Ready Reckoner

Snapshot of India's Oil & Gas data

September, 2017

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

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Highlights for the month

- Indigenous crude oil production during September 2017 was marginally higher by 0.1% than that of September 2016. PSU companies registered a growth of 2.7% during the month over September 2016. However PSC fields registered de-growth of 6.2% during the month over September 2016 due to decline in production of Rajasthan fields. On cumulative basis, there was a marginal decrease of 0.2% over April- September 2016 in indigenous crude oil production.
- Total crude oil processed during September 2017 was 20.5 MMT, which is an increase of 3.9% over September 2016 mainly due to higher crude oil processed by PSU refineries. On cumulative basis, crude oil processed was marginally higher by 0.7% over the period April- September 2016-17.
- Production of petroleum products during September 2017 saw a growth of 8.1% over September 2016. On cumulative basis a growth of 2.1% was recorded in production over the period April- September 2016-17.
- Crude oil imports decreased by 1.3% during September 2017 as compared to September 2016. On cumulative basis, crude oil imports marginally decreased by 0.1% over the corresponding period of the previous year. Product imports decreased by 10.4% during September 2017 as compared to September 2016 mainly due to decrease in petcoke imports by cement and steel industries. On cumulative basis, product imports decreased by 8.9% over the corresponding period of the previous year.
- Export of POL products increased by 3.7% during September 2017 as compared to September 2016 primarily due to higher surplus availability of HSD and Fuel oil. On cumulative basis, an increase of 1.4% was recorded in product exports over the period April- September 2016-17.
- Petroleum product consumption registered a growth of 10.0% during September 2017 as compared to 0.8% de-growth during September 2016. Except for SKO & FO/LSHS, all other major products registered positive growth during September 2017. During the period April-September 2017, petroleum product consumption registered a growth of 1.5% as compared to 9.9% growth during the same period last year. Lower growth during the current year (April to September 2017) is mainly due to heavy floods in many states and high de-growth in consumption of SKO (-35.6%), naphtha (-13.0%), petcoke (-9.4%) & FO/LHSH (9.0%) which constitute 6.0%, 2.0 %, 11.9 % and 3.4% share in total petroleum product consumption respectively.

•	Total LPG consumption continuously for the last forty nine months in a row recorded a positive growth of 3.8% during September, 2017 and a cumulative growth of 9.9% for the period April to September, 2017. Out of the five regions, Northern region had the highest share in consumption of 31.1% followed by Southern region at 28.6%, Western region at 22.1%, Eastern region at 15.9% and North Eastern region at 2.3% during the period April to September, 2017. Eastern region had the highest growth of 20.2% in total LPG consumption during the period April to September, 2017.
•	SKO registered a de-growth of 33.6% during September 2017 and cumulative de-growth of 35.6% during the period April-September 2017-18. This was mainly because of reduced allocation to states during Q1 and Q2 of 2017-18, voluntary surrender of PDS SKO quota by Haryana and Punjab and less upliftment in Rajasthan and West Bengal and nil upliftment in Andhra Pradesh during August and September 2017.
•	Gross production of natural gas for the month of September, 2017 was 2,723 MMSCM which was higher by 4.74% compared with the corresponding month of the previous year. Cumulative gross production of natural gas of 16412.90 MMSCM for the current year till September, 2017 was higher by 4.38% compared with the corresponding period of the previous year (15723.53 MMSCM).
•	LNG imports for the month of September, 2017 was 2414 MMSCM which was 4.8 % higher than the corresponding month of the previous year. Cumulative import of 12446 MMSCM for the current year till September, 2016 was lower by 1.6% compared with the corresponding period of the previous year (12652 MMSCM).
•	The price of Brent Crude averaged \$ 56.05/bbl during September, 2017 as against \$ 51.64/bbl during August, 2017. The Indian basket crude averaged \$ 54.52/bbl during September, 2017 as against \$ 50.63/bbl during the previous month.
•	The import bill of crude oil is estimated to increase by 15 % from \$ 70 billion in 2016-17 to \$ 81 billion in 2017-18 considering Indian basket crude oil price of \$ 55/bbl and \$/Rs = 65 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 (P)
1	Population (as on 1st May, 2011)	Billion	1.2	-	-	-
2	GDP at Factor Cost (Constant prices)*	Growth %	6.4	7.5	8.0	7.1 PE
3	Agricultural Production (Food grains)	MMT	265.0	252.0	251.6	275.7 4th AE
		Growth %	3.1	-4.9	-0.2	9.6
4	Gross Fiscal Deficit	%	-4.5	-4.1	-3.9	-3.5 (RE)

