Ready Reckoner

Snapshot of India's Oil & Gas data

March, 2019

Analysis • Knowledge • Information

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

As on 30.04.2019

Index of Tables

Highlights for the month

- Indigenous crude oil and condensate production during March 2019 was lower by 6.2% than that of March 2018. On cumulative basis de-growth of 4.2% was registered during FY 2018-19 as compared to FY 2017-18.
- Total crude oil processed during March 2019 was 22.5 MMT, which was 6.5% higher than March 2018. On cumulative basis an increase of 2.1% was registered in the total crude oil processed during FY 2018-19 over FY 2017-18.
- Production of petroleum products during March 2019 saw a growth of 4.5% over March 2018. On cumulative basis an increase of 3.2% was registered in the total production of petroleum products during FY 2018-19 over FY 2017-18.
- Crude oil imports increased by 5% and 2.8% during March 2019 and FY 2018-19 respectively as compared to the March 2018 and FY 2017-18.
- Product imports increased by 4.6% during March 2019 and decreased by 8.3% during FY 2018-19 over the corresponding period of the previous year. Decrease in POL product imports during FY 2018-19 was due to decrease in imports of naphtha, ATF, HSD, bitumen and petcoke.
- Export of products increased by 3.9% during March 2019 and decreased by 8.6% during FY 2018-19 over the corresponding period of the previous year. Decrease in POL product exports during FY 2018-19 was mainly due to decrease in exports of MS, naphtha, HSD and FO.
- Petroleum product consumption registered a growth of 1.3% during March 2019 and a cumulative growth of 2.7% during FY 2018-19. Except for FO/LSHS (-1.5%), LDO (-9.4%), lubes & greases (-8.9%) and petcoke (-21.3%), all other products registered growth during March 2019.
- Total LPG consumption recorded a positive growth of 10.2% during March 2019 and a cumulative growth of 6.8% during FY 2018-19. Last year during March 2018, a growth of 7.2% was observed and the cumulative growth during FY 2017-18 was 5.9%. During the FY 2018-19, 51.4 lakh DBCs and 455.2 lakh new connections were released out of which 362.9 lakh were released under PMUY. Under PMUY, nearly 207.2 lakh new connections have been released more during FY 2018-19 as

- compared to FY 2017-18. A total of 719 lakh connections have been released under PMUY till 31.03.2019 since inception. During March 2019, out of the five regions, Northern region had the highest share in total LPG consumption of 33.3% followed by Southern region at 26.8%, Western region at 22%, Eastern region at 15.4% and North Eastern region at 2.6%. Northern region had the highest growth of 17.9% in total LPG consumption during March 2019.
- SKO consumption registered a growth of 2.8% during March 2019 and cumulative de-growth of 10.1% during the period FY 2018-19. The cumulative reduction in PDS SKO allocation was 11.7% during FY 2018-19 as compared to FY 2017-18.
- Gross production of natural gas during March 2019 was 2816.0 MMSCM which was higher by 1.2% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 32873.4 MMSCM for FY 2018-19 was higher by 0.7% compared with the previous financial year. Gross natural gas production during FY 2018-19 was the highest production since FY 2015-16.
- LNG import in March 2019 was 2205.6 MMSCM which was 14.4% lower than the corresponding month of the previous year. The cumulative import of 27015.4 MMSCM for FY 2018-19 was higher by 2.6% compared with the previous financial year.
- The price of Brent Crude averaged $66.12/bbl during March 2019 as against $64.03/bbl during February 2019 and $/65.90bbl during March 2018. The Indian basket crude price averaged $66.74/bbl during March 2019 as against $64.53/bbl during February 2019 and $63.80 /bbl during March 2018.

