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Snapshot of India's Oil & Gas data

September, 2018

Analysis • Knowledge • Information

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

As on 18.10.2018

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Highlights for the month

- Indigenous crude oil and condensate production during September 2018 was lower by 4.2% than that of September 2017. PSC fields registered growth of 1.7% during the month over September 2017 while PSU companies registered de-growth of 6.4%. On cumulative basis de-growth of 3.4% was registered during April-September 2018 over the corresponding period of the previous year.
- Total crude oil processed during September 2018 was 20.9 MMT, which was an increase of 1.3% over September 2017. PSU/JV refineries registered an increase of 3.1% whereas private refineries registered a decrease of 1.8%. On cumulative basis an increase of 5% was registered in the total crude oil processed during April-September 2018 over the corresponding period of the previous year. Refineries processed 75.9% high sulphur crude oil during September 2018 against 76.1% during September 2017.
- Production of petroleum products during September 2018 saw a growth of 2.6% over September 2017. On cumulative basis an increase of 6.6% was registered in the total production of petroleum products during April-September 2018 over the corresponding period of the previous year.
- Quantity of crude oil imported during September 2018 and April-September 2018 increased by 2.1% and 5.8% respectively as compared to the same period of the previous year.
- Quantity of products imported increased by 17.8% and decreased by 5.5% during September 2018 and April-September 2018 respectively over the corresponding period of the previous year. Increase in POL product imports during September 2018 was mainly due to increase in imports of LPG & MS. Decrease in POL product imports during April-September 2018 was due to decrease in imports of HSD and petcoke.
- Quantity of products exported decreased by 3.0% and 6.3% during September 2018 and April-September 2018 respectively over the corresponding period of the previous year. Decrease in exports during April-September 2018 was mainly due to decrease in exports of MS, naphtha, fuel oil and VGO.
- Petroleum product consumption registered a growth of 1.1% during September 2018 and a cumulative growth of 3.6% during April to September 2018. Last year during September 2017, a growth of 10.6% and cumulative growth of 3.6% during period April to September 2017 was observed. Except for naphtha (-3.2%), SKO (-15.1%), HSD (-0.8%) and petcoke (-10.2%), all other products registered positive growth during September 2018.

- Total LPG consumption continuously for the last sixty one months in a row recorded a positive growth of 6.4% during September 2018 and a cumulative growth of 7.1% for the period April to September 2018 was observed. This year during the period April to September 2018, 27.3 lakh DBCs and 250.8 lakh new connections were released out of which 203.5 lakh were released under PMUY. Nearly 106.8 lakh new connections have been released more during the current year in this period compared to last year. Total 559.5 lakh connections were released under PMUY till 30.09.2018 since inception. Out of the five regions, Northern region had the highest share in consumption of 31% followed by Southern region at 28.6%, Western region at 22.7%, Eastern region at 15.6% and North Eastern region at 2.2% during September 2018. Eastern region had the highest growth of 12.1% in total LPG consumption during September 2018.
- SKO consumption registered a de-growth of 15.1% during September 2018 and cumulative de-growth of 10.1% during April to September 2018. Last year during September 2018, a de-growth of 33.5% and cumulative de-growth of 35.6% during April to September 2017 was observed. Cumulative reduction in PDS SKO allocation was 12.1% during Q1 & Q2, 2018-19 compared to same period of the previous year.
- Gross production of natural gas for the month of September 2018 was 2684 MMSCM which was lower by 1.4% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 16255 MMSCM for the current financial year till September 2018 was lower by 1.0% compared with the corresponding period of the previous year .
- LNG import for the month of September 2018 was 2315 MMSCM which was 3.2% higher than the corresponding month of the previous year. The cumulative import of 14068 MMSCM for the current year till September 2018 was higher by 15.4% compared with the corresponding period of the previous year.
- The price of Brent Crude averaged $78.85/bbl during September 2018 as against $72.62/bbl during August 2018 and $56.05/bbl during September 2017. The Indian basket crude price averaged $77.88/bbl during September 2018 as against $72.53/bbl during August 2018 and $ 54.52/bbl during September 2017.
- The import bill of crude oil is estimated to increase by 42% from $88 billion in 2017-18 to $125 billion in 2018-19 considering Indian basket crude oil price of $77.88/bbl and $/Rs.= 72.22 for the balance part of the year.

