

Ready Reckoner

Snapshot of India's Oil & Gas data

March, 2017



Analysis • Knowledge • Information

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

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Highlights for the month

	<ul style="list-style-type: none"> Indigenous crude oil production during March, 2017 was marginally higher by 0.9% than that of March, 2016 and higher by 10.5% over February, 2017 . On cumulative basis, it was lower by 2.5% than that of the previous year 2015-16. There was a reduction of crude oil production by 0.4 MMT in BH, 0.4 MMT in Mangala and 0.2 MMT in Ravva fields.
	<ul style="list-style-type: none"> Total crude oil processed during March, 2017 was 21.3 MMT, a marginal decrease of 0.3% over March, 2016 and an increase of 11.9% over February, 2017. Crude oil processing during March,2017 was the second highest in 2016-17 on monthly basis. On cumulative basis crude oil processed was 245.4 MMT, an increase of 5.4% over the period April-March, 2015-16. Around 6.4 MMT of the 12.5 MMT increase on cumulative basis was contributed by Paradip refinery and 1.8 MMT by Essar Oil Limited. An increase of around 1.0 MMT each was recorded in HPCL-Mumbai, CPCL- Manali and BPCL-Kochi refineries.
	<ul style="list-style-type: none"> Production of petroleum products during March, 2017 saw a growth of 2.0% over March, 2016 and a growth of 15.0% over February, 2017. POL production of 21.7 MMT during March, 2017 was the highest production till date in a month from refineries and fractionators. On cumulative basis a growth of 5.0% was recorded in production over the period April- March, 2015-16. POL production of 242.7 MMT during 2016-17 was the highest petroleum products production to date.
	<ul style="list-style-type: none"> Export of POL products increased by 13.1% during March, 2017 as compared to March, 2016 primarily due to higher production as well as higher surplus availability of POL products like MS, ATF and HSD, which constituted around 76.9% of total POL exports. Further, export of POL increased by 33.0% over February,2017 due to increase in export quantity of MS, Naphtha and HSD. Foreign exchange earnings of US\$ 2775 million was the highest during any month in financial year 2016-17. On cumulative basis, an increase of 7.3% was recorded in product exports over the period April- March, 2015-16. Exports of 64.99 MMT during 2016-17(P) were the second highest till date during any financial year after 2013-14. The percentage share in export by PSU/JV sector was 19.3% while private sector accounted for 80.7% during the financial year 2016-17 (P).

	<ul style="list-style-type: none"> Product imports increased by 17.0% during March, 2017 over the corresponding period of 2016 and by 9.6% over February, 2017. LPG, Lubes and Pet-coke imports contributed to 81.1 % share of total POL imports during March, 2017. On cumulative basis an increase of 21.7% was recorded in product imports over the previous year 2015-16 which was mainly due to increase in pet-coke imports by the private sector.
	<ul style="list-style-type: none"> Total petroleum product consumption for the last three months continuously in a row recorded negative growth. During March 2017, degrowth of -0.6% and cumulative growth of 5.2% for the period April 2016 to March 2017 was observed. In March 2017, except for LPG, MS, HSD, ATF and Pet Coke, all other products recorded a negative growth. Compounded Annual Growth Rate (CAGR) of total petroleum product consumption during 12th Five Year Plan (2012-17) was 5.6% as compared to 4.2% during 11th Plan period (2007-12).
	<ul style="list-style-type: none"> Total LPG consumption continuously for the last forty three months in a row recorded a positive growth of 1.9% during March 2017 and cumulative growth of 9.8% for the period April 2016 to March 2017. Records from 1970-71 to 2016-17 show that there was always growth in total LPG consumption every year except for a minor degrowth of -1.2% during 1980-81.
	<ul style="list-style-type: none"> SKO registered a major de-growth of -26.8 % during March 2017 and -21.0% on cumulative basis, which was the highest ever degrowth since 1970-71. This was mainly because of reduced SKO allocation to states, voluntary surrender of PDS SKO quota by some states and release of about 331.7 lakhs new connections including approximately 200.3 lakh connections released on account of Ujjwala scheme since its inception in May 2016.