	Economic indicators	Unit/ Base	2015-16	2016-17 (P)	September (P)		April-September (P)	
					2016	2017	2016-17	2017-18
5	Index of Industrial Production#	Growth %	3.3	4.6	4.0	4.3	5.9	2.2
6	Imports	$ Billion	381.0	384.4	31.8	37.6	175.3	219.3
7	Exports	$ Billion	262.3	275.9	22.8	28.6	132.0	147.2
8	Trade Balance	$ Billion	-118.7	-108.5	-9.1	-9.0	-43.4	-72.1
9	Foreign Exchange Reserves @	$ Billion	355.6	370.0	372.0	399.7	-	-

*Revised on account of using new series of IIP and WPI with base 2011-12. #IIP is for the month of August 2017 & cumulative for Apr-Aug'17, Base year of IIP changed to 2011-12; @2015-16-as on Mar 25, 2016; 2016-17-as on Mar 31, 2017, September 2016- as on September 30, 2016, September 2017-as on September 29, 2017; AE-Advanced Estimates; RE-Revised Estimates

2. Crude oil, LNG and petroleum products at a glance									
Details		Unit/ Base	2015-16	2016-17 (P)	September (P)		April-September (P)	
					2016	2017	2016-17	2017-18
1	Crude oil production in India	MMT	36.9	36.0	2.9	2.9	18.1	18.0
2	Consumption of petroleum products	MMT	184.7	194.6	14.8	16.3	97.2	98.7
3	Production of petroleum products	MMT	231.9	243.5	19.2	20.8	120.1	122.7
4	Imports & exports:							
Crude oil imports		MMT	202.9	213.9	17.8	17.5	106.9	106.8
		$ Billion	64.0	70.2	5.4	6.5	32.2	37.6
Petroleum products (POL) imports		MMT	29.5	36.3	3.0	2.7	19.2	17.5
		$ Billion	10.0	10.6	0.8	0.9	4.8	5.9
Gross petroleum imports (Crude + POL)		MMT	232.3	250.2	20.7	20.2	126.1	124.3
		$ Billion	73.9	80.8	6.2	7.5	37.0	43.4
Petroleum products exports		MMT	60.5	65.5	6.0	6.3	32.4	32.8
		$ Billion	27.1	29.0	2.5	3.1	13.5	15.5
LNG imports		$ Billion	6.7	6.1	0.5	0.6	2.8	3.2
5	Petroleum imports as % of India's gross imports (in value)	%	19.4	21.0	19.4	19.8	21.1	19.8
6	Petroleum exports as % of India's gross exports (in value)	%	10.3	10.5	11.0	11.0	10.2	10.5
7	Import dependency of crude (on consumption)	%	80.6%	81.7%	82.4%	83.2%	81.9%	82.3%

3. Indigenous crude oil production (Million Metric Tonne)

Details	2015-16	2016-17 (P)	September (P)			April-September (P)		
			2016 (Actual)	2017 (Target)*	2017	2016-17 (Actual)	2017-18 (Target)*	2017-18
ONGC	21.1	20.9	1.7	1.8	1.7	10.4	11.3	10.6
Oil India Limited (OIL)	3.2	3.3	0.3	0.3	0.3	1.6	1.8	1.7
Private / Joint Ventures (JVs)	11.2	10.4	0.8	0.9	0.8	5.4	5.3	4.9
Total Crude Oil	**35.5**	**34.5**	**2.8**	**3.0**	**2.8**	**17.3**	**18.4**	**17.2**
Condensate	1.4	1.5	0.1		0.1	0.7		0.8
Total (Crude + Condensate) (MMT)	**36.9**	**36.0**	**2.9**	**3.0**	**2.9**	**18.1**	**18.4**	**18.0**
Total (Crude + Condensate) (Million Bbl)	**270.8**	**263.9**	**21.4**	**21.9**	**21.4**	**132.4**	**134.6**	**132.1**