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	8.2 E (Q1)
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	5.1
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**	**September**		**April-September**	
					2017-18	**2018-19 (P)**	**2017-18**	**2018-19 (P)**
5	Index of Industrial Production (Base: 2011-12)	Growth %	4.6	4.4	4.8#	4.3#	2.3* QE	5.2* QE
6	Imports	$ Billion	384.4	465.6	38.0	41.9	222.4	258.4
7	Exports	$ Billion	275.9	303.5	28.6	28.0	145.8	164.0
8	Trade Balance	$ Billion	-108.5	-162.1	-9.4	-14.0	-76.7	-94.3
9	Foreign Exchange Reserves @	$ Billion	370.0	424.4	400.5	399.7	-	-

IIP is for the month of #August and *April-August; @2016-17-as on March 31, 2017, 2017-18-as on March 30, 2018, September 2017- as on September 29, 2017 and September 2018-as on September 28, 2018; E-Estimates; AE-Advanced Estimates; RE-Revised Estimates; PE-Provisional Estimates; FE-Final Estimates; QE-Quick Estimates.

Source: Ministry of Commerce & Industry (MoC&I), Ministry of Agriculture & Farmer's Welfare (MoA&FW), Reserve Bank of India (RBI)

2. Crude oil, LNG and petroleum products at a glance									
Details		Unit/ Base	2016-17	2017-18	September		April-September	
					2017-18	2018-19 (P)	2017-18	2018-19 (P)
1	Crude oil production in India	MMT	36.0	35.7	2.9	2.8	18.0	17.4
2	Consumption of petroleum products	MMT	194.6	206.2	16.4	16.5	100.7	104.4
3	Production of petroleum products	MMT	243.5	254.3	20.8	21.3	122.6	130.8
4	Gross natural gas production	MMSCM	31,897	32,648	2,723	2,684	16,413	16,255
5	Natural gas consumption	MMSCM	55,534	58,059	4,895	4,931	28,149	29,929
6	Imports & exports:							
	Crude oil imports	MMT	213.9	220.4	17.6	18.0	106.8	113.0
		$ Billion	70.2	87.8	6.6	9.8	37.6	58.7
	Petroleum products (POL) imports	MMT	36.3	35.5	2.5	2.9	17.8	16.8
		$ Billion	10.6	13.6	0.9	1.4	5.9	8.3
	Gross petroleum imports (Crude + POL)	MMT	250.2	255.9	20.1	20.9	124.6	129.8
		$ Billion	80.8	101.4	7.5	11.2	43.4	67.0
	Petroleum products exports	MMT	65.5	66.8	6.3	6.1	32.8	30.7
		$ Billion	29.0	34.9	3.1	4.1	15.5	20.4
	LNG imports*	MMSCM	24,686	26,328	2,243	2,315	12,195	14,068
		$ Billion	6.1	7.8	0.6	0.8	3.1	4.9
7	Petroleum imports as percentage of India's gross imports (in value terms)	%	21.0	21.8	19.7	26.8	19.5	25.9
8	Petroleum exports as percentage of India's gross exports (in value terms)	%	10.5	11.5	11.0	14.8	10.6	12.4
9	Import dependency of crude (on consumption basis)	%	81.7	82.9	83.3	83.7	82.6	83.3

*RIL LNG Import data not received for Sep 2018. Hence average quantity from Apr-Aug has been taken . Value based upon average industry change over previous month.

3. Indigenous crude oil production (Million Metric Tonnes)								
Details	**2016-17**	**2017-18**	**September**			**April-September**		
			2017-18	**2018-19 (Target)***	**2018-19 (P)**	**2017-18**	**2018-19 (Target)***	**2018-19 (P)**
ONGC	20.9	20.8	1.7	1.9	1.6	10.6	11.2	9.9
Oil India Limited (OIL)	3.3	3.4	0.3	0.3	0.3	1.7	1.8	1.7
Private / Joint Ventures (JVs)	10.4	9.9	0.8	0.8	0.8	4.9	5.1	4.9
Total Crude Oil	**34.5**	**34.0**	**2.8**	**3.0**	**2.7**	**17.2**	**18.1**	**16.6**
ONGC condensate	1.4	1.5	0.1		0.1	0.7		0.7
PSC condensate	0.1	0.2	0.01		0.02	0.09		0.11
Total condensate	**1.5**	**1.6**	**0.1**	**0.0**	**0.1**	**0.8**	**0.0**	**0.9**
Total (Crude + Condensate) (MMT)	**36.0**	**35.7**	**2.9**	**3.0**	**2.8**	**18.0**	**18.1**	**17.4**
Total (Crude + Condensate) (Million Bbl)	**263.9**	**261.6**	**21.4**	**22.0**	**20.5**	**132.1**	**133.0**	**127.6**