<ul style="list-style-type: none"> • 	<p>Growth in ATF consumption during March 2017 was 10.4% and 12.1% during the period April 2016 to March 2017. This is the highest growth in annual consumption of ATF since 2007-08 which was mainly due to more than 20% growth in domestic passenger traffic during the year.</p>
<ul style="list-style-type: none"> • 	<p>Gross production of natural gas during March, 2017 was 2,750 MMSCM which was higher by 8.3% compared with the corresponding month of the previous year. Cumulative gross production of natural gas of 31,897 MMSCM for 2016-17 was lower by 1.1% compared with the corresponding period of the previous year. Gross natural gas production during 2016-17 was the lowest production in the last four years.</p>
<ul style="list-style-type: none"> • 	<p>LNG import for the month of March, 2017 was 2,076 MMSCM which was 6% higher than the corresponding month of the previous year. The cumulative import of 24608 MMSCM for 2016-17 was higher by 15.5% compared with the corresponding period of the previous year. LNG import during 2016-17 was the highest during the last four years.</p>
<ul style="list-style-type: none"> • 	<p>The prices of Brent crude averaged \$51.56/bbl during March, 2017 as against \$55.11/bbl during February, 2017. The Indian basket crude averaged \$51.47/bbl during March, 2017 as against \$54.86/bbl during the previous month. The price of Indian basket crude rose by 3% during 2016-17 at an average of \$47.56/bbl as against \$46.18/bbl during 2015-16.</p>
<ul style="list-style-type: none"> • 	<p>The import bill of crude oil is estimated to increase by 9% from \$64 billion in 2015-16 to \$70 billion in 2016-17.</p>

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 1 st 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	272.0 2nd AE
		Growth %	3.1	-4.9	-0.2	8.1
4	Gross Fiscal Deficit	%	-4.5	-4.1	-3.9	-3.5 (RE)

Economic indicators	Unit/ Base	2013-14	2014-15	March		April-March		
				2016	2017 ^(P)	2015-16	2016-17 ^(P)	
5	Index of Industrial Production	Growth %	-0.1	2.8	0.3	-1.2~	2.4	0.4~
6	Imports	\$ Billion	450.2	448.0	27.3	39.7	381.0	380.4
7	Exports	\$ Billion	314.4	310.3	22.9	29.2	262.3	274.6
8	Trade Balance	\$ Billion	-135.8	-137.7	-4.4	-10.4	-118.7	-105.7
9	Foreign Exchange Reserves	\$ Billion	303.7	341.4	355.6*	370.0^	-	-

~IIP is for the month of February 2017; AE-Advanced Estimates; RE-Revised Estimates; *As on Mar 25, 2016; ^As on Mar 31, 2017.

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

Details		Unit/ Base	2013-14	2014-15	March		April-March	
					2016	2017 ^(P)	2015-16	2016-17 ^(P)
1	Crude oil production in India	MMT	37.8	37.5	3.1	3.1	36.9	36.0
2	Consumption of petroleum products	MMT	158.4	165.5	17.5	17.4	184.7	194.2
3	Production of petroleum products	MMT	220.3	220.7	21.3	21.7	231.2	242.7
4	Imports & exports:							
Crude oil imports		MMT	189.2	189.4	18.5	17.6	202.9	213.3
		\$ Billion	143.0	112.7	4.3	6.2	64.0	69.7
Petroleum products (POL) imports		MMT	16.7	21.3	2.7	3.2	29.5	35.9
		\$ Billion	12.5	12.1	0.6	1.1	10.0	10.6
Gross petroleum imports (Crude + POL)		MMT	205.9	210.7	21.3	20.8	232.3	249.2
		\$ Billion	155.4	124.9	5.0	7.3	73.9	80.3
Petroleum products exports		MMT	67.9	63.9	5.4	6.1	60.5	65.0
		\$ Billion	60.7	47.3	2.0	2.8	27.1	28.7
LNG imports		\$ Billion	8.6	9.2	0.4	0.6	6.7	6.1
5	Petroleum imports as % of India's gross imports (in value)	%	34.5	27.9	18.2	18.4	19.4	21.1
6	Petroleum exports as % of India's gross exports (in value)	%	19.3	15.2	8.7	9.5	10.3	10.4
7	Import dependency of crude (on consumption)	%	77.6%	78.5%	82.8%	82.7%	80.9%	82.1%