*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	2015-16	2016-17 (P)	September (P)		April-September (P)	
			2016	2017	2016-17	2017-18
Total domestic production (MMTOE)	69.2	67.9	5.5	5.6	33.8	34.4
Overseas production (MMTOE)	10.1	16.2	1.1	1.4	6.1	9.5
Overseas production as % of domestic production	**14.6%**	**23.9%**	**19.9%**	**25.7%**	**17.9%**	**27.6%**

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

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

Details		2015-16	2016-17 (P)	September (P)		April-September (P)	
				2016	2017	2016-17	2017-18
1	High Sulphur crude	166.1	177.6	14.6	15.6	87.6	90.3
2	Low Sulphur crude	66.7	67.8	5.2	4.9	33.9	32.1
Total crude processed		**232.9**	**245.4**	**19.7**	**20.5**	**121.5**	**122.4**
Share of HS crude in total crude oil processing		**71.3%**	**72.4%**	**73.9%**	**76.0%**	**72.1%**	**73.8%**

6. Quantity and value of crude oil imports			
Year	**Quantity (MMT)**	**$ Million**	**Rs. Crore**
2016-17	213.93	70,196	4,70,159
2017-18 (Estimated)	213.50	80,846	5,23,234

Note: April-September 2017 imports are based on actuals and for October 2017 to March 2018, the imports are estimated at $ 55/bbl and Rs. 65/$.

Impact of variation in Crude oil price & Exchange rate on Crude oil imports for October 2017- March 2018 :

If crude prices increase by one $/bbl - Net Import bill increases by Rs. 5,116 crores ($ 0.79 bn)

If exchange rate of $ increases by Rs. 1/$ - Net Import bill increases by Rs. 4,329 crores ($ 0.66 bn)

7. Self-sufficiency in petroleum products (Million Metric Tonnes)								
Details		**2015-16**	**2016-17 (P)**	**September(P)**		**April-September(P)**	
				2016	**2017**	**2016-17**	**2017-18**
1	Indigenous crude oil processing :	34.1	33.5	2.4	2.5	16.7	16.4
2	Products from indigenous crude (93.3% of crude oil processed)	31.8	31.3	2.3	2.3	15.5	15.3
3	Products from fractionators (Including LPG and Gas)	4.0	4.3	0.3	0.4	2.1	2.2
4	Total production from indigenous crude & condensate **(2 + 3)**	35.8	35.6	2.6	2.7	17.6	17.5
5	Total domestic consumption	184.7	194.6	14.8	16.3	97.2	98.7
% Self-sufficiency (4 / 5)		**19.4%**	**18.3%**	**17.6%**	**16.8%**	**18.1%**	**17.7%**