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

4. Domestic oil & gas production vis-à-vis overseas production						
Details	**2016-17**	**2017-18**	**September**		**April-September**	
			2017-18	**2018-19 (P)**	**2017-18**	**2018-19 (P)**
Total domestic production (MMTOE)	67.9	68.3	5.6	5.5	34.4	33.7
Overseas production (MMTOE)	17.4	21.8	1.6	2.0	10.8	12.0
Overseas production as percentage of domestic production	**25.6%**	**31.8%**	**28.4%**	**36.0%**	**31.2%**	**35.5%**

Source: ONGC Videsh, GAIL, OIL , IOCL, HPCL & BPRL . **Note:** FY 2016-17 & 2017-18 data revised in line with revised IOCL data.

5. High Sulphur (HS) & Low Sulphur (LS) crude oil processing (MMT)							
Details		**2016-17**	**2017-18**	**September**		**April-September**	
				2017-18	**2018-19 (P)**	**2017-18**	**2018-19 (P)**
1	High Sulphur crude	177.4	188.4	15.7	15.8	90.4	98.2
2	Low Sulphur crude	67.9	63.6	4.9	5.0	32.1	30.5
Total crude processed		**245.4**	**251.9**	**20.6**	**20.9**	**122.5**	**128.7**
Percentage share of HS crude in total crude oil processing		**72.3%**	**74.8%**	**76.1%**	**75.9%**	**73.8%**	**76.3%**

6. Quantity and value of crude oil imports			
Year	**Quantity (MMT)**	**$ Million**	**Rs. Crore**
2017-18	220.4	87,803	5,66,450
2018-19 (Estimated)	228.6	124,738	8,81,282

Note: April - September, 2018 Imports are based on actuals and for October 2018- March 2019 imports are estimated at average price of Indian basket crude oil for September 2018 i.e. $77.88/bbl and average exchange rate for September 2018 i.e. Rs.72.22/$.

Impact of variation in crude oil price & exchange rate on value of crude oil imports for October 2018- March 2019 :

If crude prices changes by one $/bbl - Crude oil import bill changes by Rs. 6,158 crores

If exchange rate of Rs./$ changes by Rs. 1/$ - Crude oil import bill changes by Rs. 6,639 crores

7. Self-sufficiency in petroleum products (Million Metric Tonnes)							
Particulars		**2016-17**	**2017-18**	**September**		**April-September**	
				2017-18	**2018-19 (P)**	**2017-18**	**2018-19 (P)**
1	Indigenous crude oil processing	33.5	32.8	2.5	2.4	16.3	16.0
2	Products from indigenous crude (93.3% of crude oil processed)	31.3	30.6	2.3	2.3	15.3	15.0
3	Products from fractionators (Including LPG and Gas)	4.3	4.6	0.4	0.4	2.2	2.4
4	Total production from indigenous crude & condensate **(2 + 3)**	35.6	35.2	2.7	2.7	17.5	17.4
5	Total domestic consumption	194.6	206.2	16.4	16.5	100.7	104.4
% Self-sufficiency (4 / 5)		**18.3%**	**17.1%**	**16.7%**	**16.3%**	**17.4%**	**16.7%**