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	8.0 3rd RE	8.2 2nd RE	7.2 1st RE	7.0 2nd AE
3	Agricultural Production (Food grains)	MMT	265.1	252.0	251.5	275.1	277.5 2nd AE	281.4 2nd AE
		Growth %	3.1	-4.9	-0.2	9.4	0.9	1.4
4	Gross Fiscal Deficit	%	-4.5	-4.1	-3.9	-3.5	-3.5	-3.4 RE

	Economic indicators	Unit/ Base	2016-17	2017-18	March		April-March	
					2017-18	2018-19 (P)	2017-18	2018-19 (P)
5	Index of Industrial Production (Base: 2011-12)	Growth %	4.6	4.4	#6.9	#0.1 QE	*4.3	*4.0
6	Imports	$ Billion	384.4	465.6	42.8	43.4	465.6	507.4
7	Exports	$ Billion	275.9	303.5	29.3	32.6	303.5	331.0
8	Trade Balance	$ Billion	-108.5	-162.1	-13.5	-10.9	-162.1	-176.4
9	Foreign Exchange Reserves @	$ Billion	370.0	424.4	424.4	411.9	-	-

IIP is for the month of #February and *April-February; @2016-17-as on March 31, 2017, 2017-18-as on March 30, 2018, March 2018- as on March 30, 2018 and March 2019-as on March 29, 2019; AE-Advanced Estimates; RE-Revised 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	2015-16	2016-17	March		April-March	
					2017-18	2018-19 (P)	2017-18	2018-19 (P)
1	Crude oil production in India	MMT	36.9	36.0	3.0	2.9	35.7	34.2
2	Consumption of petroleum products	MMT	184.7	194.6	18.6	18.9	206.2	211.6
3	Production of petroleum products	MMT	231.9	243.5	22.0	23.0	254.3	262.4
4	Gross natural gas production	MMSCM	32,249	31,897	2,783	2,816	32,648	32,874
5	Natural gas consumption	MMSCM	52,517	55,534	5,280	4,945	58,059	59,071
6	Imports & exports:							
	Crude oil imports	MMT	202.9	213.9	18.4	19.3	220.4	226.6
		$ Billion	64.0	70.2	8.3	9.0	87.8	112.0
	Petroleum products (POL) imports	MMT	29.5	36.3	2.9	3.0	35.5	32.5
		$ Billion	10.0	10.6	1.3	1.5	13.6	16.2
	Gross petroleum imports (Crude + POL)	MMT	232.3	250.2	21.3	22.3	255.9	259.2
		$ Billion	73.9	80.8	9.6	10.5	101.4	128.2
	Petroleum products exports	MMT	60.5	65.5	5.3	5.5	66.8	61.1
		$ Billion	27.1	29.0	3.1	3.3	34.9	38.2
	LNG imports	MMSCM	21,388	24,686	2,578	2,206	26,328	27,015
		$ Billion	6.9	6.1	0.9	0.7	7.7	9.6
7	Petroleum imports as percentage of India's gross imports (in value terms)	%	19.4	21.0	22.5	24.2	21.8	25.3
8	Petroleum exports as percentage of India's gross exports (in value terms)	%	10.3	10.5	10.7	10.2	11.5	11.6
9	Import dependency of crude (on consumption basis)	%	80.6	81.7	82.9	84.5	82.9	83.7

February and March 2019 private import (POL) quantity is prorated on the basis of February 2018-January 2019 actual data provided by DGCIS.

Note: 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	2015-16	2016-17	March			April-March		
			2017-18	2018-19 (Target)*	2018-19 (P)	2017-18	2018-19 (Target)*	2018-19 (P)
ONGC	21.1	20.9	1.7	2.1	1.6	20.8	23.0	19.6
Oil India Limited (OIL)	3.2	3.3	0.3	0.3	0.3	3.4	3.7	3.3
Private / Joint Ventures (JVs)	11.2	10.4	0.9	0.9	0.8	9.9	10.2	9.6
Total Crude Oil	**35.5**	**34.5**	**2.9**	**3.3**	**2.7**	**34.0**	**37.0**	**32.5**
ONGC condensate	1.3	1.4	0.1		0.1	1.5		1.5
PSC condensate	0.2	0.1	0.02		0.03	0.2		0.2
Total condensate	**1.4**	**1.5**	**0.2**		**0.1**	**1.6**		**1.7**
Total (Crude + Condensate) (MMT)	**36.9**	**36.0**	**3.0**	**3.3**	**2.9**	**35.7**	**37.0**	**34.2**
Total (Crude + Condensate) (Million Bbl)	**270.5**	**263.9**	**22.3**	**24.0**	**20.9**	**261.6**	**271.3**	**250.7**

