 | 14 | - | **15,171** |
| SKO/LDO agencies **(Nos.)** | 3,897 | 1,001 | 1,638 | - | - | - | - | **6,536** |
| LPG Distributors (total) **(Nos.) (PSUs only)** | 10,213 | 5,084 | 4,849 | - | - | - | - | **20,146** |
| LPG Bottling plants **(Nos.) (PSUs only)** | 91 | 50 | 48 | - | - | - | 1# | **190** |
| LPG Bottling capacity **(TMTPA) (PSUs only)** | 9,385 | 3,933 | 4,047 | - | - | - | 30~ | **17,395** |
| LPG active domestic consumers **(Nos. crore) (PSUs only)** | 10.6 | 5.8 | 6.1 | - | - | - | - | **22.4** |

$ RIL= 5 terminals and 13 mini depots; * 4 MRPL & 2 NRL; @ ShellMRPL -1, ^ MRPL-6 # NRL-1; ~ NRL-30

## 16. Natural gas at a glance

(MMSCM)

| Details | 2014-15 | 2015-16 | March | | | April-March | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2017 (Actual) | 2018 (Target) | 2018 (P) | 2016-17 (Actual) | 2017-18 (Target) | 2017-18 (P) |
| (a) Gross production | 33,657 | 32,249 | 2,750 | 3,131 | 2,783 | 31,897 | 35,134 | 32,649 |
| - ONGC | 22,023 | 21,177 | 1,972 | 2,206 | 2,014 | 22,088 | 24,208 | 23,429 |
| - Oil India Limited (OIL) | 2,722 | 2,838 | 251 | 248 | 237 | 2,937 | 3,000 | 2,882 |
| - Private / Joint Ventures (JVs) | 8,912 | 8,235 | 527 | 677 | 532 | 6,872 | 7,926 | 6,338 |
| (b) Net availability (excluding flare gas and loss) | 32,693 | 31,129 | 2,669 | | 2,702 | 30,848 | | 31,731 |
| (c) LNG import | 18,545 | 21,388 | 2,155 | | 2,578 | 24,686 | | 26,328 |
| (d) Total consumption including internal consumption (Net availability+Import) (b+c) | 51,238 | 52,517 | 4,824 | | 5,280 | 55,534 | | 58,059 |
| (e) Total consumption **(in BCM)** | 51.2 | 52.5 | 4.8 | | 5.3 | 55.5 | | 58.1 |
| (f) Import dependency based on consumption (%), {c/d*100} | 36.2 | 40.7 | 44.7 | | 48.8 | 44.5 | | 45.3 |

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

## 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 | | 16,613 | Sq. KM |
| Blocks awarded | | 33 | Nos. |
| Production of CBM gas | March 2018 (P) | 70.4 | MMSCM |
| Production of CBM gas-Cumulative | April 2017-March 2018 (P) | 734.8 | MMSCM |

## 18. Gas pipelines under execution / construction as on 01.04.2018

| Network/ Region | Entity | Length sanctioned (KM) | Design capacity (MMSCMD) | Pipeline size |
|---|---|---|---|---|
| Kochi-Kottanad-Bengaluru-Mangalore | GAIL (India) Ltd | 1,056 | 16 | 24"/18"/12" |
| Dabhol - Bengaluru (DBPL) | GAIL (India) Ltd | 302 | 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” |
| 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** | | **13,489** | | |

## 19. Existing LNG terminals

| Location | Promoters | Capacity (MMTPA) as on 01.04.2018 | Capacity utilisation in % April 2017-February 2018 (P) |
|---|---|---|---|
| Dahej | Petronet LNG Ltd (PLL) | 15 MMTPA | 105.0 |
| Hazira | Hazira LNG Pvt Ltd (HLPL) | 5 MMTPA | 58.0 |
| Dabhol | RGPPL (GAIL - NTPC JV) | 1.692 MMTPA in phase-1 without break water to be increased to 5 MMTPA | 55.1 |
| Kochi | Petronet LNG Ltd (PLL) | 5 MMTPA | 12.4 |
| **Total Capacity** | | **26.7 MMTPA** | |