8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)										
Company	Refinery	Installed capacity (1.10.2018) (MMTPA)	Crude oil processing (MMT)							
			2016-17	2017-18	September			April-September		
					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	0.4	0.6	0.5	2.5	3.2	3.2
	Koyali (1965)	13.7	14.0	13.8	1.1	1.2	1.0	6.3	6.5	6.6
	Haldia (1975)	7.5	7.7	7.7	0.7	0.6	0.7	4.1	3.8	4.0
	Mathura (1982)	8.0	9.2	9.2	0.3	0.8	0.7	4.3	4.1	4.8
	Panipat (1998)	15.0	15.6	15.7	1.3	0.6	1.3	7.5	7.2	8.2
	Guwahati (1962)	1.0	0.9	1.0	0.08	0.08	0.09	0.50	0.48	0.55
	Digboi (1901)	0.65	0.5	0.7	0.06	0.05	0.06	0.33	0.32	0.34
	Bongaigaon(1979)	2.35	2.5	2.4	0.2	0.2	0.2	1.2	1.1	1.2
	Paradip (2016)	15.0	8.2	12.7	1.2	1.2	1.2	6.9	6.8	6.6
	IOCL-TOTAL	**69.2**	**65.2**	**69.0**	**5.4**	**5.3**	**5.7**	**33.6**	**33.6**	**35.5**
CPCL	Manali (1969)	10.5	9.8	10.3	0.7	0.9	0.9	5.0	4.9	5.3
	CBR (1993)	1.0	0.53	0.50	0.03	0.04	0.04	0.24	0.23	0.18
	CPCL-TOTAL	**11.5**	**10.3**	**10.8**	**0.7**	**0.9**	**1.0**	**5.2**	**5.1**	**5.5**
BPCL	Mumbai (1955)	12.0	13.5	14.1	1.2	1.1	1.1	6.7	6.8	7.2
	Kochi (1966)	15.5	11.8	14.1	1.2	1.3	1.4	6.5	8.0	8.2
BORL	Bina (2011)	6.0	6.4	6.7	0.6	0.0	0.0	3.6	2.7	2.5
NRL	Numaligarh (1999)	3.0	2.7	2.8	0.2	0.2	0.2	1.4	1.5	1.4
	BPCL-TOTAL	**36.5**	**34.4**	**37.7**	**3.2**	**2.7**	**2.7**	**18.3**	**18.9**	**19.3**

Company	Refinery	Installed capacity (1.10.2018) (MMTPA)	Crude oil processing (MMT)							
			2016-17	2017-18	September			April-September		
					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	0.039	0.028	0.029
MRPL	Mangalore (1996)	15.0	16.0	16.1	1.1	1.3	1.3	7.5	7.6	7.7
	ONGC-TOTAL	**15.1**	**16.1**	**16.2**	**1.1**	**1.3**	**1.3**	**7.6**	**7.6**	**7.7**
HPCL	Mumbai (1954)	7.5	8.5	8.6	0.6	0.6	0.7	4.3	4.2	4.4
	Visakh (1957)	8.3	9.3	9.6	0.8	0.8	0.8	4.9	4.7	4.9
HMEL	Bathinda (2012)	11.3	10.5	8.8	1.0	0.9	1.0	2.9	5.4	6.2
	HPCL- TOTAL	**27.1**	**28.3**	**27.1**	**2.5**	**2.2**	**2.6**	**12.0**	**14.3**	**15.5**
RIL	Jamnagar (DTA) (1999)	33.0	32.8	33.2	2.8	2.8	2.7	16.4	16.4	16.5
	Jamnagar (SEZ) (2008)	35.2	37.4	37.3	3.2	3.2	3.1	19.1	19.1	18.1
NEL#	Vadinar (2006)	20.0	20.9	20.7	1.7	1.4	1.7	10.4	9.2	10.5
All India		**247.6**	**245.4**	**251.9**	**20.6**	**19.9**	**20.9**	**122.5**	**124.3**	**128.7**

*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 01.10.2018)

Details		ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Others*	Total
Crude Oil	Length (KM)	1,192	1,193	688	1,017	5,301	937	0	0	**10328**
	Cap (MMTPA)	58.5	8.4	10.7	11.3	48.6	6.0	0.0	0.0	**143.5**
Products	Length (KM)	0	654	0	0	7,909	1,948	3,371	2,688	**16570**
	Cap (MMTPA)	0.0	1.7	0.0	0.0	45.4	16.2	38.1	9.3	**110.6**

***Other** 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**	**Q1, 2018-19**
IOCL	Barauni	2.93	6.52	6.60	8.78
	Koyali	6.80	7.55	9.44	9.37
	Haldia	3.96	6.80	6.86	9.78
	Mathura	3.30	7.01	7.09	9.03
	Panipat	4.15	7.95	7.74	10.04
	Guwahati **	15.88	22.14	21.88	19.80
	Digboi **	16.17	24.49	24.86	27.07
	Bongaigaon **	11.09	20.15	20.62	25.37
	Paradip #	-0.65	4.22	7.02	8.69
	Weighted average	**5.06**	**7.77**	**8.49**	**10.21**
BPCL	Kochi	6.87	5.16	6.44	6.79
	Mumbai	6.37	5.36	7.26	8.23
	Weighted average	**6.59**	**5.26**	**6.85**	**7.49**
HPCL	Mumbai	8.09	6.95	8.35	6.91
	Visakhapatnam	5.46	5.51	6.55	7.36
	Weighted average	**6.68**	**6.20**	**7.40**	**7.15**
CPCL	Chennai	5.27	6.05	6.42	7.11
MRPL	Mangalore	5.20	7.75	7.54	8.28
NRL	Numaligarh **	23.68	28.56	31.92	30.18
BORL	Bina	11.70	11.80	11.70	15.00
RIL	Jamnagar	10.80	11.00	11.60	10.50
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**	**Q1, 2018-19**
IOCL	Guwahati	1.26	1.12	3.70	3.99
	Digboi	4.16	7.73	8.27	12.42
	Bongaigaon	0.08	6.03	6.22	12.38
NRL	Numaligarh	8.06	8.50	11.43	13.21