*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	2015-16	2016-17	March		April-March	
			2017-18	2018-19 (P)	2017-18	2018-19 (P)
Total domestic production (MMTOE)	69.2	67.9	5.8	5.7	68.3	67.1
Overseas production (MMTOE)	10.2	17.4	2.0	2.2	21.8	24.8
Overseas production as percentage of domestic production	**14.7%**	**25.6%**	**34.0%**	**38.6%**	**31.9%**	**37.0%**

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		2015-16	2016-17	March		April-March	
				2017-18	2018-19 (P)	2017-18	2018-19 (P)
1	High Sulphur crude	166.1	177.4	15.5	16.6	188.4	194.0
2	Low Sulphur crude	66.7	67.9	5.7	5.8	63.6	63.3
Total crude processed		**232.9**	**245.4**	**21.1**	**22.5**	**251.9**	**257.2**
Percentage share of HS crude in total crude oil processing		**71.3%**	**72.3%**	**73.2%**	**74.0%**	**74.8%**	**75.4%**

6. Quantity and value of crude oil imports			
Year	Quantity (MMT)	$ Million	Rs. Crore
2018-19 (P)	226.6	111,956	7,83,427
2019-20 (Estimated)	233.0	112,721	8,00,317

Note: 2019-20 Imports are estimated at average price of Indian basket crude oil $66/bbl and average exchange rate for Rs.71/$.

Impact of variation in crude oil price & exchange rate on value of crude oil imports for April 2019 - March 2020 :

If crude prices changes by one $/bbl - Crude oil import bill changes by Rs. 12,126 crores

If exchange rate of Rs./$ changes by Rs. 1/$ - Crude oil import bill changes by Rs. 11,272 crores

7. Self-sufficiency in petroleum products (Million Metric Tonnes)							
Particulars		2015-16	2016-17	March		April-March	
				2017-18	2018-19 (P)	2017-18	2018-19 (P)
1	Indigenous crude oil processing	34.1	33.5	3.0	2.7	32.8	31.7
2	Products from indigenous crude (93.3% of crude oil processed)	31.8	31.3	2.8	2.5	30.6	29.6
3	Products from fractionators (Including LPG and Gas)	4.0	4.3	0.4	0.4	4.6	4.9
4	Total production from indigenous crude & condensate **(2 + 3)**	35.8	35.6	3.2	2.9	35.2	34.5
5	Total domestic consumption	184.7	194.6	18.6	18.9	206.2	211.6
% Self-sufficiency (4 / 5)		**19.4%**	**18.3%**	**17.1%**	**15.5%**	**17.1%**	**16.3%**

8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)										
Company	Refinery	Installed capacity (1.4.2019) (MMTPA)	Crude oil processing (MMT)							
			2015-16	2016-17	March			April-March		
					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	6.5	0.6	0.6	0.6	5.8	6.5	6.7
	Koyali (1965)	13.7	13.8	14.0	1.3	1.3	1.0	13.8	13.6	13.5
	Haldia (1975)	7.5	7.8	7.7	0.7	0.7	0.7	7.7	8.1	8.0
	Mathura (1982)	8.0	8.9	9.2	0.9	0.8	0.9	9.2	9.3	9.7
	Panipat (1998)	15.0	15.3	15.6	1.4	0.7	0.7	15.7	15.4	15.3
	Guwahati (1962)	1.0	0.9	0.9	0.09	0.09	0.08	1.0	1.1	0.9
	Digboi (1901)	0.65	0.6	0.5	0.06	0.06	0.06	0.7	0.7	0.7
	Bongaigaon(1979)	2.35	2.4	2.5	0.2	0.2	0.2	2.4	2.2	2.5
	Paradip (2016)	15.0	1.8	8.2	0.4	1.3	1.4	12.7	14.4	14.6
	IOCL-TOTAL	**69.2**	**58.0**	**65.2**	**5.6**	**5.6**	**5.7**	**69.0**	**71.1**	**71.8**
CPCL	Manali (1969)	10.5	9.1	9.8	0.9	0.9	0.9	10.3	10.2	10.3
	CBR (1993)	1.0	0.5	0.5	0.05	0.00	0.06	0.5	0.3	0.4
	CPCL-TOTAL	**11.5**	**9.6**	**10.3**	**1.0**	**0.9**	**1.0**	**10.8**	**10.5**	**10.7**
BPCL	Mumbai (1955)	12.0	13.4	13.5	1.3	1.1	1.4	14.1	13.5	14.8
	Kochi (1966)	15.5	10.7	11.8	1.4	1.4	1.4	14.1	15.5	16.1
BORL	Bina (2011)	7.8	6.4	6.4	0.6	0.7	0.7	6.7	6.4	5.7
NRL	Numaligarh (1999)	3.0	2.5	2.7	0.2	0.2	0.2	2.8	2.9	2.9
	BPCL-TOTAL	**38.3**	**33.0**	**34.4**	**3.5**	**3.4**	**3.7**	**37.7**	**38.2**	**39.4**