## 20. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) as on 01.03.2018

| State | Entity operating | Geographical area | CNG stations | PNG connections | | | No. of CNG vehicles |
|---|---|---|---|---|---|---|---|
| | | | | Domestic | Industrial | Commercial | |
| **Haryana** | Haryana City Gas Distribution Ltd, Adani Gas Limited, GAIL Gas Ltd., Indraprastha Gas Ltd. | Sonepat, Faridabad, Gurgaon, Rewadi, Panipat | 47 | 74,066 | 330 | 224 | 1,25,227 |
| **Andhra Pradesh** | Bhagyanagar Gas Ltd, Godavari Gas Pvt.Ltd. | Kakinada, Vijayawada, East/ West Godavari | 18 | 13,185 | 1 | 50 | 17,125 |
| **Gujarat** | Sabarmati Gas Ltd, Gujarat Gas Ltd, Adani Gas Ltd, Vadodara Gas Ltd, Hindustan Petroleum Corporation Ltd, Charotar Gas Sahakari Mandal Ltd, IRM Energy Ltd. | Gandhinagar, Mehsana, Sabarkantha and Patan, Surat-Bharuch-Ankleswar GA, Nadiad GA,Navsari GA, Rajkot GA, Surendra Nagar GA, Hazira GA, Valsad GA, Jamnagar GA, Bhavnagar GA, Kutch (West) GA, UT of Dadra and Nagar Haveli GA, Amreli District GA, Dahej-Vagra Taluka GA, Dahod District GA, Panchmahal District GA, Anand (Exclusive area authorised) district GA, Ahmedabad (Excluding area already authorised) district GA, Vadodara, Vadodara Rural and Ahmedabad Urban, Anand and Palanpur | 428 | 18,22,643 | 4,526 | 17,805 | 9,09,206 |

## 20. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) as on 01.03.2018

| State | Entity operating | Geographical area | CNG stations | PNG connections | | | No. of CNG vehicles |
|---|---|---|---|---|---|---|---|
| | | | | Domestic | Industrial | Commercial | |
| **Telangana** | Bhagyanagar Gas Ltd. | Hyderabad | 31 | 7,599 | 5 | 8 | 24,368 |
| **Assam** | Assam Gas Co. Ltd | Tinsukia, Dibrugarh, Sibsagar, Jorhat, Golaghat | 0 | 31,406 | 405 | 1,056 | 0 |
| **Madhya Pradesh** | Aavantika Gas Ltd, GAIL Gas Ltd | Dewas, Vijaipur, Indore including Ujjain, Gwalior | 30 | 38,446 | 124 | 91 | 30,584 |
| **Rajasthan** | Rajasthan State Gas Limited | Kota | 3 | 305 | 15 | 3 | 6,853 |
| **New Delhi** | Indraprastha Gas Ltd . | NCT of Delhi (Including Noida & Ghaziabad) | 427 | 8,67,673 | 1,185 | 2,151 | 10,24,807 |
| **Karnataka** | Gail Gas Ltd. | Bengaluru | 4 | 5,038 | 21 | 44 | 338 |
| **Chandigarh** | IndianOil- Adani Gas | Chandigarh | 4 | 10,583 | 0 | 0 | 4,000 |
| **Kerala** | IndianOil- Adani Gas | Ernakulam | 4 | 2,661 | 0 | 3 | 0 |
| **Daman and Diu** | IndianOil- Adani Gas | Daman and Diu | 1 | 2,073 | 3 | 13 | 500 |
| **Dadra & Nagar Haveli** | Gujarat Gas Ltd. | Dadra & Nagar Haveli | 1 | 439 | 8 | 9 | 0 |
| **Odisha** | GAIL (India) Ltd. | Bhubaneswar | 2 | 87 | 0 | 0 | 438 |