12. Production and consumption of petroleum products (Million Metric Tonnes)										
Products	**2017-18**		**Sep-2017**		**Sep 2018 (P)**		**Apr-Sep 2017**		**Apr-Sep 2018 (P)**	
	Prod	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**
LPG	12.4	23.3	1.0	1.9	1.0	2.1	5.8	11.2	6.3	12.0
MS	37.8	26.2	3.1	2.1	3.1	2.2	18.5	13.0	19.1	14.0
NAPHTHA	20.0	12.9	1.7	1.2	1.7	1.1	9.8	6.0	9.8	6.8
ATF	14.7	7.6	1.2	0.6	1.2	0.7	6.9	3.7	7.7	4.1
SKO	4.3	3.8	0.3	0.3	0.4	0.3	2.2	2.0	2.1	1.8
HSD	108.1	81.1	8.9	6.1	8.7	6.0	52.4	39.6	55.0	40.8
LDO	0.6	0.5	0.04	0.04	0.06	0.04	0.2	0.2	0.3	0.3
LUBES	1.0	3.9	0.1	0.3	0.1	0.4	0.5	1.7	0.5	1.9
FO/LSHS	10.3	6.7	0.9	0.6	0.9	0.6	5.4	3.4	4.9	3.2
BITUMEN	5.3	6.1	0.2	0.3	0.3	0.4	2.3	2.4	2.5	2.9
PET COKE	13.9	25.7	1.1	2.2	1.2	2.0	6.8	13.6	7.1	11.6
OTHERS	26.2	8.3	2.3	0.7	2.7	0.8	11.8	3.8	15.4	4.8
ALL INDIA	**254.3**	**206.2**	**20.8**	**16.4**	**21.3**	**16.5**	**122.6**	**100.7**	**130.8**	**104.4**
Growth (%)	**4.4%**	**5.9%**	**7.9%**	**10.6%**	**2.6%**	**1.1%**	**2.1%**	**3.6%**	**6.6%**	**3.6%**

Note: Prod - Production; Cons - Consumption

13. LPG consumption (Thousand Metric Tonne)

LPG category	2016-17	2017-18	September			April-September		
			2017-18	2018-19 (P)	Gr (%)	2017-18	2018-19 (P)	Gr (%)
1. PSU Sales :								
LPG-Packed Domestic	18871.4	20,351.8	1692.4	1800.6	6.4	9,793.0	10,517.1	7.4
LPG-Packed Non-Domestic	1775.9	2,085.8	173.3	189.4	9.3	975.6	1,114.0	14.2
LPG-Bulk	364.3	355.4	29.1	26.4	-9.3	181.7	166.3	-8.5
Auto LPG	167.3	184.4	15.7	14.9	-5.1	93.3	92.4	-1.0
Sub-Total (PSU Sales)	**21,178.9**	**22,977.4**	**1,910.5**	**2,031.3**	**6.3**	**11,043.7**	**11,889.8**	**7.7**
2. Direct Private Imports*	429.3	364.5	23.2	25.8	11.2	198.8	149.0	-25.0
Total (1+2)	**21,608.2**	**23,341.8**	**1,933.7**	**2,057.1**	**6.4**	**11,242.4**	**12,038.8**	**7.1**

*April to July 2018 import data are actuals provided by DGCIS and August & September 2018 import data are prorated on the basis of August 2017 to July 2018 actual data provided by DGCIS.