8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)										
Com-pany	Refinery	Installed capacity (1.4.2017) (MMTPA)	2015-16	2016-17 (P)	Crude oil processing (MMT)					
					September (P)			April-September (P)		
					2016 (Actual)	2017 (Target)	2017	2016-17 (Actual)	2017-18 (Target)	2017-18
IOCL	Barauni (1964)	6.0	6.5	6.5	0.5	0.5	0.4	3.3	2.5	2.5
	Koyali (1965)	13.7	13.8	14.0	1.1	1.1	1.1	7.3	6.2	6.3
	Haldia (1975)	7.5	7.8	7.7	0.7	0.7	0.7	4.0	4.0	4.1
	Mathura (1982)	8.0	8.9	9.2	0.7	0.4	0.3	4.6	3.8	4.3
	Panipat (1998)	15.0	15.3	15.6	1.2	1.2	1.3	7.7	7.2	7.5
	Guwahati (1962)	1.0	0.9	0.9	0.07	0.07	0.08	0.4	0.4	0.5
	Digboi (1901)	0.65	0.6	0.5	0.05	0.04	0.06	0.3	0.3	0.3
	Bongaigaon(1979)	2.4	2.4	2.5	0.2	0.1	0.2	1.2	1.1	1.2
	Paradip (2016)	15.0	1.8	8.2	0.4	1.2	1.2	2.8	5.4	6.9
	IOCL TOTAL	**69.2**	**58.0**	**65.2**	**5.0**	**5.3**	**5.4**	**31.7**	**30.8**	**33.6**
CPCL	Manali (1969)	10.5	9.1	9.8	0.9	0.9	0.7	5.3	5.1	5.0
	CBR (1993)	1.0	0.5	0.5	0.04	0.04	0.03	0.3	0.3	0.2
	CPCL-TOTAL	**11.5**	**9.6**	**10.3**	**0.9**	**0.9**	**0.7**	**5.6**	**5.4**	**5.2**
BPCL	Mumbai (1955)	12.0	13.4	13.5	1.2	1.0	1.2	7.1	6.3	6.7
	Kochi (1966)	12.4	10.7	11.8	0.9	1.2	1.2	5.5	6.4	6.5
BORL	Bina (2011)	6.0	6.4	6.4	0.5	0.2	0.6	3.3	2.9	3.6
NRL	Numaligarh (1999)	3.0	2.5	2.7	0.1	0.2	0.2	1.2	1.3	1.4
	BPCL-TOTAL	**33.4**	**33.0**	**34.4**	**2.7**	**2.6**	**3.2**	**17.1**	**16.9**	**18.3**

Com-pany	Refinery	Installed capacity (1.4.2017) (MMTPA)	Crude oil processing (MMT)								
			2015-16	2016-17 (P)	September (P)			April-September (P)		
					2016 (Actual)	2017 (Target)	2017	2016-17 (Actual)	2017-18 (Target)	2017-18
ONGC	Tatipaka (2001)	0.1	0.07	0.09	0.007	0.005	0.007	0.04	0.03	0.04
MRPL	Mangalore (1996)	15.0	15.5	16.0	1.3	1.1	1.1	7.7	7.5	7.5
	ONGC TOTAL	**15.1**	**15.6**	**16.1**	**1.3**	**1.1**	**1.1**	**7.7**	**7.5**	**7.6**
HPCL	Mumbai (1954)	7.5	8.0	8.5	0.6	0.7	0.6	4.1	4.0	4.3
	Visakh (1957)	8.3	9.2	9.3	0.7	0.8	0.8	4.4	4.5	4.9
HMEL	Bathinda (2012)	9.0	10.7	10.5	0.9	0.9	1.0	5.5	3.7	2.9
	HPCL- TOTAL	**24.8**	**27.9**	**28.4**	**2.3**	**2.4**	**2.5**	**14.0**	**12.2**	**12.0**
RIL*	Jamnagar (DTA) (1999)	33.0	32.4	32.8	2.7	2.7	2.7	16.6	16.6	16.3
	Jamnagar (SEZ) (2008)	27.0	37.1	37.4	3.1	3.1	3.2	18.3	18.3	19.0
EOL	Vadinar (2006)	20.0	19.1	20.9	1.8	1.7	1.7	10.5	10.1	10.4
All India		**234.0**	**232.9**	**245.4**	**19.7**	**19.8**	**20.5**	**121.5**	**117.7**	**122.4**

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

9. Major crude oil and product pipeline network

		ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Other	Total
Crude Oil	Length (KM)	1,191	1,193	660	1,017	5,301	937	-	-	**10,299**
(as on 1.10.2017)	Cap (MMTPA)	58.5	8.4	8.7	9.0	48.6	6.0	-	-	**139.2**
Products	Length (KM)	-	654	-	-	7,830	1,936	3,333	2,688	**16,441**
(as on 1.10.2017)	Cap (MMTPA)	-	1.7	-	-	45.1	14.9	34.6	9.3	**105.6**

Other includes GAIL and Petronet India.