3. Indigenous crude oil production (Million Metric Tonne)

Details	2013-14	2014-15	March			April-March		
			2016 (Actual)	2017 (Target)*	2017 ^(P)	2015-16 (Actual)	2016-17 (Target)*	2016-17 ^(P)
ONGC	19.2	18.6	1.6	2.0	1.6	18.5	22.8	18.3
Oil India Limited (OIL)	3.5	3.4	0.3	0.3	0.3	3.2	3.5	3.3
Private / Joint Ventures (JVs)	12.0	11.7	0.9	0.9	0.9	11.3	10.8	10.5
Total Crude Oil	34.7	33.8	2.8	3.3	2.7	33.1	37.1	32.0
Condensate	3.1	3.7	0.3		0.4	3.8		4.0
Total (Crude + Condensate) (MMT)	37.8	37.5	3.1	3.3	3.1	36.9	37.1	36.0
Total (Crude + Condensate) (Million Bbl)	277.0	274.7	22.4	24.2	22.7	270.8	271.8	263.9

*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	2013-14	2014-15	March		April-March	
			2016	2017 ^(P)	2015-16	2016-17 ^(P)
Total domestic production (MMTOE)	73.2	71.1	5.6	5.8	69.2	67.9
Overseas production (MMTOE)	8.8	9.6	0.8	1.6	9.7	15.9
Overseas production as % of domestic production	12.0%	13.5%	15.0%	26.7%	14.1%	23.4%

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

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

Details		2013-14	2014-15	March		April-March	
				2016	2017 ^(P)	2015-16	2016-17 ^(P)
1	High Sulphur crude	160.2	161.4	15.4	15.3	166.1	177.6
2	Low Sulphur crude	62.2	61.9	5.9	6.0	66.7	67.8
Total crude processed		222.5	223.3	21.4	21.3	232.9	245.4
Share of HS crude in total crude oil processing		72.0%	72.3%	72.2%	71.9%	71.3%	72.4%

6. Quantity and value of crude oil imports			
Year	Quantity (MMT)	\$ Million	Rs. Crore
2015-16 (Actuals)	202.85	63,972	4,16,579
2016-17 (Provisional)	213.30	69,727	4,67,371

Note: April 2016 to March 2017 imports are based on actuals.

Impact of variation in Crude oil price & Exchange rate on Crude oil imports for April 2016 - March 2017 :

If crude prices increase by one \$/bbl - Net Import bill increases by Rs. 10,550 crores (\$ 1.57 bn)

If exchange rate of \$ increases by Rs. 1/\$ - Net Import bill increases by Rs. 6,973 crores (\$ 1.02 bn)

7. Self-sufficiency in petroleum products (Million Metric Tonnes)							
Details		2013-14	2014-15	March		April-March	
				2016	2017^(P)	2015-16	2016-17^(P)
1	Indigenous crude oil processing :	33.9	34.2	2.9	2.9	34.1	33.5
a)	Products from indigenous crude (93.3% of crude oil processed)	31.6	32.0	2.7	2.7	31.8	31.3
b)	Products from fractionators (Including LPG and Gas)	3.9	3.7	0.3	0.3	3.4	3.5
2	Total production from indigenous crude & condensate (a + b)	35.5	35.6	3.0	3.0	35.2	34.7
3	Total domestic consumption	158.4	165.5	17.5	17.4	184.7	194.2
% Self-sufficiency (2 / 3)		22.4%	21.5%	17.2%	17.3%	19.1%	17.9%

Note: Indigenous crude oil processed by RIL DTA for March 2017 is provisionally taken as average of Indigenous crude oil processed during April 2016-February 2017.