14. Kerosene allocation vs upliftment (Kilo Litres)

Product	2015-16		2016-17		2017-18		H1, 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	23,04,452	21,55,933

15. Industry marketing infrastructure (as on 01.10.2018) (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.)**[@]	113	52	42	28	-	-	1	**236**
Retail Outlets (total) **(Nos.)**[^]	27,325	14,565	15,255	1,400	4,833	114	6	**63,498**
out of which, Rural ROs	7,678	2,657	3,387	127	1,743	15	-	**15,607**
SKO/LDO agencies **(Nos.)**	3,892	1,001	1,638	-	-	-	-	**6,531**
LPG Distributors (total) **(Nos.) (PSUs only)**	10,839	5,422	5,305	-	-	-	-	**21,566**
LPG Bottling plants **(Nos.) (PSUs only)**[#]	89	51	48	-	-	-	3	**191**
LPG Bottling capacity **(TMTPA) (PSUs only)**[&]	9,291	3,963	4,137	-	-	-	173	**17,564**
LPG active domestic consumers **(Nos. crore) (PSUs only)**	11.6	6.4	6.8	-	-	-	-	**24.7**

[$](RIL= 5 terminals and 13 mini 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	September			April-September		
			2017-18	2018-19 (Target)	2018-19 (P)	2017-18	2018-19 (Target)	2018-19 (P)
(a) Gross production	31,897	32,648	2,723	2,904	2,684	16,413	17,620	16,255
- ONGC	22,088	23,429	1,938	2,124	2,006	11,675	12,784	12,018
- Oil India Limited (OIL)	2,937	2,881	246	263	228	1,481	1,591	1,366
- Private / Joint Ventures (JVs)	6,872	6,338	540	517	450	3,256	3,246	2,871
(b) Net availability (excluding flare gas and loss)	30,848	31,731	2,653		2,616	15,954		15,861
(c) LNG import	24,686	26,328	2,243		2,315	12,195		14,068
(d) Total consumption including internal consumption (b+c)	55,534	58,059	4,895		4,931	28,149		29,929
(e) Total consumption **(in BCM)**	55.5	58.1	4.9		4.9	28.1		29.9
(f) Import dependency based on consumption (%), {c/d*100}	44.5	45.3	45.8		46.9	43.3		47.0

Note: Some sub-totals/ totals may not add-up due to rounding off at individual levels. RIL LNG Import data not received for Sep 2018. Hence average quantity from Apr-Aug has been taken .

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	September 2018 (P)	54.2	MMSCM
Production of CBM gas	April-September 2018 (P)	352.8	MMSCM

18. Major natural gas pipeline network as on 01.10.2018

Nature of pipeline		GAIL	Reliance	GSPL	ARN	IOCL	Total
Natural gas	Length (KM)	11,410	1,784	2,620	817	140	**16,771**
	Cap (MMSCMD)*	229.5	83.5	43.0	3	9.5	**368.7**

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

19. Gas pipelines under execution / construction as on 01.10.2018

Network/ Region	Entity	Length sanctioned (KM)	Design capacity (MMSCMD)	Pipeline size
Kochi-Kottanad-Bengaluru-Mangalore	GAIL (India) Ltd	1,056	16	24"/18"/12"
Dabhol - Bengaluru (DBPL)	GAIL (India) Ltd	302	16	36"/30"/24"/18"
Jagdishpur- Haldia-Bokaro-Dhamra	GAIL (India) Ltd	2,539	16	30”/24"/18"/12”/8”/4”
Mallavaram – Bhopal - Bhilwara	GSPC India Transco Ltd	2,042	78.25	42”/36"/30"/24"/18"/12”
Mehsana - Bathinda	GSPC India Gasnet Ltd	2,052	77.11	36”/24”/18”/12”
Bathinda - Jammu - Srinagar	GSPC India Gasnet Ltd	725	42.42	24”/18”/16”/12”/8”/6”
Kakinada - Vizag - Srikakulam	AP Gas Distribution Co.	391	90	24”/18”/8”/4”
Ennore - Nellore	Gas Transmission India Pvt.	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		**11,377**		