Company	Refinery	Installed capacity (1.4.2019) (MMTPA)	Crude oil processing (MMT)							
			2015-16	2016-17	March			April-March		
					2017-18 (Actual)	2018-19 (Target)*	2018-19 (P)	2017-18 (Actual)	2018-19 (Target)*	2018-19 (P)
ONGC	Tatipaka (2001)	0.066	0.07	0.09	0.006	0.005	0.008	0.08	0.06	0.07
MRPL	Mangalore (1996)	15.0	15.5	16.0	1.5	1.5	1.4	16.1	16.2	16.2
	ONGC-TOTAL	**15.1**	**15.6**	**16.1**	**1.5**	**1.5**	**1.4**	**16.2**	**16.3**	**16.3**
HPCL	Mumbai (1954)	7.5	8.0	8.5	0.7	0.7	0.8	8.6	8.5	8.7
	Visakh (1957)	8.3	9.2	9.3	0.9	0.8	0.9	9.6	9.6	9.8
HMEL	Bathinda (2012)	11.3	10.7	10.5	1.0	0.9	1.1	8.8	10.8	12.5
	HPCL- TOTAL	**27.1**	**27.9**	**28.3**	**2.6**	**2.5**	**2.7**	**27.1**	**28.8**	**30.9**
RIL	Jamnagar (DTA) (1999)	33.0	32.4	32.8	2.8	2.8	2.8	33.2	33.2	31.8
	Jamnagar (SEZ) (2008)	35.2	37.1	37.4	2.4	2.4	3.3	37.3	37.3	37.4
NEL#	Vadinar (2006)	20.0	19.1	20.9	1.8	1.7	1.8	20.7	18.4	18.9
All India		**249.4**	**232.9**	**245.4**	**21.1**	**20.8**	**22.5**	**251.9**	**253.9**	**257.2**

*Targets are as received from MOPNG, #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 01.04.2019)

Details		ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Others*	Total
Crude Oil	Length (KM)	1,283	1,193	688	1,017	5,301	937	-	-	**10419**
	Cap (MMTPA)	60.6	8.4	10.7	11.3	48.6	6.0	-	-	**145.6**
Products	Length (KM)	-	654	-	-	8,769	2,241	3,371	2,395	**17430**
	Cap (MMTPA)	-	1.7	-	-	45.6	19.5	38.1	9.4	**114.3**