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

Com- pany	Refinery	Installed capacity (1.4.2017)	2013-14	2014-15	Crude oil processing					
					March			April-March		
					2016 (Actual)	2017 (Target)*	2017 (P)	2015-16 (Actual)	2016-17 (Target)*	2016-17 ^(P)
IOCL	Barauni (1964)	6.0	6.5	5.9	0.6	0.5	0.6	6.5	6.2	6.5
	Koyali (1965)	13.7	13.0	13.3	1.3	1.1	1.2	13.8	13.4	14.0
	Haldia (1975)	7.5	8.0	7.7	0.7	0.7	0.7	7.8	7.8	7.7
	Mathura (1982)	8.0	6.6	8.5	0.8	0.7	0.8	8.9	8.6	9.2
	Panipat (1998)	15.0	15.1	14.2	1.3	1.3	1.4	15.3	15.2	15.6
	Guwahati (1962)	1.0	1.0	1.0	0.08	0.08	0.08	0.9	1.0	0.9
	Digboi (1901)	0.7	0.7	0.6	0.06	0.06	0.05	0.6	0.6	0.5
	Bongaigaon(1979)	2.4	2.3	2.4	0.2	0.2	0.2	2.4	2.4	2.5
	Paradip (2016)	15.0	-	-	0.5	1.1	1.2	1.8	10.0	8.2
	IOCL TOTAL	69.2	53.1	53.6	5.5	5.8	6.3	58.0	65.1	65.2
CPCL	Manali (1969)	10.5	10.1	10.2	0.9	0.8	0.7	9.1	9.7	9.8
	CBR (1993)	1.0	0.6	0.5	0.06	0.05	0.05	0.5	0.6	0.5
	CPCL-TOTAL	11.5	10.6	10.8	1.0	0.8	0.8	9.6	10.2	10.3
BPCL	Mumbai (1955)	12.0	12.7	12.8	1.2	0.7	0.7	13.4	13.2	13.5
	Kochi (1966)	9.5	10.3	10.4	0.9	1.4	1.1	10.7	12.1	11.8
BORL	Bina (2011)	6.0	5.4	6.2	0.6	0.5	0.6	6.4	6.0	6.4
NRL	Numaligarh (1999)	3.0	2.6	2.8	0.2	0.2	0.2	2.5	2.7	2.7
	BPCL-TOTAL	30.5	31.0	32.2	3.0	2.8	2.7	33.0	33.9	34.4

Com-pany	Refinery	Installed capacity (1.4.2017)	2013-14	2014-15	Crude oil processing					
					March			April-March		
					2016 (Actual)	2017 (Target)*	2017 ^(P)	2015-16 (Actual)	2016-17 (Target)*	2016-17 ^(P)
ONGC	Tatipaka (2001)	0.1	0.07	0.05	0.008	0.004	0.007	0.07	0.04	0.09
MRPL	Mangalore (1996)	15.0	14.6	14.6	1.5	1.5	1.4	15.5	15.5	16.0
	ONGC TOTAL	15.1	14.7	14.7	1.5	1.5	1.5	15.6	15.5	16.1
HPCL	Mumbai (1954)	6.5	7.7	7.4	0.8	0.7	0.8	8.0	7.8	8.5
	Visakh (1957)	8.3	7.8	8.8	0.8	0.8	0.9	9.2	9.0	9.3
HMEL	Bathinda (2012)	9.0	9.3	7.3	0.9	0.4	0.7	10.7	9.0	10.5
	HPCL- TOTAL	23.8	24.8	23.5	2.6	1.9	2.4	27.9	25.8	28.4
RIL*	Jamnagar (DTA) (1999)	33.0	30.3	30.9	2.8	2.8	2.8	32.4	32.4	32.8
	Jamnagar (SEZ) (2008)	27.0	37.7	37.2	3.3	3.3	3.3	37.1	37.1	37.4
EOL	Vadinar (2006)	20.0	20.2	20.5	1.8	1.7	1.8	19.1	20.3	20.9
	All India	230.1	222.5	223.3	21.4	20.5	21.3	232.9	240.4	245.4

* RIL target for 2016-17 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

		ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Other	Total
Crude Oil	Length (KM)	1,191	1,193	660	1,017	5,217	937		-	10,215
(as on 1.4.2017)	Cap (MMTPA)	58.5	8.4	8.7	9.0	48.6	6.0	-	-	139.2
Products	Length (KM)	-	654	-	-	7,491	1,935	3,313	2,687	16,080
(as on 1.4.2017)	Cap (MMTPA)	-	1.7	-	-	45.1	14.9	33.5	9.3	104.5