20. Existing LNG terminals

Location	Promoters	Capacity (MMTPA) as on 01.09.2018	Capacity utilisation in % April-August 2018 (P)
Dahej	Petronet LNG Ltd (PLL)	15 MMTPA	109.8
Hazira	Hazira LNG Pvt Ltd (HLPL)	5 MMTPA	95.2
Dabhol	RGPPL (GAIL - NTPC JV)	1.692 MMTPA*	3.9
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	10.1
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 01.10.2018							
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, Vijayawada, East/ West Godavari, Krishna	26	19,417	16,493	74	2
Assam	Assam Gas Co. Ltd	Tinsukia, Dibrugarh, Sibsagar, Jorhat, Golaghat	0	0	31,996	1,061	412
Chandigarh	IndianOil- Adani Gas	Chandigarh	4	5,000	45,006	0	0
Dadra & Nagar Haveli	Gujarat Gas Ltd.	Dadra & Nagar Haveli	3	849	1,223	9	11
Daman and Diu	Indian Oil- Adani Gas	Daman and Diu	2	500	2,755	23	9
Delhi	Indraprastha Gas Ltd .	NCT of Delhi (Including Noida & Ghaziabad)	450	10,48,903	9,70,849	2,350	1,429
Gujarat	Sabarmati Gas Ltd, Gujarat Gas Ltd, Adani Gas Ltd, Vadodara Gas Ltd, Hindustan Petroleum Corporation Ltd, Charotar Gas Sahakari Mandal Ltd, IRM Energy Ltd.	Gandhinagar, Mehsana, Sabarkantha and Patan, Surat-Bharuch-Ankleswar GA, Nadiad GA,Navsari GA, Rajkot GA, Surendra Nagar GA, Hazira GA, Valsad GA, Jamnagar GA, Bhavnagar GA, Kutch (West) GA, UT of Dadra and Nagar Haveli GA, Amreli District GA, Dahej-Vagra Taluka GA, Dahod District GA, Panchmahal District GA, Anand (Exclusive area authorised) district GA, Ahmedabad (Excluding area already authorised) district GA, Vadodara, Vadodara Rural and Ahmedabad Urban, Anand and Palanpur	469	8,67,528	19,36,754	18,153	4,675

21. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) as on 01.10.2018							
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.	Sonepat, Faridabad, Gurgaon, Rewari, Panipat	54	1,47,601	88,817	256	396
Karnataka	Gail Gas Ltd., Megha Engineering & Infrastructures Ltd.	Bengaluru, Tumkur, Belgaum	6	609	8,493	89	46
Kerala	Indian Oil- Adani Gas	Ernakulam	4	500	12060	2	0
Madhya Pradesh	Aavantika Gas Ltd, GAIL Gas Ltd	Dewas, Vijaipur, Indore including Ujjain, Gwalior, Pithampur	32	35,236	37,282	111	158
Maharashtra	Mahanagar Gas Ltd, Maharashtra Natural Gas Ltd, Gujarat Gas Limited	Mumbai, Greater Mumbai including Thane City, Mira Bhayender, Navi Mumbai, Ambernath, Bhiwandi, Kalyan, Dombivli, Badlapur, Ulhasnagar, Panvel, Kharghar & Taloja, Pune City including Pimpri Chinchwad along with adjoining contiguous areas of Hinjewadi, Chakan & Talegaon GA, Raigarh District and Palghar and Thane Rural	276	8,58,447	13,13,502	3,923	237
Odisha	GAIL (India) Ltd.	Bhubaneswar	4	1,509	161	0	0
Punjab	IRM Energy Pvt. Ltd.	Fatehgarh Sahib	1	415	120	1	4

21. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.) as on 01.10.2018

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	7,938	679	4	12
Telangana	Bhagyanagar Gas Ltd.	Hyderabad	33	24,555	8,168	9	13
Tripura	Tripura Natural Gas Co. Ltd	Agartala	8	11,053	36,774	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, Bareilly, Lucknow, Moradabad, Firozabad Geographical Area (TTZ), Khurja and Allahabad, Varanasi	92	1,45,822	1,35,321	410	658
Uttarakhand	Indian Oil-Adani Gas Pvt. Ltd.	Udham Singh Nagar, Haridwar	1	50	2,120	0	1
West Bengal	Great Eastern Energy Corporation Ltd.	Kultora, Asansol, Raniganj, Durgapur	7	3,578	0	0	0
Total			**1,477**	**31,79,510**	**46,48,573**	**26,890**	**8,112**

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-Sep'18
Crude oil (Indian Basket)	47.56	56.43	73.68
Petrol	58.10	67.83	82.68
Diesel	56.59	68.19	86.61
Kerosene	56.81	67.65	86.35
LPG ($/MT)	393.17	485.92	551.50
FO ($/MT)	258.92	327.50	431.75
Naphtha ($/MT)	415.17	494.73	630.07
Exchange (Rs./$)	67.09	64.45	68.51

