Ready Reckoner

Snapshot of India's Oil & Gas data

December, 2018

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

As on 28.01.2019

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Highlights for the month

- Indigenous crude oil and condensate production during December 2018 was lower by 4.3% than that of December 2017. PSC fields registered de-growth of 1.7% during the month over December 2017. PSU companies OIL and ONGC registered de-growth of 4.7% and 5.4% respectively during the month over December 2017. On cumulative basis de-growth of 3.7% was registered during April-December 2018 over the corresponding period of the previous year.
- Total crude oil processed during December 2018 was 21 MMT, which was a decrease of 5% over December 2017. PSU/JV refineries registered a marginal decrease of 0.1% while private refineries registered a decrease of 14.1%. On cumulative basis an increase of 2.5% was registered in the total crude oil processed during April-December 2018 over the corresponding period of the previous year. Refineries processed 75.6% high sulphur crude oil during December 2018 against 74.7% during December 2017.
- Production of petroleum products during December 2018 saw a de-growth of 4.8% over December 2017. On cumulative basis an increase of 4.1% was registered in the total production of petroleum products during April – December 2018 over the corresponding period of the previous year.
- Crude oil imports increased by 1.1% and 3.8% during December 2018 and April-December 2018 respectively as compared to the same period of the previous year.
- Product imports decreased by 9.4% and 11.0% during December 2018 and April-December 2018 respectively over the corresponding period of the previous year. Decrease in POL product imports during April-December 2018 was due to decrease in imports of HSD and Petcoke.
- Exports of products decreased by 12.0% and 6.7% during December 2018 and April-December 2018 respectively over the corresponding period of the previous year. Exports decreased during April-December 2018 mainly due to increase in domestic consumption of all products except SKO, LDO, FO and petcoke.
- Petroleum product consumption registered a growth of 3.2% during December 2018 and a cumulative growth of 2.5% during the period April to December 2018. Except for SKO (-14%), LDO (-17.1%), lubes & greases (-3%), and petcoke (-12.8%), all other products registered a growth during December 2018.

- Total LPG consumption after a negative growth in November 2018 recorded a positive growth of 5.6% during December 2018 and the cumulative growth of 5% for the period April to December 2018. During the period April to December 2018, 40.1 lakh DBCs and 312.1 lakh new connections were released out of which 238.1 lakh were released under PMUY. Under PMUY, nearly 112.4 lakh new connections have been released more during the current year in this period as compared to last year. Total 594.1 lakh connections were released under PMUY till 31.12.2018 since inception. During December 2018, out of the five regions, Northern region had the highest share in total LPG consumption of 32% followed by Southern region at 28.2%, Western region at 22.4%, Eastern region at 14.9% and North Eastern region at 2.5%. North-Eastern region had the highest growth of 10.9% in total LPG consumption during December 2018.
- SKO consumption registered a de-growth of 14% during December 2018 and cumulative de-growth of 10.4% during the period April to December 2018. The cumulative reduction in PDS SKO allocation was 11.9% during Q1, Q2 & Q3 2018-19 compared to the same period of the previous year.
- Gross production of natural gas in December 2018 was 2866.5 MMSCM which was higher by 4.2% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 24650.3 MMSCM for the current financial year till December 2018 was lower by 0.2% compared with the corresponding period of the previous year.
- LNG import in December 2018 was 2127.7 MMSCM which was 4.7% higher than the corresponding month of the previous year. The cumulative import of 20717.4 MMSCM for the current year till December 2018 was higher by 7.7% compared with the corresponding period of the previous year.
- The price of Brent Crude averaged $57.39/bbl during December 2018 as against $64.74/bbl during November 2018 and $64.19/bbl during December 2017. The Indian basket crude price averaged $57.77/bbl during December 2018 as against $65.40/bbl during November 2018 and $ 62.29/bbl during December 2017.
- The import bill of crude oil is estimated to increase by 27% from $88 billion in 2017-18 to $112 billion in 2018-19 considering actuals upto December, 2018 and Indian basket crude oil price at $57.77/bbl and exchange rate at Rs. 70.73/$ for January 2019-March 2019.

1. Selected indicators of the Indian economy

	Economic indicators	Unit/ Base	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	Population (as on 1st May, 2011)	Billion	1.2	-	-	-	-	-
2	GDP at constant (2011-12 Prices)	Growth %	6.4	7.4	8.2	7.1	6.7 PE	7.2 1st AE
3	Agricultural Production (Food grains)	MMT	265.0	252.0	251.6	275.1 FE	284.8 4th AE	141.6 1st AE (Kharif)
		Growth %	3.1	-4.9	-0.2	9.4	3.5	0.6$
4	Gross Fiscal Deficit	%	-4.5	-4.1	-3.9	-3.5	-3.5 RE	3.3 BE