## 20. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) as on 01.03.2018

| State | Entity operating | Geographical area | CNG stations | PNG connections | | | No. of CNG vehicles |
|---|---|---|---|---|---|---|---|
| | | | | Domestic | Industrial | Commercial | |
| **Maharashtra** | Mahanagar Gas Ltd, Maharashtra Natural Gas Ltd, Gujarat Gas Limited | Mumbai, Greater Mumbai including Thane City, Mira Bhayender, Navi Mumbai, Ambernath, Bhiwandi, Kalyan, Dombivli, Badlapur, Ulhasnagar, Panvel, Kharghar & Taloja, Pune City including Pimpri Chinchwad along with adjoining contiguous areas of Hinjewadi, Chakan & Talegaon GA, Raigarh District and Palghar and Thane Rural | 263 | 11,86,743 | 219 | 3,712 | 7,85,343 |
| **Tripura** | Tripura Natural Gas Co. Ltd | Agartala | 6 | 33,673 | 50 | 406 | 10,560 |
| **West Bengal** | Greater Calcutta Gas Supply Corporation Ltd | Kolkata | 7 | 0 | 0 | 0 | 3,471 |
| **Uttar Pradesh** | GAIL Gas Ltd, Sanwariya Gas Ltd, Green Gas Ltd, Central U.P. Gas Ltd, Siti Energy Ltd, Adani Gas Ltd, Indian Oil-Adani Gas Pvt. Ltd. | Meerut, Divyapur, Mathura, Agra, Kanpur, Bareilly, Lucknow, Moradabad, Firozabad Geographical Area (TTZ), Khurja and Allahabad | 73 | 96,456 | 615 | 357 | 1,35,959 |
| **Total** | | | **1,349** | **41,93,076** | **7,507** | **25,932** | **30,78,779** |

| 21. Major natural gas pipeline network as on 01.04.2018 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Nature of pipeline** | | **GAIL** | **Reliance** | **GSPL** | **ARN** | **IOCL** | **ONGC** | **Total** |
| **Natural gas** | Length (KM) | 11410 | 1784 | 2618 | 817 | 140 | 24 | **16793** |
| | Cap (MMSCMD) | 229.5* | 83.5 | 43.0 | 3.2 | 9.5 | 6.0 | **387.3** |

*GAIL's pipeline capacity is inclusive of CJPL (5 MMSCMD) and DBPL (31 MMSCMD) which is the extension of DVPL-2 / VDPL.

| 22. Domestic natural gas price and gas price ceiling (GCV basis) | | |
|---|---|---|
| **Period** | **Domestic Natural Gas price in US$/MMBTU** | **Gas price ceiling in US$/MMBTU** |
| 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 |
| October 2017 - March 2018 | 2.89 | 6.30 |
| April 2018 - September 2018 | 3.06 | 6.78 |

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

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

| Particulars | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|
| Crude oil (Indian Basket) | 46.17 | 47.56 | 56.43 |
| Petrol | 61.72 | 58.10 | 67.83 |
| Diesel | 55.02 | 56.59 | 68.19 |
| Kerosene | 55.71 | 56.81 | 67.65 |
| LPG ($/MT) | 394.71 | 393.31 | 486.04 |
| FO ($/MT) | 235.13 | 258.92 | 327.50 |
| Naphtha ($/MT) | 420.14 | 415.17 | 494.73 |
| Exchange (Rs./$) | 65.46 | 67.09 | 64.45 |

## Customs & excise duty rates (w.e.f. 02.02.2018)

| Product | Basic Customs duty # | Excise duty | GST rates |
|---|---|---|---|
| Petrol | 2.50% | Rs 19.48/Ltr | ** |
| Diesel | 2.50% | Rs 15.33/Ltr | ** |
| PDS SKO | Nil | Not Applicable | 5.00% |
| Non-PDS SKO | 5.00% | | 18.00% |
| Domestic LPG | Nil*** | | 5.00% |
| Non Domestic LPG | 5.00% | | 18.00% |
| Furnace Oil (Non-Fert) | 5.00% | | 18.00% |
| Naphtha (Non-Fert) | 5.00% | | 18.00% |
| ATF | Nil | 14% * | ** |
| Crude Oil | Nil+Rs.50/ -MT as NCCD | Nil+ Cess@ 20% +Rs.50 /-MT NCCD | ** |