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		March 2016		March 2017 (P)		April 2015-March 2016		April 2016-March 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	1.0	1.9	1.1	1.9	10.6	19.6	11.3	21.5
MS	32.2	19.1	3.2	2.0	3.4	2.1	35.3	21.8	36.5	23.8
NAPHTHA	17.5	11.1	1.7	1.2	1.9	1.1	17.9	13.3	19.8	13.3
ATF	11.1	5.7	1.3	0.6	1.3	0.6	11.8	6.3	13.8	7.0
SKO	7.6	7.1	0.6	0.6	0.4	0.4	7.5	6.8	6.0	5.4
HSD	94.3	69.4	9.1	6.8	9.2	6.8	98.6	74.6	102.1	76.0
LDO	0.4	0.4	0.05	0.05	0.06	0.03	0.4	0.4	0.6	0.4
LUBES	0.9	3.3	0.10	0.4	0.08	0.3	1.0	3.6	1.0	3.4
FO/LSHS	12.2	6.0	0.8	0.7	0.7	0.6	10.7	6.6	12.0	7.2
BITUMEN	4.7	5.1	0.6	0.8	0.5	0.7	5.2	5.9	5.2	5.9
OTHERS	30.0	20.4	2.8	2.5	3.1	2.7	32.2	25.6	34.4	30.3
ALL INDIA	220.7	165.5	21.3	17.5	21.7	17.4	231.2	184.7	242.7	194.2
Growth (%)	0.2%	4.5%	12.0%	19.0%	2.0%	-0.6%	4.8%	11.6%	5.0%	5.2%

Note: Prodⁿ - Production; Consumpⁿ - Consumption

13. LPG consumption (Thousand Metric Tonne)								
LPG category	2013-14	2014-15	March			April-March		
			2016	2017 ^(P)	Gr (%)	2015-16	2016-17 ^(P)	Gr (%)
1. PSU Sales :								
LPG-Packed Domestic	14,411.6	16,040.4	1,609.9	1,664.1	3.4	17,181.7	18,870.3	9.8
LPG-Packed Non-Domestic	1,073.6	1,051.0	142.1	145.9	2.7	1,464.4	1,775.7	21.3
LPG-Bulk	245.7	315.7	34.0	28.1	-17.4	317.2	364.2	14.8
Auto LPG	194.3	163.8	14.6	14.8	1.0	170.9	167.2	-2.2
Sub-Total (PSU Sales)	15925.2	17,570.9	1,800.6	1,852.8	2.9	19,134.2	21,177.5	10.7
2. Direct Private Imports	368.5	429.2	51.5	34.0	-34.1	489.0	370.7	-24.2
Total (1+2)	16,293.6	18,000.1	1,852.2	1,886.8	1.9	19,623.2	21,548.2	9.8

14. Kerosene allocation vs upliftment (Kilo Litres)

Product	2014-15		2015-16		2016-17 (April-March 2017) ^(P)	
	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment
Kerosene	89,75,538	88,78,352	86,85,384	85,36,752	69,33,030	66,78,423

15. Industry marketing infrastructure (as on 01.04.2017) (Provisional)

Particulars	IOCL	BPCL	HPCL	RIL	ESSAR	SHELL	Others	Total
POL Terminal/ Depots (Nos.)	131	83	82	18 ^S	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

^SRIL= 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	March			April-March		
			2016 (Actual)	2017 (Target)*	2017 (P)	2015-16 (Actual)	2016-17 (Target)*	2016-17(P)
(a) Gross production	35,407	33,657	2,540	3,116	2,750	32,249	34,119	31,897
- ONGC	23,284	22,023	1,643	2,096	1,972	21,177	22,743	22,088
- Oil India Limited (OIL)	2,626	2,722	254	243	251	2,838	2,950	2,937
- Private / Joint Ventures (JVs)	9,497	8,912	643	777	527	8,235	8,425	6,872
(b) Net production (excluding flare gas and loss)	34,574	32,693	2,440		2,669	31,138		30,848
(c) LNG import	17,728	18,536	1,958		2,076	21,309		24,608
(d) Total consumption including internal consumption (Net production+Import) (b+c)	52,302	51,229	4,398		4,745	52,448		55,455
(e) Total consumption (in BCM)	52.30	51.23	4.40		4.74	52.45		55.46
(f) Import dependency based on consumption {c/d*100}	33.90	36.18	44.52		43.76	40.63		44.37

Note :LNG import figure of RIL for March 2017 is on estimated basis.