	Economic indicators	Unit/ Base	2016-17	2017-18	December		April-December	
					2017-18	2018-19 (P)	2017-18	2018-19 (P)
5	Index of Industrial Production (Base: 2011-12)	Growth %	4.6	4.4	#8.5	#0.5 QE	*3.2	*5.0
6	Imports	$ Billion	384.4	465.6	42.0	41.0	343.3	386.7
7	Exports	$ Billion	275.9	303.5	27.8	27.9	222.8	245.4
8	Trade Balance	$ Billion	-108.5	-162.1	-14.2	-13.1	-120.6	-141.2
9	Foreign Exchange Reserves @	$ Billion	370.0	424.4	409.4	393.4	-	-

$Agricultural production (Kharif), 2017-18=140.73 (4th AE); IIP is for the month of #Novemberr and *April-November; @2016-17-as on March 31, 2017, 2017-18-as on March 30, 2018, December 2017- as on December 29, 2017 and December 2018-as on December 28, 2018; E-Estimates; AE-Advanced Estimates; RE-Revised Estimates; PE-Provisional Estimates; FE-Final Estimates; QE-Quick Estimates.

Source: Ministry of Commerce & Industry, Ministry of Agriculture & Farmer's Welfare, Reserve Bank of India

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

	Details	Unit/ Base	2016-17	2017-18	December		April-December	
					2017-18	2018-19 (P)	2017-18	2018-19 (P)
1	Crude oil production in India	MMT	36.0	35.7	3.0	2.9	26.9	25.9
2	Consumption of petroleum products	MMT	194.6	206.2	17.9	18.5	153.5	157.4
3	Production of petroleum products	MMT	243.5	254.3	22.5	21.4	188.9	196.7
4	Gross natural gas production	MMSCM	31,897	32,648	2,751	2,867	24,688	24,650
5	Natural gas consumption	MMSCM	55,534	58,059	4,705	4,923	43,236	44,766
6	Imports & exports:							
	Crude oil imports	MMT	213.9	220.4	19.3	19.5	164.3	170.5
		$ Billion	70.2	87.8	8.5	8.4	61.8	86.9
	Petroleum products (POL) imports	MMT	36.3	35.5	3.3	3.0	27.2	24.2
		$ Billion	10.6	13.6	1.4	1.3	9.8	12.1
	Gross petroleum imports (Crude + POL)	MMT	250.2	255.9	22.6	22.5	191.6	194.8
		$ Billion	80.8	101.4	9.9	9.7	71.6	99.1
	Petroleum products exports	MMT	65.5	66.8	5.9	5.2	50.3	46.9
		$ Billion	29.0	34.9	3.3	2.7	25.2	30.2
	LNG imports	MMSCM	24,686	26,328	2,031	2,128	19,229	20,717
		$ Billion	6.1	7.7	0.7	0.8	5.2	7.5
7	Petroleum imports as percentage of India's gross imports (in value terms)	%	21.0	21.8	23.5	23.6	20.8	25.6
8	Petroleum exports as percentage of India's gross exports (in value terms)	%	10.5	11.5	12.0	9.6	11.3	12.3
9	Import dependency of crude (on consumption basis)	%	81.7	82.9	83.4	84.5	82.8	83.4

October, November and December 2018 private import (POL) quantity prorated on the basis of October 2017-September 2018 actual data provided by DGCIS.
Crude oil imports ($ Billion) during 2018-19 does not include value of crude oil quantity of 0.8 MMT imported at ISPRL, Mangalore.

3. Indigenous crude oil production (Million Metric Tonnes)

Details	2016-17	2017-18	December			April-December		
			2017-18	2018-19 (Target)*	2018-19 (P)	2017-18	2018-19 (Target)*	2018-19 (P)
ONGC	20.9	20.8	1.7	2.0	1.6	15.8	17.1	14.8
Oil India Limited (OIL)	3.3	3.4	0.3	0.3	0.3	2.5	2.8	2.5
Private / Joint Ventures (JVs)	10.4	9.9	0.8	0.9	0.8	7.4	7.7	7.3
Total Crude Oil	**34.5**	**34.0**	**2.9**	**3.2**	**2.7**	**25.7**	**27.5**	**24.6**
ONGC condensate	1.4	1.5	0.1		0.1	1.1		1.1
PSC condensate	0.1	0.2	0.02		0.02	0.1		0.2
Total condensate	**1.5**	**1.6**	**0.1**	**0.0**	**0.2**	**1.2**	**0.0**	**1.3**
Total (Crude + Condensate) (MMT)	**36.0**	**35.7**	**3.0**	**3.2**	**2.9**	**26.9**	**27.5**	**25.9**
Total (Crude + Condensate) (Million Bbl)	**263.9**	**261.6**	**21.9**	**23.3**	**21.0**	**197.4**	**201.9**	**190.1**

*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	2016-17	2017-18	December		April-December	
			2017-18	2018-19 (P)	2017-18	2018-19 (P)
Total domestic production (MMTOE)	67.9	68.3	5.7	5.7	51.6	50.6
Overseas production (MMTOE)	17.4	21.7	1.8	2.2	16.2	18.3
Overseas production as percentage of domestic production	**25.6%**	**31.8%**	**31.8%**	**38.2%**	**31.3%**	**36.2%**

Source: ONGC Videsh, GAIL, OIL , IOCL, HPCL & BPRL; **Note:** IOCL data for 2016-17 & 2017-18 revised.