10. Gross Refining Margins (GRM) of refineries ($/bbl)					
Company	**Refinery**	**2014-15**	**2015-16**	**2016-17**	**Apr-Jun'2017**
IOCL	Barauni	-1.20	2.93	6.52	1.88
	Koyali	4.79	6.80	7.55	6.25
	Haldia	-1.51	3.96	6.80	1.79
	Mathura	-2.19	3.30	7.01	3.81
	Panipat	-1.97	4.15	7.95	2.75
	Guwahati	8.68	15.88	22.14	19.61
	Digboi	13.73	16.17	24.49	25.82
	Bongaigaon	-0.26	11.09	20.15	12.80
	Paradip	-	-0.65	4.22	4.00
	Average	**0.27**	**5.06**	**7.77**	**4.32**
BPCL	Kochi	3.17	6.87	5.16	3.74
	Mumbai	3.97	6.37	5.36	6.08
	Average	**3.62**	**6.59**	**5.03**	**4.88**
HPCL	Mumbai	4.88	8.09	6.95	7.98
	Visakhapatnam	1.12	5.46	5.51	3.94
	Average	**2.84**	**6.68**	**6.20**	**5.86**
CPCL	Chennai	1.97	5.27	6.05	3.81
MRPL	Mangalore	-0.64	5.20	7.75	4.74
NRL	Numaligarh	16.67	23.68	28.56	29.62
BORL	Bina	6.10	11.70	11.80	8.90
RIL	Jamnagar	8.60	10.80	11.00	11.90
Essar	Vadinar	8.37	10.81	9.14	*

*Being unlisted company, quarterty results not declared.

11. GRM of North-East refineries excluding excise duty benefit ($/bbl)					
Company	**Refinery**	**2014-15**	**2015-16**	**2016-17**	**Apr-Jun'2017**
IOCL	Guwahati	0.96	1.26	1.12	1.69
	Digboi	5.42	4.16	7.73	7.23
	Bongaigaon	-6.51	0.08	6.03	0.11
NRL	Numaligarh	9.46	8.06	8.50	7.51

12. Production and consumption of petroleum products (Million Metric Tonnes)										
Products	**April 2016-March 2017 (P)**		**September 2016 (P)**		**September 2017 (P)**		**April-September 2016 (P)**		**April-September 2017 (P)**	
	Prod^n	**Consump^n**	**Prod^n**	**Consump^n**	**Prod^n**	**Consump^n**	**Prod^n**	**Consump^n**	**Prod^n**	**Consump^n**
LPG	11.3	21.6	0.8	1.9	1.0	1.9	5.3	10.3	5.8	11.3
MS	36.5	23.8	2.8	1.8	3.1	2.1	17.9	11.9	18.5	13.0
NAPHTHA	19.8	13.2	1.8	1.1	1.7	1.2	9.5	6.8	9.8	5.9
ATF	13.8	7.0	1.1	0.6	1.2	0.6	6.7	3.4	6.9	3.7
SKO	6.0	5.4	0.5	0.5	0.4	0.3	3.4	3.1	2.2	2.0
HSD	102.1	76.0	7.9	5.2	8.9	6.1	50.2	37.3	52.3	39.6
LDO	0.6	0.4	0.04	0.04	0.04	0.04	0.2	0.2	0.2	0.2
LUBES	1.0	3.5	0.08	0.2	0.07	0.3	0.5	1.7	0.5	1.7
FO/LSHS	12.0	7.2	0.9	0.6	0.9	0.6	6.1	3.7	5.4	3.4
BITUMEN	5.2	5.9	0.3	0.3	0.2	0.3	2.4	2.6	2.3	2.4
PET COKE	12.9	24.0	1.1	2.0	1.1	2.1	6.2	13.0	6.8	11.7
OTHERS	22.3	6.6	2.0	0.6	2.3	0.7	11.6	3.3	12.0	3.7
ALL INDIA	**243.5**	**194.6**	**19.2**	**14.8**	**20.8**	**16.3**	**120.1**	**97.2**	**122.7**	**98.7**
Growth (%)	**5.0%**	**5.4%**	**6.9%**	**-0.8%**	**8.1%**	**10.0%**	**7.3%**	**9.9%**	**2.1%**	**1.5%**
Note: Prod^n - Production; Consump^n - Consumption										