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	March, 2017	44.852
Production of CBM gas-Cumulative	April 2016-March 2017	564.590
		MMSCM
		MMSCM

18. Gas pipelines under execution / construction as on 01.01.2017

Network/ Region	Entity	Length sanctioned (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 01.01.2017

Existing	Promoters	Capacity (MMTPA)	Capacity utilisation (Apr-Dec 2016)
Dahej	Petronet LNG Ltd (PLL)	10 MMTPA up to July, 2016 increased to 15 MMTPA from August, 2016	Apr -July, 2016- 125% Aug-Sep, 2016 - 98% October-December - 97% approx
Hazira	Hazira LNG Pvt Ltd (HLPL)	5 MMTPA	75.8%
Dabhol	RGPL (GAIL - NTPC JV)	1.692 MMTPA in phase-1 without break water to be increased to 5 MMTPA	56.3%
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	5% approx.
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 1.3.2017	As on 1.3.2017	As on 1.3.2017	As on 1.3.2017	As on 1.3.2017
Haryana	Haryana City Gas, Adani Gas Limited, GAIL Gas Ltd.	Sonepat, Faridabad, Gurgaon	31	52,599	240	163	1,25,227
Andhra Pradesh	Bhagyanagar Gas Ltd	Kakinada, Vijayawada	12	3,534	0	41	15,666
Telangana	Bhagyanagar Gas Ltd	Hyderabad	24	2,321	5	5	23,545
Assam	Assam Gas Co. Ltd	Tinsukia, Dibrugarh, Sibsagar, Jorhat, Golaghat	0	29,965	400	1,000	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	380	16,40,158	4,256	14,718	10,56,937
Madhya Pradesh	Aavantika Gas Ltd, GAIL Gas Ltd	Dewas, Vijaipur, Indore including Ujjain, Gwalior, Pithampura	23	10,881	92	56	22,765
Rajasthan	GAIL Gas Ltd	Kota	3	157	16	1	5,550

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 1.3.2017	As on 1.3.2017	As on 1.3.2017	As on 1.3.2017	As on 1.3.2017
Maharashtra	Mahanagar Gas Ltd, Maharashtra Natural Gas Ltd, GAIL Gas Ltd	Mumbai, Greater Mumbai, Thane & adjoining contiguous areas including Mira Bhayender, Navi Mumbai, Thane City, Ambarnath, Bhiwandi, Kalyan, Dombivily, Badlapur, Ulhasnagar, Panvel, Kharghar & Taloja, Pune City including Pimpri-Chinchwad and adjoining contiguous areas of Chakan, Hinjewadi & Talegaon GA	241	9,87,010	185	3,385	6,71,377
Tripura	Tripura Natural Gas Co. Ltd	Agartala	5	28,176	50	354	9,328
West Bengal	Great Eastern Energy Corporation Ltd	Kolkata	7	0	0	0	3,148
Uttar Pradesh	GAIL Gas Ltd, Sanwariya Gas, Green Gas, Central U.P. Gas, Siti Energy Ltd		48	47,580	498	258	1,16,734

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 1.3.2017	As on 1.3.2017	As on 1.3.2017	As on 1.3.2017	As on 1.3.2017
New Delhi	Indraprastha Gas Ltd	NCT of Delhi (Incl. Noida & Ghaziabad)	420	7,23,251	946	1,835	8,92,324
Karnataka	Gail Gas Ltd.	Bengaluru	3	2,117	3	17	120
Dadra & Nagar Haveli	Gujarat Gas Ltd.	Dadra & Nagar Haveli	0	52	0	0	0
Total			1,197	35,27,801	6,691	21,833	29,42,721

Note : Domestic PNG connection of Karnataka is as on 01.10.2016.

21. Major natural gas pipeline network

Nature of pipeline		GAIL	Reliance	GSPL	ARN	IOCL	ONGC	Total
Natural gas (as on 01.01.2017)	Length (KM)	11,077	1,469	2,600	811	140	24	16,121
	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)			
Particulars	2014-15	2015-16	2016-17
Crude (Indian Basket)	84.16	46.17	47.56
Petrol	95.45	61.72	58.10
Diesel	96.64	55.02	56.59
Kerosene	96.98	55.71	56.81
LPG (\$/MT)	683.87	394.71	393.31
FO (\$/MT)	471.99	235.13	258.92
Naphtha (\$/MT)	717.44	420.14	415.17
Exchange (Rs./\$)	61.15	65.46	67.09
Customs & excise duty rates (w.e.f. 1.3.2016)			
Product	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)		
Particulars	Petrol*	Diesel*
Price before taxes and dealer commission	29.00	28.91
Central taxes	22.03	17.87
State taxes	14.46	8.40
Dealer commission	2.58	1.65
Retail selling price (RSP)	68.07	56.83
Change in Ex. Rate/ Crude price : Impact on under-recoveries		
(Rs. Crores)	Rs.1/\$ Ex. Rate	\$1/bbl Crude
Impact on under-recovery	1,200	1,520
Note: The above calculation for SKO & LPG are based on RTP for April 2017 at level of Crude Price \$51.80/bbl & Ex. Rate Rs.66.05/USD		