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

Details		2016-17	2017-18	December		April-December	
				2017-18	2018-19 (P)	2017-18	2018-19 (P)
1	High Sulphur crude	177.4	188.4	16.5	15.9	139.9	146.1
2	Low Sulphur crude	67.9	63.6	5.6	5.1	48.1	46.5
Total crude processed		**245.4**	**251.9**	**22.1**	**21.0**	**188.0**	**192.7**
Percentage share of HS crude in total crude oil processing		**72.3%**	**74.8%**	**74.7%**	**75.6%**	**74.4%**	**75.8%**

6. Quantity and value of crude oil imports			
Year	**Quantity (MMT)**	**$ Million**	**Rs. Crore**
2017-18 (P)	220.4	87,803	5,66,450
2018-19 (Estimated)	228.6	111,525	7,81,171

Note: April - December 2018 imports are based on actuals and for January - March 2019 imports are estimated at average price of Indian basket crude oil for December 2018 i.e. $57.77/bbl and average exchange rate for December 2018 i.e. Rs.70.73/$.

Impact of variation in crude oil price & exchange rate on value of crude oil imports for January - March 2019 :

If crude prices changes by one $/bbl - Crude oil import bill changes by Rs. 3,029 crores

If exchange rate of Rs./$ changes by Rs. 1/$ - Crude oil import bill changes by Rs. 2,473 crores

7. Self-sufficiency in petroleum products (Million Metric Tonnes)							
Particulars		**2016-17**	**2017-18**	**December**		**April-December**	
				2017-18	**2018-19 (P)**	**2017-18**	**2018-19 (P)**
1	Indigenous crude oil processing	33.5	32.8	2.8	2.6	24.6	24.0
2	Products from indigenous crude (93.3% of crude oil processed)	31.3	30.6	2.6	2.4	23.0	22.4
3	Products from fractionators (Including LPG and Gas)	4.3	4.6	0.4	0.4	3.4	3.7
4	Total production from indigenous crude & condensate **(2 + 3)**	35.6	35.2	3.0	2.9	26.4	26.1
5	Total domestic consumption	194.6	206.2	17.9	18.5	153.5	157.4
% Self-sufficiency (4 / 5)		**18.3%**	**17.1%**	**16.6%**	**15.5%**	**17.2%**	**16.6%**

8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)										
Company	Refinery	Installed capacity (1.1.2019) (MMTPA)	Crude oil processing (MMT)							
			2016-17	2017-18	December			April-December		
					2017-18 (Actual)	2018-19 (Target)*	2018-19 (P)	2017-18 (Actual)	2018-19 (Target)*	2018-19 (P)
IOCL	Barauni (1964)	6.0	6.5	5.8	0.6	0.6	0.6	4.2	4.9	4.9
	Koyali (1965)	13.7	14.0	13.8	1.3	1.3	1.2	10.1	10.5	10.3
	Haldia (1975)	7.5	7.7	7.7	0.2	0.7	0.7	5.6	6.0	6.0
	Mathura (1982)	8.0	9.2	9.2	0.9	0.8	0.8	6.8	7.1	7.4
	Panipat (1998)	15.0	15.6	15.7	1.4	1.4	1.4	11.6	12.1	12.3
	Guwahati (1962)	1.0	0.9	1.0	0.09	0.09	0.02	0.8	0.8	0.7
	Digboi (1901)	0.65	0.5	0.7	0.05	0.06	0.05	0.5	0.5	0.5
	Bongaigaon(1979)	2.35	2.5	2.4	0.3	0.2	0.2	1.8	1.7	1.8
	Paradip (2016)	15.0	8.2	12.7	1.3	1.3	1.3	10.5	10.6	10.5
	IOCL-TOTAL	**69.2**	**65.2**	**69.0**	**6.0**	**6.3**	**6.3**	**51.8**	**54.1**	**54.5**
CPCL	Manali (1969)	10.5	9.8	10.3	0.9	0.9	0.9	7.6	7.7	7.5
	CBR (1993)	1.0	0.5	0.5	0.05	0.00	0.04	0.4	0.3	0.3
	CPCL-TOTAL	**11.5**	**10.3**	**10.8**	**0.9**	**0.9**	**1.0**	**8.0**	**8.0**	**7.8**
BPCL	Mumbai (1955)	12.0	13.5	14.1	1.3	1.2	1.3	10.3	10.2	11.0
	Kochi (1966)	15.5	11.8	14.1	1.2	1.4	1.0	10.2	11.5	11.8
BORL	Bina (2011)	7.8	6.4	6.7	0.6	0.7	0.6	5.0	4.5	3.7
NRL	Numaligarh (1999)	3.0	2.7	2.8	0.2	0.2	0.3	2.1	2.1	2.2
	BPCL-TOTAL	**38.3**	**34.4**	**37.7**	**3.4**	**3.5**	**3.1**	**27.6**	**28.3**	**28.6**