*2% for scheduled commuter airlines from regional connectivity scheme airports; ** Crude oil, Petrol, Diesel, ATF and Natural Gas are outside GST levy; # Social welfare surcharge @ 3% on petrol and diesel and 10% on other products is levied on aggregate duties of Customs.*** Customs duty is Nil for import of Domestic LPG sold to household consumers (including NDEC) by PSU OMCs. Customs duty rate is 5% for other importers of domestic LPG.

## Price buildup of petroleum products (Rs./litre/Cylinder)

| Particulars | Petrol* | Diesel* |
|---|---|---|
| Price charged to dealers (excluding Excise Duty and VAT) | 35.24 | 37.81 |
| Excise Duty | 19.48 | 15.33 |
| Dealer Commission (Average) | 3.60 | 2.52 |
| VAT (incl VAT on dealer commission) | 15.75 | 9.61 |
| **Retail selling price (RSP) -Rounded** | **74.07** | **65.27** |
| **Particulars** | **PDS SKO*** | **Sub. Dom LPG*** |
| Price before taxes and dealer/distributor commission | 21.05 | 573.26 |
| Dealer/distributor commission | 2.03 | 49.12 |
| GST (incl GST on dealer/distributor commission) | 1.15 | 31.12 |
| **Retail Selling Price** | **24.24** | **653.50** |
| Less: Cash Compensation on LPG to consumers under DBTL | | 162.15 |
| **Effective cost to consumer after subsidy** | | **491.35** |

*Petrol and diesel at Delhi as per IOCL are as on 19th April, 2018. SKO at Mumbai is as on 16th April, 2018 and Sub. Dom LPG at Delhi is as on 1st April, 2018. RSP of Subsidized Dom LPG rounded.

## Impact of changes in product price by $1 per bbl for PDS SKO and $10/MT for Domestic LPG & change in exchange rate by ₹1 per $

| Product | Impact of change in product price by $1per bbl / $10per MT | | Impact of change in exchange rate by ₹ 1/$ | |
|---|---|---|---|---|
| | Per unit impact (₹/lit./cyl.) | Annualised financial impact (₹crore) | Per unit impact (₹/lit./cyl.) | Annualised financial impact (₹crore) |
| PDS SKO | 0.43 | 180 | 0.53 | 230 |
| Domestic LPG | 9.33 | 1250 | 6.70 | 900 |
| **Total** | - | **1,430** | - | **1,130** |

**Note:** The above calculations are based on RTP for April, 2018

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

### Under-recoveries/subsidy & burden sharing

| Product | 2015-16 | 2016-17 | Apr-Dec'2017 |
|---|---|---|---|
| **Per unit under-recovery/subsidy (Rs./litre/Cylinder)** | | | |
| PDS SKO | 13.47 | 11.39 | 9.46 |
| Sub. Dom LPG | 150.82* | 108.78 | 157.61 |
| **Total under-recoveries including DBTL Subsidy (Rs. Crores)** | | | |
| PDS SKO | 11,496 | 7,595 | 3,275 |
| Sub. Dom LPG | 16,074# | 12,133 | 14,172 |
| **Total** | **27,570** | **19,728** | **17,446** |

### Burden sharing (Rs. Crores)

| Particulars | 2015-16 | 2016-17 | Apr-Dec'2017 |
|---|---|---|---|
| Government | 26,301 | 19,728 | 17446** |
| Upstream | 1,251 | 0 | 0 |
| OMCs | 18 | 0 | 0 |

* Average of DBTL subsidy and under-recovery towards non-DBTL domestic LPG;
# Includes under recovery towards non-DBTL domestic LPG (2015-16: Rs.18 Cr);
** Pending sanction for 2017-18 (April-Dec 2017) -Sub.Dom LPG Rs.5,485 Cr; PDS-SKO Rs. 1,209 Cr.