* **Others** include 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**	**2018-19 (9M)**
IOCL	Barauni	2.93	6.52	6.60	3.39
	Koyali	6.80	7.55	9.44	6.12
	Haldia	3.96	6.80	6.86	4.89
	Mathura	3.30	7.01	7.09	5.53
	Panipat	4.15	7.95	7.74	5.36
	Guwahati **	15.88	22.14	21.88	17.80
	Digboi **	16.17	24.49	24.86	23.63
	Bongaigaon **	11.09	20.15	20.62	17.84
	Paradip #	-0.65	4.22	7.02	4.22
	Weighted average	**5.06**	**7.77**	**8.49**	**5.83**
BPCL	Kochi	6.87	5.16	6.44	5.12
	Mumbai	6.37	5.36	7.26	5.38
	Weighted average	**6.59**	**5.26**	**6.85**	**5.25**
HPCL	Mumbai	8.09	6.95	8.35	6.00
	Visakhapatnam	5.46	5.51	6.55	4.44
	Weighted average	**6.68**	**6.20**	**7.40**	**5.17**
CPCL	Chennai	5.27	6.05	6.42	3.92
MRPL	Mangalore	5.20	7.75	7.54	3.72
NRL	Numaligarh **	23.68	28.56	31.92	26.76
BORL	Bina	11.70	11.80	11.70	10.10
RIL	Jamnagar	10.80	11.00	11.60	9.50
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**	**2018-19 (9M)**
IOCL	Guwahati	1.26	1.12	3.70	1.40
	Digboi	4.16	7.73	8.27	9.43
	Bongaigaon	0.08	6.03	6.22	4.83
NRL	Numaligarh	8.06	8.50	11.43	10.67

12. Production and consumption of petroleum products (Million Metric Tonnes)										
Products	**2016-17**		**March 2018**		**March 2019 (P)**		**2017-18**		**2018-19 (P)**	
	Prod	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**
LPG	11.3	21.6	1.1	2.1	1.2	2.3	12.4	23.3	12.8	24.9
MS	36.6	23.8	3.3	2.4	3.3	2.6	37.8	26.2	38.0	28.3
NAPHTHA	19.7	13.2	1.7	1.2	1.6	1.3	20.0	12.9	19.6	14.1
ATF	13.8	7.0	1.4	0.7	1.3	0.7	14.7	7.6	15.5	8.3
SKO	6.0	5.4	0.4	0.3	0.3	0.3	4.3	3.8	4.1	3.5
HSD	102.1	76.0	9.2	7.3	9.9	7.5	108.1	81.1	110.6	83.5
LDO	0.6	0.4	0.06	0.05	0.06	0.0	0.6	0.5	0.7	0.6
LUBES	1.0	3.5	0.1	0.4	0.1	0.4	1.0	3.9	0.9	3.9
FO/LSHS	12.0	7.2	0.7	0.5	0.6	0.5	10.3	6.7	10.0	6.5
BITUMEN	5.2	5.9	0.6	0.8	0.6	0.8	5.3	6.1	5.6	6.6
PET COKE	12.9	24.0	1.1	1.9	1.2	1.5	13.9	25.7	13.7	20.5
OTHERS	22.3	6.6	2.4	0.9	2.7	0.9	26.2	8.3	31.0	11.0
ALL INDIA	**243.5**	**194.6**	**22.0**	**18.6**	**23.0**	**18.9**	**254.3**	**206.2**	**262.4**	**211.6**
Growth (%)	**5.0%**	**5.4%**	**0.9%**	**7.2%**	**4.5%**	**1.3%**	**4.4%**	**5.9%**	**3.2%**	**2.7%**

Note: Prod - Production; Cons - Consumption

13. LPG consumption (Thousand Metric Tonne)

LPG category	2015-16	2016-17	March			April-March		
			2017-18	2018-19 (P)	Gr (%)	2017-18	2018-19 (P)	Gr (%)
1. PSU Sales :								
LPG-Packed Domestic	17181.7	18,871.4	1795.0	1981.7	10.4	20,351.8	21,732.5	6.8
LPG-Packed Non-Domestic	1464.4	1,775.9	181.5	214.8	18.4	2,085.8	2,358.8	13.1
LPG-Bulk	317.2	364.3	32.4	29.5	-8.9	355.4	322.0	-9.4
Auto LPG	170.9	167.3	15.5	14.9	-3.7	184.4	180.3	-2.2
Sub-Total (PSU Sales)	**19,134.2**	**21,178.9**	**2,024.3**	**2,240.9**	**10.7**	**22,977.4**	**24,593.6**	**7.0**
2. Direct Private Imports*	489.0	429.3	34.5	27.4	-20.6	364.5	324.4	-11.0
Total (1+2)	**19,623.2**	**21,608.2**	**2,058.9**	**2,268.3**	**10.2**	**23,341.8**	**24,918.0**	**6.8**

*April 2018 to January 2019 import data are actuals provided by DGCIS and February-March 2019 import data are prorated on the basis of February 2018 to January 2019 actual data provided by DGCIS.