Company	Refinery	Installed capacity (1.1.2019) (MMTPA)	Crude oil processing (MMT)							
			2016-17	2017-18	December			April-December		
					2017-18 (Actual)	2018-19 (Target)*	2018-19 (P)	2017-18 (Actual)	2018-19 (Target)*	2018-19 (P)
ONGC	Tatipaka (2001)	0.066	0.09	0.08	0.007	0.005	0.005	0.06	0.04	0.04
MRPL	Mangalore (1996)	15.0	16.0	16.1	1.5	1.5	1.5	12.0	12.0	12.0
	ONGC-TOTAL	**15.1**	**16.1**	**16.2**	**1.5**	**1.5**	**1.5**	**12.0**	**12.0**	**12.1**
HPCL	Mumbai (1954)	7.5	8.5	8.6	0.8	0.7	0.7	6.5	6.3	6.5
	Visakh (1957)	8.3	9.3	9.6	0.8	0.8	0.8	7.2	7.2	7.3
HMEL	Bathinda (2012)	11.3	10.5	8.8	1.0	0.9	1.1	5.9	8.2	9.4
	HPCL- TOTAL	**27.1**	**28.3**	**27.1**	**2.6**	**2.5**	**2.6**	**19.6**	**21.7**	**23.3**
RIL	Jamnagar (DTA) (1999)	33.0	32.8	33.2	2.7	2.7	2.8	24.7	24.7	24.7
	Jamnagar (SEZ) (2008)	35.2	37.4	37.3	3.3	3.3	3.3	28.7	28.7	27.9
NEL[#]	Vadinar (2006)	20.0	20.9	20.7	1.8	1.4	0.5	15.5	13.3	13.8
All India		**249.4**	**245.4**	**251.9**	**22.1**	**22.0**	**21.0**	**188.0**	**190.8**	**192.7**

*Targets are as received from oil companies. RIL target for 2018-19 is previous year crude processing; #Nayara Energy Limited (formerly Essar Oil Limited). **Note:** Some sub-totals/ totals may not add up due to rounding off at individual levels.

9. Major crude oil and product pipeline network (as on 01.01.2019)

Details		ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Others*	Total
Crude Oil	Length (KM)	1,192	1,193	688	1,017	5,301	937	-	-	**10328**
	Cap (MMTPA)	58.5	8.4	10.7	11.3	48.6	6.0	-	-	**143.5**
Products	Length (KM)	-	654	-	-	8,404	2,241	3,371	2,395	**17065**
	Cap (MMTPA)	-	1.7	-	-	45.6	19.5	38.1	9.4	**114.3**

*__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**	**2015-16**	**2016-17**	**2017-18**	**H1, 2018-19**
IOCL	Barauni	2.93	6.52	6.60	6.83
	Koyali	6.80	7.55	9.44	7.73
	Haldia	3.96	6.80	6.86	7.67
	Mathura	3.30	7.01	7.09	7.54
	Panipat	4.15	7.95	7.74	8.39
	Guwahati **	15.88	22.14	21.88	18.52
	Digboi **	16.17	24.49	24.86	25.70
	Bongaigaon **	11.09	20.15	20.62	22.09
	Paradip #	-0.65	4.22	7.02	6.99
	Weighted average	**5.06**	**7.77**	**8.49**	**8.45**
BPCL	Kochi	6.87	5.16	6.44	6.23
	Mumbai	6.37	5.36	7.26	6.85
	Weighted average	**6.59**	**5.26**	**6.85**	**6.52**
HPCL	Mumbai	8.09	6.95	8.35	6.20
	Visakhapatnam	5.46	5.51	6.55	5.69
	Weighted average	**6.68**	**6.20**	**7.40**	**5.93**
CPCL	Chennai	5.27	6.05	6.42	5.98
MRPL	Mangalore	5.20	7.75	7.54	6.29
NRL	Numaligarh **	23.68	28.56	31.92	27.73
BORL	Bina	11.70	11.80	11.70	13.70
RIL	Jamnagar	10.80	11.00	11.60	9.90
NEL@	Vadinar	10.81	9.14	8.95	*

*Data not available; ** GRM of North Eastern refineries are including excise duty benefit. For GRM excluding excise duty benefit, refer table 11; # Commissioned in February 2016; @Nayara Energy Limited (formerly Essar Oil Limited)

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

Company	Refinery	2015-16	2016-17	2017-18	H1, 2018-19
IOCL	Guwahati	1.26	1.12	3.70	1.51
	Digboi	4.16	7.73	8.27	10.87
	Bongaigaon	0.08	6.03	6.22	8.73
NRL	Numaligarh	8.06	8.50	11.43	12.06