23. Information on Prices, Taxes and Under-recoveries

Under-recoveries & burden sharing			
Product	2014-15	2015-16	Apr-Dec`16
Per unit under-recovery (Rs./litre/Cylinder)			
Diesel	2.70 [^]	Deregulated	Deregulated
PDS SKO	27.93	13.47	10.88
Sub. Dom LPG	409.72	150.82*	76.14*
Total under-recoveries including DBTL (Rs. Crores)			
Diesel	10,935 [^]	Deregulated	Deregulated
PDS SKO	24,799	11,496	5,721
Sub. Dom LPG#	40,551	16,074	7,654
Total	76,285	27,570	13,375
Burden sharing (Rs. Crores)			
Particulars	2014-15	2015-16	Apr-Dec`16
Government	31,279	26301**	13,375**
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	
Sub. Dom LPG	1,920	31.3.2015	
*Average of DBTL and under-recovery towards non-DBTL; # Inc subsidy under DBTL (2014-15: Rs.3,971 cr, 2015-16: Rs.16,056 cr Apr-Jan`17 Rs.7,654 cr; ** Govt. compensation pending disbursement for PDS SKO(Apr-Dec`16 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)			
Company	As on Mar`15	As on Mar`16	As on Dec.`16
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.			
Particulars	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)			
Particulars	2013-14	2014-15	2015-16
Petroleum subsidy	1.30	0.62	0.25
Note - GDP figure for 2013-14 are 2 nd 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)	April-March	
				Target*	2017 ^(P)
ONGC Videsh Ltd (OVL)	35,357	7,172	6,783	14,843	18,360
ONGC Ltd	32,470	29,997	29,502	29,307	28,010
Oil India Ltd (OIL)	9,351	3,774	3,550	4,020	10,514
GAIL (India) Ltd	4,070	1,632	1,880	1,929	2,180
Indian Oil Corp. Ltd. (IOCL)	16,661	14,314	14,368	15,395	21,918
Hindustan Petroleum Corp. Ltd (HPCL)	2,642	2,670	5,459	6,862	5,861
Bharat Petroleum Corp. Ltd (BPCL)	4,374	6,875	10,926	13,097	16,810
Mangalore Refinery & Petrochem Ltd (MRPL)	1,449	2,747	1,550	600	614
Chennai Petroleum Corp. Ltd (CPCL)	229	466	1,318	1,148	1,293
Numaligarh Refinery Ltd (NRL)	372	103	237	352	500
Balmer Lawrie Co. Ltd (BL)	120	80	38	50	73
TOTAL	1,07,095	69,830	75,611	87,603	1,06,133

* Targets are for full financial year 2016-17 and actual is for April-March, 2017. Budget Estimates are for both Plan and Non-Plan

25. Conversion factors and volume conversion

Weight to volume conversion				Volume conversion	
Product	Weight (MT)	Volume (KL)	Barrel (bbl)	From	To
LPG	1	1.844	11.60	1 US Barrel (bbl)	159 litres
Petrol (MS)	1	1.411	8.50	1 US Barrel (bbl)	42 US Gallons
Diesel (HSD)	1	1.210	7.45	1 US Gallon	3.78 litres
Kerosene (SKO)	1	1.285	7.90	1 Kilo litre (KL)	6.29 bbl
ATF	1	1.288	8.10	1 Million barrels per day	49.8 MMTPA
Light Diesel Oil (LDO)	1	1.172	7.37	Energy conversion	
Furnace Oil (FO)	1	1.071	6.74	1 Kilocalorie (kcal)	4.187 kJ
Crude Oil	1	1.170	7.33	1 Kilocalorie (kcal)	3.968 Btu
Exclusive Economic Zone				1 Kilowatt-hour (kWh)	860 kcal
200 Nautical Miles	370.4 Kilometers			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	