14. Kerosene allocation vs upliftment (Kilo Litres)

Product	2015-16		2016-17		2017-18		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	44,32,216	41,52,117

15. Industry marketing infrastructure (as on 01.04.2019) (Provisional)

Particulars	IOCL	BPCL	HPCL	RIL	NEL[##]	SHELL	Others	Total
POL Terminal/ Depots **(Nos.)**[$]	125	78	83	18	3	-	6	**313**
Aviation Fuel Stations **(Nos.)**[@]	116	56	42	30	-	-	1	**245**
Retail Outlets (total) **(Nos.)**,[^]	27,702	14,802	15,440	1,400	5,128	145	7	**64,624**
out of which Rural ROs	7,857	2,702	3,478	127	1,811	20	-	**15,995**
SKO/LDO agencies **(Nos.)**	3,889	1,001	1,638	-	-	-	-	**6,528**
LPG Distributors (total) **(Nos.) (PSUs only)**	11,964	5,907	5,866	-	-	-	-	**23,737**
LPG Bottling plants **(Nos.) (PSUs only)**[#]	89	51	49	-	-	-	3	**192**
LPG Bottling capacity **(TMTPA) (PSUs only)**[&]	9,666	4,182	4,317	-	-	-	173	**18,338**
LPG active domestic consumers **(Nos. crore) (PSUs only)**	12.4	6.8	7.3	-	-	-	-	**26.5**

[$](RIL= 5 terminals and 13 depots, Others=4 MRPL & 2 NRL); [@](Others=ShellMRPL -1); [^](Others=MRPL-7); [#](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	2015-16	2016-17	March			April-March		
			2017-18	2018-19 (Target)	2018-19 (P)	2017-18	2018-19 (Target)	2018-19 (P)
(a) Gross production	32,249	31,897	2,783	3,093	2,816	32,648	35,599	32,874
- ONGC	21,177	22,088	2,014	2,237	2,135	23,429	25,981	24,675
- Oil India Limited (OIL)	2,838	2,937	237	259	235	2,881	3,120	2,722
- Private / Joint Ventures (JVs)	8,235	6,872	532	597	446	6,338	6,498	5,477
(b) Net availability (excluding flare gas and loss)	31,129	30,848	2,702		2,739	31,731		32,056
(c) LNG import	21,388	24,686	2,578		2,206	26,328		27,015
(d) Total consumption including internal consumption (b+c)	52,517	55,534	5,280		4,945	58,059		59,071
(e) Total consumption **(in BCM)**	52.5	55.5	5.3		4.9	58.1		59.1
(f) Import dependency based on consumption (%), {c/d*100}	40.7	44.5	48.8		44.6	45.3		45.7

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 2019 (P)	58.1	MMSCM
Production of CBM gas	April 2018-March 2019 (P)	710.5	MMSCM

18. Major natural gas pipeline network as on 01.04.2019

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)	229.6	83.5	43.0	2.9	9.5	**368.5**

^Excludes CGD pipeline network

19. Gas pipelines under execution / construction as on 01.04.2019

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 as on 01.04.2019	Capacity utilisation in % 2018-19 (P)
Dahej	Petronet LNG Ltd (PLL)	15 MMTPA	106.5%
Hazira	Shell Energy India Pvt. Ltd.	5 MMTPA	79.9%
Dabhol	RGPPL (GAIL - NTPC JV)	1.692 MMTPA*	24.4%
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	9.3%
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 01.04.2019							
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 (excluding areas already authorized)	44	19,794	29,435	120	4
Assam	Assam Gas Co. Ltd	Upper Assam GA	0	0	32,469	1,074	402
Chandigarh	Indian Oil-Adani Gas Pvt. Ltd.	Chandigarh	5	7,500	9,598	0	1
Dadra & Nagar Haveli	Gujarat Gas Ltd.	UT of Dadra & Nagar Haveli GA	3	1,510	2,676	18	15
Daman and Diu	Indian Oil-Adani Gas Pvt. Ltd.	Daman	3	1,000	506	22	9
Delhi	Indraprastha Gas Ltd .	NCT of Delhi (Including Noida & Ghaziabad)	482	10,65,603	10,92,223	2,561	1,751
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 including Kanjari and Vadtal villages GA and Palanpur	545	9,23,776	20,38,881	18,701	4,882

21. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) as on 01.04.2019							
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 Ltd., GAIL Gas Ltd., Indraprastha Gas Ltd. , Indian Oil-Adani Gas Pvt. Ltd.	Sonipat, Faridabad, Gurgaon, Rewari, Panipat, Nuh & Palwal	66	1,59,783	98,893	281	486
Karnataka	Gail Gas Ltd., Megha Engineering & Infrastructures Ltd.	Bengaluru rural and urban districts GA, Tumkur district GA, Belgaum district GA, Dharwad	13	1,093	16,860	124	75
Kerala	Indian Oil-Adani Gas Pvt. Ltd.	Ernakulam	4	900	1,032	10	1
Madhya Pradesh	Aavantika Gas Ltd, GAIL Gas Ltd	Dewas, Vijaipur, Gwalior GA, Indore GA including Ujjain city	43	35,996	56,110	133	189
Maharashtra	Mahanagar Gas Ltd, Maharashtra Natural Gas Ltd, Gujarat Gas Limited, Mahesh Gas Ltd, Unison Enviro Private Limited	Mumbai, Greater Mumbai, Thane Urban, 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 GA excl. areas already authorized, Palghar district and Thane Rural GA, Pune (excluding area already authorised), Ratnagiri	313	9,22,439	14,52,902	4,064	260
Odisha	GAIL (India) Ltd.	Khordha district GA, Cuttack district GA	6	2,640	225	0	0
Punjab	IRM Energy Pvt. Ltd., GSPL	Fatehgarh Sahib, Amritsar	6	2,202	400	1	11

21. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) as on 01.04.2019

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	8,438	2,160	12	14
Telangana	Bhagyanagar Gas Ltd.	Hyderabad	45	24,980	10,579	12	17
Tripura	Tripura Natural Gas Co. Ltd	Agartala	9	11,688	39,743	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.,Torrent Gas Pvt Ltd., GAIL (India) Ltd.	Meerut, Dibiyapur, Mathura, Agra, Kanpur ga, Bareilly GA, Lucknow dist., Moradabad GA, Firozabad GA (TTZ), Khurja GA, Allahabad, Varanasi & Auraiya, Kanpur Dehat & Etawah, Patna	130	1,54,091	1,57,503	495	651
Uttarakhand	Indian Oil-Adani Gas Pvt. Ltd.	Udham Singh Nagar, Haridwar district GA	1	100	993	3	6
West Bengal	Great Eastern Energy Corporation Ltd.	Kultora, Asansol, Raniganj, Durgapur	7	3,756	0	0	0
Total			**1,730**	**33,47,289**	**50,43,188**	**28,046**	**8,823**

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
April 2019 - September 2019	3.69	9.32

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

International FOB prices/ Exchange rates ($/bbl)

Particulars	2016-17	2017-18	2018-19
Crude oil (Indian Basket)	47.56	56.43	69.88
Petrol	58.10	67.83	75.58
Diesel	56.59	68.19	82.51
Kerosene	56.81	67.65	82.24
LPG ($/MT)	393.17	485.92	526.00
FO ($/MT)	258.92	327.50	420.93
Naphtha ($/MT)	415.17	494.73	573.72
Exchange (Rs./$)	67.09	64.45	69.89