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

Products	2017-18		Dec-2017		Dec-2018 (P)		Apr-Dec 2017		Apr-Dec 2018 (P)	
	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons
LPG	12.4	23.3	1.1	2.1	1.1	2.2	9.1	17.3	9.5	18.1
MS	37.8	26.2	3.3	2.2	3.0	2.4	28.1	19.6	28.4	21.1
NAPHTHA	20.0	12.9	1.7	1.1	1.7	1.2	15.0	9.4	15.0	10.5
ATF	14.7	7.6	1.3	0.7	1.3	0.7	10.7	5.6	11.5	6.2
SKO	4.3	3.8	0.3	0.3	0.4	0.3	3.2	2.9	3.1	2.6
HSD	108.1	81.1	9.7	7.1	8.9	7.4	80.6	60.5	82.8	62.1
LDO	0.6	0.5	0.06	0.06	0.04	0.05	0.4	0.4	0.5	0.4
LUBES	1.0	3.9	0.1	0.3	0.1	0.3	0.7	2.7	0.7	2.9
FO/LSHS	10.3	6.7	0.7	0.5	0.9	0.6	8.0	5.1	7.6	4.9
BITUMEN	5.3	6.1	0.5	0.6	0.6	0.6	3.6	4.0	3.9	4.6
PET COKE	13.9	25.7	1.2	2.2	0.9	1.9	10.4	20.1	10.5	16.5
OTHERS	26.2	8.3	2.4	0.7	2.6	0.8	19.1	6.0	23.3	7.5
ALL INDIA	**254.3**	**206.2**	**22.5**	**17.9**	**21.4**	**18.5**	**188.9**	**153.5**	**196.7**	**157.4**
Growth (%)	**4.4%**	**5.9%**	**6.4%**	**10.8%**	**-4.8%**	**3.2%**	**3.8%**	**4.9%**	**4.1%**	**2.5%**

Note: Prod - Production; Cons - Consumption

13. LPG consumption (Thousand Metric Tonne)

LPG category	2016-17	2017-18	December			April-December		
			2017-18	2018-19 (P)	Gr (%)	2017-18	2018-19 (P)	Gr (%)
1. PSU Sales :								
LPG-Packed Domestic	18871.4	20,351.8	1781.6	1888.2	6.0	15,038.9	15,817.6	5.2
LPG-Packed Non-Domestic	1775.9	2,085.8	198.9	214.3	7.8	1,540.7	1,692.9	9.9
LPG-Bulk	364.3	355.4	29.2	19.8	-32.3	269.0	232.7	-13.5
Auto LPG	167.3	184.4	15.5	14.7	-5.2	139.2	135.7	-2.6
Sub-Total (PSU Sales)	**21,178.9**	**22,977.4**	**2,025.2**	**2,137.1**	**5.5**	**16,987.8**	**17,878.8**	**5.2**
2. Direct Private Imports*	429.3	364.5	25.4	27.5	8.0	273.2	246.1	-9.9
Total (1+2)	**21,608.2**	**23,341.8**	**2,050.6**	**2,164.5**	**5.6**	**17,260.9**	**18,124.9**	**5.0**

*April to September 2018 import data are actuals provided by DGCIS and October-December 2018 import data are prorated on the basis of October 2017 to September 2018 actual data provided by DGCIS.

14. Kerosene allocation vs upliftment (Kilo Litres)

Product	2015-16		2016-17		2017-18		April-December 2018-19 (P)	
	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment
PDS Kerosene	86,85,384	85,36,752	69,33,030	66,78,447	50,21,828	46,69,164	33,77,936	31,66,381

15. Industry marketing infrastructure (as on 01.01.2019) (Provisional)

Particulars	IOCL	BPCL	HPCL	RIL	NEL[##]	SHELL	Others	Total
POL Terminal/ Depots **(Nos.)**[$]	125	78	83	18	2	-	6	**312**
Aviation Fuel Stations **(Nos.)**[@]	114	56	42	30	-	-	1	**243**
Retail Outlets (total) **(Nos.)**,[^]	27,459	14,651	15,357	1,400	5,033	144	6	**64,050**
out of which Rural ROs	7,752	2,673	3,430	127	1,781	19	-	**15,782**
SKO/LDO agencies **(Nos.)**	3,889	1,001	1,638	-	-	-	-	**6,528**
LPG Distributors (total) **(Nos.) (PSUs only)**	11,445	5,641	5,568	-	-	-	-	**22,654**
LPG Bottling plants **(Nos.) (PSUs only)**[#]	89	51	48	-	-	-	3	**191**
LPG Bottling capacity **(TMTPA) (PSUs only)**[&]	9,246	3,942	4,197	-	-	-	173	**17,558**
LPG active domestic consumers **(Nos. crore) (PSUs only)**	11.8	6.5	6.9	-	-	-	-	**25.2**

[$](RIL= 5 terminals and 13 depots, Others=4 MRPL & 2 NRL); [@](Others=ShellMRPL -1); [^](Others=MRPL-6); [#]**(**Others=NRL-1, OIL-1, CPCL-1); [&](Others=NRL-30, OIL-23, CPCL-120); [##]Nayara Energy Limited (formerly Essar Oil Limited).