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

| Apr-Dec'2017 | Turnover | PAT |
|---|---|---|
| Upstream/midstream Companies (PSU) | 106,271 | 19,429 |
| Downstream Companies (PSU) | 740,367 | 25,983 |
| Standalone Refineries (PSU) | 74,494 | 3,862 |
| Private-RIL | 218,108 | 24,915 |

### Borrowings of OMCs (Rs. Crores)

| Company | As on Mar`16* | As on Mar`17 | Apr-Dec'2017 |
|---|---|---|---|
| IOCL | 52,880 | 54,820 | 31,938 |
| BPCL | 15,857 | 23,159 | 15,865 |
| HPCL | 21,167 | 21,250 | 12,124 |

*Regrouped as per Ind AS

### Petroleum sector contribution to Central/State Govt.

| Particulars | 2015-16 | 2016-17 | Apr-Dec'2017 |
|---|---|---|---|
| Central Government | 2,58,443 | 3,34,534 | 2,30,807 |
| % of total revenue receipts | 21% | 24% | - |
| State Governments | 1,60,209 | 1,89,770 | 1,50,996 |
| % of total revenue receipts | 8% | 8% | - |
| **Total (Rs. Crores)** | **4,18,652** | **5,24,304** | **3,81,803** |

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

| Particulars | 2014-15 | 2015-16 | 2016-17 |
|---|---|---|---|
| Petroleum subsidy | 0.62 | 0.25 | 0.18 |

**Note:** GDP figure for 2014-15 and 2015-16 are Revised Estimates and 2016-17 are Provisional Estimates

## 24. Capital expenditure of PSU oil companies

(Rs in crores)

| Company | 2013-14 | 2014-15 | 2015-16 (P) | 2016-17 (P) | 2017-18 | |
|---|---|---|---|---|---|---|
| | | | | | Target | Actual (P)# |
| ONGC Ltd | 32,470 | 29,997 | 29,502 | 28,010 | 29,968 | 72,383 |
| ONGC Videsh Ltd (OVL) | 35,357 | 7,172 | 6,783 | 18,360 | 7,088 | 6,240 |
| Oil India Ltd (OIL) | 9,351 | 3,774 | 3,550 | 10,514 | 9,252 | 8,395 |
| GAIL (India) Ltd | 4,070 | 1,632 | 1,880 | 2,180 | 2,053 | 3,613 |
| Indian Oil Corp. Ltd. (IOCL) | 16,661 | 14,314 | 14,368 | 21,918 | 20,162 | 20,345 |
| Hindustan Petroleum Corp. Ltd (HPCL) | 2,642 | 2,670 | 5,459 | 5,861 | 7,110 | 7,134 |
| Bharat Petroleum Corp. Ltd (BPCL) | 4,374 | 6,875 | 10,926 | 16,810 | 7,100 | 8,161 |
| Mangalore Refinery & Petrochem Ltd (MRPL) | 1,449 | 2,747 | 1,550 | 614 | 1,138 | 1,281 |
| Chennai Petroleum Corp. Ltd (CPCL) | 229 | 466 | 1,318 | 1,293 | 845 | 963 |
| Numaligarh Refinery Ltd (NRL) | 372 | 103 | 237 | 500 | 1,261 | 387 |
| Balmer Lawrie Co. Ltd (BL) | 120 | 80 | 38 | 73 | 50 | 78 |
| **Total** | **1,07,095** | **69,830** | **75,611** | **1,06,133** | **86,027** | **1,28,981** |

#(P) Provisional & includes expenditure on investment in JV/subsidiaries.

## 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 | 8.88 |
| Diesel (HSD) | 1 | 1.210 | 7.61 |
| Kerosene (SKO) | 1 | 1.285 | 8.08 |
| 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 |