Customs, excise duty & GST rates (as on 11.10.2018)

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)	43.49	48.02
Excise Duty	17.98	13.83
Dealer Commission (Average)	3.66	2.53
VAT (incl VAT on dealer commission)	17.59	11.08
Retail selling price (RSP) -Rounded	**82.72**	**75.46**
Particulars	**PDS SKO***	**Sub. Dom LPG***
Price before taxes and dealer/distributor commission	24.05	787.71
Dealer/distributor commission	2.03	49.43
GST (incl GST on dealer/distributor commission)	1.30	41.86
Retail Selling Price	**27.39**	**879.00**
Less: Cash Compensation on LPG to consumers under DBTL		376.60
Effective cost to consumer after subsidy		**502.40**

*Petrol and diesel at Delhi as per IOCL are as on 15th October 2018. SKO at Mumbai is as on 16th October 2018 and Sub. Dom LPG at Delhi is as on 1st October 2018.

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	0.45	190	0.57	250
Domestic LPG	10.32	1380	8.78	1,180
Total	-	**1,570**	-	**1,430**

Note: The above calculations are based on RTP for October 2018.

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

Under-recoveries/subsidy & burden sharing

PDS Kerosene

Product	2016-17	2017-18	Q1, 2018-19
	Rs./Crore		
Under Recovery	7,595	4,672	1,660
Subsidy under DBTK #	11	113	0
Total	**7,605**	**4,785**	**1,660**

#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	Q1, 2018-19
	Rs./Crore		
DBTL subsidy	12,905	20,880	5,026
PME &IEC^	-	25	92
Total	**12,905**	**20,905**	**5,118**

PMUY (Pradhan Mantri Ujjwala Yojana)

Particulars	2016-17	2017-18	Q1, 2018-19
	Rs./Crore		
PMUY claims	2,999	2,496	1,372
PME & IEC^	-	63	34
Total	**2,999**	**2,559**	**1,406**

^ on payment basis

Sales & profit of petroleum sector (Rs. Crores)

Particulars	2017-18		Q1, 2018-19	
	Turnover	PAT	Turnover	PAT
Upstream/midstream Companies (PSU)	1,48,473	27,231	47,693	8,106
Downstream Companies (PSU)	10,20,395	35,622	3,03,769	10,844
Standalone Refineries (PSU)	1,20,430	5,181	29,456	1,008
Private-RIL	3,15,357	33,612	99,318	8,820

Borrowings of OMCs (Rs. Crores), As on

Company	Mar`16*	Mar`17	Mar`18
IOCL	54,820	58,030	44,797
BPCL	23,159	23,351	19,683
HPCL	21,250	20,991	14,842

*Regrouped as per Ind AS

Petroleum sector contribution to Central/State Govt.

Particulars	2016-17	2017-18	Q1, 2018-19
Central Government	3,34,534	3,43,862	66,379
% of total revenue receipts	24%	23%	
State Governments	189770	2,09,155	57,685
% of total revenue receipts	9%	9%	
Total (Rs. Crores)	**5,24,304**	**5,53,017**	**1,24,064**

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-Sep (P)
ONGC Ltd	29,502	28,010	72,383	32,077	12,172
ONGC Videsh Ltd (OVL)	6,783	18,360	6,240	5,886	2,226
Oil India Ltd (OIL)	3,550	10,514	8,395	4,300	1,543
GAIL (India) Ltd	1,880	2,180	3,613	4,722	2,253
Indian Oil Corp. Ltd. (IOCL)	14,368	21,918	20,345	22,862	12,834
Hindustan Petroleum Corp. Ltd (HPCL)	5,459	5,861	7,134	8,425	3,956
Bharat Petroleum Corp. Ltd (BPCL)	10,926	16,810	8,161	7,400	4,601
Mangalore Refinery & Petrochem Ltd (MRPL)	1,550	614	1,281	744	338
Chennai Petroleum Corp. Ltd (CPCL)	1,318	1,293	963	1,010	485
Numaligarh Refinery Ltd (NRL)	237	500	387	428	149
Balmer Lawrie Co. Ltd (BL)	38	73	78	125	73
Engineers India Ltd (EIL) [#]	-	-	-	1356	62
Total	**75,611**	**106,133**	**128,981**	**89,335**	**40,692**

(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	1,314 SCM	Power generation from 1 MMSCMD of gas	220 MW