16. Natural gas at a glance

(MMSCM)

Details	2016-17	2017-18	December 2017-18	December 2018-19 (Target)	December 2018-19 (P)	April-December 2017-18	April-December 2018-19 (Target)	April-December 2018-19 (P)
(a) Gross production	31,897	32,648	2,751	3,011	2,867	24,688	26,580	24,650
- ONGC	22,088	23,429	2,001	2,247	2,197	17,651	19,434	18,416
- Oil India Limited (OIL)	2,937	2,881	237	262	233	2,197	2,388	2,061
- Private / Joint Ventures (JVs)	6,872	6,338	514	502	437	4,839	4,758	4,173
(b) Net availability (excluding flare gas and loss)	30,848	31,731	2,673		2,795	24,008		24,048
(c) LNG import	24,686	26,328	2,031		2,128	19,229		20,717
(d) Total consumption including internal consumption (b+c)	55,534	58,059	4,705		4,923	43,236		44,766
(e) Total consumption **(in BCM)**	55.5	58.1	4.7		4.9	43.2		44.8
(f) Import dependency based on consumption (%), {c/d*100}	44.5	45.3	43.2		43.2	44.5		46.3

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	December 2018 (P)	63.4	MMSCM
Production of CBM gas	April-December 2018 (P)	534.5	MMSCM

18. Major natural gas pipeline network as on 01.01.2019

Nature of pipeline		GAIL	Reliance	GSPL	ARN^	IOCL	Total
Natural gas	Length (KM)	11,410	1,784	2,593	299	140	**16,226**
	Cap (MMSCMD)	230	84	43	3	10	**368.5**

^Excludes CGD pipeline network

19. Gas pipelines under execution / construction as on 01.01.2019

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) Spur Lines, Phase-2	GAIL(India) Ltd.	302	16	36"/30"/24"/18"
Jagdishpur- Haldia-Bokaro-Dhamra (JHBDPL)	GAIL(India) Ltd.	2,539	16	30"/24"/18"/12"/8"/4"
Mallavaram-Bhopal-Bhilwara-Vijaipur	GSPL India Transco Ltd.	1,881	78.25	42"/36"/30"/24"/18"/12"
Mehsana - Bathinda	GSPL India Gasnet Ltd.	2,052	77.1	36"/24"/18"/12"
Bathinda -Jammu-Srinagar	GSPL India Gasnet Ltd.	725	42.4	24"/18"/16"/12"/8"/6"
Kakinada - Vizag-Srikakulam	AP Gas Distribution	391	90	24"/18"/8"/4"
Ennore- Nellore	Gas Transmission India Pvt.	250	36	24"/18"
Ennore-Thiruvallur-Bengaluru-Puducherry-Nagapattinam-Madurai-Tuticorin	Indian Oil Corporation Ltd.	1,385	84.7	28"/24"/16"/12" /10"
Jaigarh-Mangalore	H-Energy Pvt. Ltd.	635	17	24"
Total		**11,216**		

20. Existing LNG terminals

Location	Promoters	Capacity (MMTPA) as on 01.12.2018	Capacity utilisation in % April-November 2018 (P)
Dahej	Petronet LNG Ltd (PLL)	15 MMTPA	107.7%
Hazira	Hazira LNG Pvt Ltd (HLPL)	5 MMTPA	90.0%
Dabhol	RGPPL (GAIL - NTPC JV)	1.692 MMTPA*	12.1%
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	9.9%
Total Capacity		**26.7 MMTPA**	

* To increase to 5 MMTPA with breakwater

21. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) as on 01.01.2019							
State	Entity operating	Geographical area/City	CNG stations	No. of CNG vehicles	PNG connections		
					Domestic	Commercial	Industrial
Andhra Pradesh	Bhagyanagar Gas Ltd, Godavari Gas Pvt.Ltd., Megha Engineering & Infrastructures Ltd.	Kakinada, Vijaywada, East/West Godavari, Krishna district GA (excl. area already authorized)	29	19,572	21,406	102	5
Assam	Assam Gas Co. Ltd	Upper Assam GA	0	0	32,100	1,061	411
Chandigarh	Indian Oil-Adani Gas Pvt. Ltd.	Chandigarh	4	7,500	8,513	0	1
Dadra & Nagar Haveli	Gujarat Gas Ltd.	UT of Dadra & Nagar Haveli GA	3	853	1,545	13	14
Daman and Diu	Indian Oil-Adani Gas Pvt. Ltd.	Daman	2	1000	505	24	9
Delhi	Indraprastha Gas Ltd .	NCT of Delhi (Including Noida & Ghaziabad)	458	10,58,111	10,23,739	2,470	1,613
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 & Sabarkanta GA, Patan district GA, Surat-Bharuch-Ankleswar GA, Nadiad GA, Navsari GA, Rajkot GA, Surendranagar GA, Hazira GA, Valsad GA, Jamnagar GA, Bhavnagar GA, Kutch (West) GA, Amreli District GA, Dahej Vagra Taluka GA, Dahod District GA, Panchmahal District GA, Anand (excluding area authorised) district GA, Ahmedabad city and Daskroi area (excluding area already authorised) GA, Vadodara district, Vadodara Rural, Ahmedabad district GA, Anand area incl. Kanjari and Vadtal villages GA and Palanpur	481	8,85,049	19,81,166	18,355	4,773

21. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) as on 01.01.2019							
State	**Entity operating**	**Geographical area/City**	**CNG stations**	**No. of CNG vehicles**	**PNG connections**		
					Domestic	**Commercial**	**Industrial**
Haryana	Haryana City Gas Distribution Ltd, Adani Gas Limited, GAIL Gas Ltd., Indraprastha Gas Ltd. , Indian Oil-Adani Gas Pvt. Ltd.	Sonipat, Faridabad, Gurgaon, Rewari, Panipat	57	1,55,502	86,893	262	445
Karnataka	Gail Gas Ltd., Megha Engineering & Infrastructures Ltd.	Bengaluru rural and urban districts GA, Tumkur district GA, Belgaum district GA	9	907	10,884	108	62
Kerala	Indian Oil-Adani Gas Pvt. Ltd.	Ernakulam	4	825	951	9	0
Madhya Pradesh	Aavantika Gas Ltd, GAIL Gas Ltd	Dewas, Vijaipur, Indore including Ujjain & Gwalior, Pithampur	35	35,479	45,711	118	173
Maharashtra	Mahanagar Gas Ltd, Maharashtra Natural Gas Ltd, Gujarat Gas Limited	Mumbai, Greater Mumbai , Thane City, Mira Bhayender, Navi Mumbai, Ambernath, Bhiwandi, Kalyan, Dombivli, Badlapur, Ulhasnagar, Panvel, Kharghar & Taloja, Pune City including Pimpri-Chiechwad along with adjoining contiguous areas of Hinjewadi, Chakan & Talegaon GA, Raigarh District GA excl. areas already authorized, Palghar district and Thane Rural GA	286	8,89,921	13,74,510	3,992	243
Odisha	GAIL (India) Ltd.	Khordha district GA, Cuttack district GA	4	1,910	170	0	0
Punjab	IRM Energy Pvt. Ltd.	Fatehgarh Sahib	1	1128	220	1	10

21. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) as on 01.01.2019

State	Entity operating	Geographical area/City	CNG stations	No. of CNG vehicles	PNG connections		
					Domestic	Commercial	Industrial
Rajasthan	Rajasthan State Gas Limited	Kota, Neemrana & Kukas	5	8,108	1,118	6	14
Telangana	Bhagyanagar Gas Ltd.	Hyderabad	35	24,630	9,179	9	15
Tripura	Tripura Natural Gas Co. Ltd	Agartala	8	11,263	37,574	415	49
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, Dibiyapur, Mathura, Agra, Kanpur ga, Bareilly GA, Lucknow district, Moradabad GA, Firozabad Geographical Area (TTZ), Khurja GA, Allahabad, Varanasi	99	1,49,180	1,36,060	440	673
Uttarakhand	Indian Oil-Adani Gas Pvt. Ltd., Haridwar Natural Gas Pvt. Ltd.	Udham Singh Nagar, Haridwar district GA	1	75	439	2	2
West Bengal	Great Eastern Energy Corporation Ltd.	Kultora, Asansol, Raniganj, Durgapur	7	3,642	0	0	0
Total			**1,528**	**32,54,655**	**47,72,683**	**27,387**	**8,512**

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
October 2018 - March 2019	3.36	7.67

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

International FOB prices/ Exchange rates ($/bbl)

Particulars	2016-17	2017-18	Apr-Dec'18
Crude oil (Indian Basket)	47.56	56.43	72.05
Petrol	58.10	67.83	78.90
Diesel	56.59	68.19	85.00
Kerosene	56.81	67.65	84.88
LPG ($/MT)	393.17	485.92	546.89
FO ($/MT)	258.92	327.50	430.11
Naphtha ($/MT)	415.17	494.73	601.72
Exchange (Rs./$)	67.09	64.45	69.68

Customs, excise duty & GST rates (as on 01.12.2018)