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%	Not Applicable	18.00%
Domestic LPG	Nil***	Not Applicable	5.00%
Non Domestic LPG	5.00%	Not Applicable	18.00%
Furnace Oil (Non-Fert)	5.00%	Not Applicable	18.00%
Naphtha (Non-Fert)	5.00%	Not Applicable	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)	35.89	40.23
Excise Duty	17.98	13.83
Dealer Commission (Average)	3.56	2.49
VAT (incl VAT on dealer commission)	15.50	9.76
Retail selling price (RSP) -Rounded	**72.93**	**66.31**
Particulars	**PDS SKO***	**Sub. Dom LPG***
Price before taxes and dealer/distributor commission (after rounding off adjustment)	27.05	621.95
Dealer/distributor commission	2.60	50.89
GST (incl GST on dealer/distributor commission)	1.48	33.66
Retail Selling Price	**31.13**	**706.50**
Less: Cash Compensation on LPG to consumers under DBTL		210.64
Effective cost to consumer after subsidy		**495.86**

*Petrol and diesel at Delhi as per IOCL are as on 16th April 2019. PDS SKO at Mumbai and Sub. Dom LPG at Delhi are as on 16th April 2019 & 1st April 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	160	0.51	190
Domestic LPG	10.00	1430	7.39	1,060
Total	-	**1,590**	-	**1,250**

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

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

Under-recoveries/subsidy & burden sharing

PDS Kerosene

Product	2016-17	2017-18	2018-19 (9M)
	Rs./Crore		
Under recovery	7,595	4,672	5,124
Subsidy under DBTK #	11	113	26
Total	**7,605**	**4,785**	**5,150**

#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	2018-19 (9M)
	Rs./Crore		
DBTL subsidy	12,905	20,880	25,700
PME &IEC^	-	25	92
Total	**12,905**	**20,905**	**25,792**

PMUY (Pradhan Mantri Ujjwala Yojana)

Particulars	2016-17	2017-18	2018-19 (9M)
	Rs./Crore		
PMUY claims	2,999	2,496	3,754
PME & IEC^	-	63	34
Total	**2,999**	**2,559**	**3,788**

^ on payment basis

Sales & profit of petroleum sector (Rs. Crores)

Particulars	2017-18		2018-19 (9M)	
	Turnover	PAT	Turnover	PAT
Upstream/midstream Companies (PSU)	1,48,473	27,231	149,106	30,373
Downstream Companies (PSU)	10,20,395	35,622	9,33,153	17,861
Standalone Refineries (PSU)	1,20,430	5,181	106,158	1,215
Private-RIL	3,15,357	33,612	310,965	26,607

Borrowings of OMCs (Rs. Crores), As on

Company	Mar`17	Mar`18	Dec`18
IOCL	54,820	58,030	64,573
BPCL	23,159	23,351	22,767
HPCL	21,250	20,991	20,618

Petroleum sector contribution to Central/State Govt.

Particulars	2016-17	2017-18	2018-19 (9M)*
Central Government	3,34,534	3,44,671	2,48,637
% of total revenue receipts	24%	23%	19%
State Governments	1,89,770	2,09,155	1,72,944
% of total revenue receipts	9%	9%	8%
Total (Rs. Crores)	**5,24,304**	**5,53,826**	**4,21,581**

*Percentages are based on 9 month contribution vs 9 month adjusted annual budget

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	April-March (P)
ONGC Ltd	29,502	28,010	72,383	32,077	28,738
ONGC Videsh Ltd (OVL)	6,783	18,360	6,240	5,886	6,013
Oil India Ltd (OIL)	3,550	10,514	8,395	4,300	3,702
GAIL (India) Ltd	1,880	2,180	3,613	4,722	5,958
Indian Oil Corp. Ltd. (IOCL)	14,368	21,918	20,345	22,862	26,548
Hindustan Petroleum Corp. Ltd (HPCL)	5,459	5,861	7,134	8,425	11,689
Bharat Petroleum Corp. Ltd (BPCL)	10,926	16,810	8,161	7,400	10,084
Mangalore Refinery & Petrochem Ltd (MRPL)	1,550	614	1,281	744	1,072
Chennai Petroleum Corp. Ltd (CPCL)	1,318	1,293	963	1,010	1,208
Numaligarh Refinery Ltd (NRL)	237	500	387	428	459
Balmer Lawrie Co. Ltd (BL)	38	73	78	125	125
Engineers India Ltd (EIL) [#]	-	-	-	1356	87
Total	**75,611**	**106,133**	**128,981**	**89,335**	**95,684**

(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