Product	Basic customs duty #	Excise duty	GST rates
Petrol	2.50%	Rs 17.98/Ltr	**
Diesel	2.50%	Rs 13.83/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	5.00%	11% *	**
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 excluding CVD in liue of IGST.*** 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)	33.82	38.71
Excise Duty	17.98	13.83
Dealer Commission (Average)	3.58	2.53
VAT (incl VAT on dealer commission)	14.95	9.52
Retail selling price (RSP) -Rounded	**70.33**	**64.59**
Particulars	**PDS SKO***	**Sub. Dom LPG***
Price before taxes and dealer/distributor commission (after rounding off adjustment)	25.55	605.31
Dealer/distributor commission	2.05	50.86
GST (incl GST on dealer/distributor commission)	1.38	32.83
Retail Selling Price	**28.98**	**689.00**
Less: Cash Compensation on LPG to consumers under DBTL		194.01
Effective cost to consumer after subsidy		**494.99**

*Petrol and diesel at Delhi as per IOCL are as on 16th January 2019. PDS SKO at Mumbai and Sub. Dom LPG at Delhi are as on 1st January 2019 & 16th January 2019 respectively.

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	0.44	190	0.45	190
Domestic LPG	10.14	1360	6.30	840
Total	-	**1,550**	-	**1,030**

Note: The above calculations are based on RTP for January 2019.

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

Under-recoveries/subsidy & burden sharing

PDS Kerosene

Product	2016-17	2017-18	H1, 2018-19
	Rs./Crore		
Under recovery	7,595	4,672	3,309
Subsidy under DBTK #	11	113	0
Total	**7,605**	**4,785**	**3,309**

#DBTK subsidy excludes cash incentive/assistance for establishment of institutional mechanisam for direct transfer of subsidy paid to States/UTs.

Domestic LPG under DBTL (Direct benefit transfer for LPG)

Particulars	2016-17	2017-18	H1, 2018-19
	Rs./Crore		
DBTL subsidy	12,905	20,880	13,921
PME &IEC^	-	25	92
Total	**12,905**	**20,905**	**14,013**

PMUY (Pradhan Mantri Ujjwala Yojana)

Particulars	2016-17	2017-18	H1, 2018-19
	Rs./Crore		
PMUY claims	2,999	2,496	3,062
PME & IEC^	-	63	34
Total	**2,999**	**2,559**	**3,096**

^ on payment basis

Sales & profit of petroleum sector (Rs. Crores)

Particulars	2017-18		H1, 2018-19	
	Turnover	PAT	Turnover	PAT
Upstream/midstream Companies (PSU)	1,48,473	27,231	98,341	19,198
Downstream Companies (PSU)	10,20,395	35,622	6,09,145	16,401
Standalone Refineries (PSU)	1,20,430	5,181	68,925	1,407
Private-RIL	3,15,357	33,612	202,404	17,679

Borrowings of OMCs (Rs. Crores), As on

Company	Mar`17	Mar`18	Sep`18
IOCL	54,820	58,030	59,409
BPCL	23,159	23,351	23,955
HPCL	21,250	20,991	17,852

Petroleum sector contribution to Central/State Govt.

Particulars	2016-17	2017-18	H1, 2018-19
Central Government	3,34,534	3,43,862	1,56,865
% of total revenue receipts	24%	23%	
State Governments	189770	2,09,155	1,15,499
% of total revenue receipts	9%	9%	
Total (Rs. Crores)	**5,24,304**	**5,53,017**	**2,72,364**

Subsidy as a percentage of GDP (at current prices)

Particulars	2015-16	2016-17	2017-18
Petroleum subsidy	0.25	0.18	0.17

Note: GDP figure for 2015-16 and 2016-17 are Revised Estimates and 2017-18 are Provisional Estimates

24. Capital expenditure of PSU oil companies

(Rs in crores)

Company	2015-16 (P)	2016-17 (P)	2017-18 (P)	2018-19	
				Target	Apr-Dec (P)
ONGC Ltd	29,502	28,010	72,383	32,077	20,437
ONGC Videsh Ltd (OVL)	6,783	18,360	6,240	5,886	3,560
Oil India Ltd (OIL)	3,550	10,514	8,395	4,300	2,352
GAIL (India) Ltd	1,880	2,180	3,613	4,722	4,268
Indian Oil Corp. Ltd. (IOCL)	14,368	21,918	20,345	22,862	19,083
Hindustan Petroleum Corp. Ltd (HPCL)	5,459	5,861	7,134	8,425	7,073
Bharat Petroleum Corp. Ltd (BPCL)	10,926	16,810	8,161	7,400	7,209
Mangalore Refinery & Petrochem Ltd (MRPL)	1,550	614	1,281	744	566
Chennai Petroleum Corp. Ltd (CPCL)	1,318	1,293	963	1,010	710
Numaligarh Refinery Ltd (NRL)	237	500	387	428	230
Balmer Lawrie Co. Ltd (BL)	38	73	78	125	111
Engineers India Ltd (EIL) #	-	-	-	1356	73
Total	**75,611**	**106,133**	**128,981**	**89,335**	**65,671**

(P) Provisional; Includes expenditure on investment in JV/subsidiaries.

Included from 2018-19.

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	1,325 SCM	Power generation from 1 MMSCMD of gas	220 MW