13. LPG consumption (Thousand Metric Tonne)

LPG category	2015-16	2016-17 (P)	September (P) 2016	September (P) 2017	September (P) Gr (%)	April-September (P) 2016-17	April-September (P) 2017-18	April-September (P) Gr (%)
1. PSU Sales :								
LPG-Packed Domestic	17,181.7	18,871.4	1,633.6	1,692.5	3.6	8,942.9	9,794.5	9.5
LPG-Packed Non-Domestic	1,464.4	1,775.9	158.8	173.3	9.1	830.7	975.7	17.5
LPG-Bulk	317.2	364.3	31.0	30.9	-0.3	177.8	188.3	5.9
Auto LPG	170.9	167.3	12.4	15.6	25.5	82.0	93.2	13.6
Sub-Total (PSU Sales)	**19134.2**	**21178.9**	**1835.8**	**1912.3**	**4.2**	**10033.3**	**11051.7**	**10.1**
2. Direct Private Imports	489.0	358.4	32.6	32.6	-0.2	186.7	217.5	16.5
Total (1+2)	**19,623.2**	**21,537.3**	**1,868.4**	**1,944.9**	**4.1**	**10,220.0**	**11,269.2**	**10.3**

14. Kerosene allocation vs upliftment (Kilo Litres)

Product	2014-15		2015-16		2016-17 (P)		H1, 2016-17 (P)		H1, 2017-18 (P)	
	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment
Kerosene	89,75,538	88,78,352	86,85,384	85,36,752	69,33,030	66,78,447	39,75,216	38,30,874	26,22,056	24,12,360

15. Industry marketing infrastructure (as on 01.10.2017) (Provisional)

Particulars	IOCL	BPCL	HPCL	RIL	ESSAR	SHELL	Others	Total
POL Terminal/ Depots **(Nos.)**	129	83	81	18[$]	2		6[*]	**319**
Aviation Fuel Stations **(Nos.)**	105	50	38	28			1[@]	**222**
Retail Outlets (total) **(Nos.)**	26,429	14,137	14,628	1,400	3,810	89	4[^]	**60,497**
Out of which, Rural ROs	7,201	2,542	3,142	127	1,295	11		**14,318**
SKO/LDO agencies **(Nos.)**	3,899	1,001	1,638					**6,538**
LPG Distributors (total) **(Nos.) (PSUs only)**	9,808	4,783	4,632					**19,223**
Out of which, Durgam Kshetriya Vitrak	1,601	864	878					**3,343**
LPG Bottling plants **(Nos.) (PSUs only)**	91	50	47				1[#]	**189**
LPG Bottling capacity **(TMTPA) (PSUs only)**	9,025	3,693	3,762				24[~]	**16,504**
LPG registered domestic consumers **(Nos. crore) (PSUs only)**	12.12	6.40	6.59					**25.11**
LPG active domestic consumers **(Nos. crore) (PSUs only)**	10.03	5.55	5.82					**21.40**

[$]RIL= 5 Terminals and 13 Mini Depots; *4 MRPL & 2 NRL; @ShellMRPL -1, ^MRPL-4 #NRL-1; ~NRL-24

16. Natural gas at a glance

(MMSCM)

Details	2015-16	2016-17 (P)	September (P) 2016 (Actual)	September (P) 2017 (Target)	September (P) 2017	April-September (P) 2016-17 (Actual)	April-September (P) 2017-18 (Target)	April-September (P) 2017-18
(a) Gross production	32,249	31,897	2,600	2,884	2,723	15,724	17,353	16,413
- ONGC	21,177	22,088	1,842	1,976	1,938	10,684	11,860	11,675
- Oil India Limited (OIL)	2,838	2,937	243	256	246	1,474	1,530	1,481
- Private / Joint Ventures (JVs)	8,235	6,872	515	652	540	3,566	3,964	3,256
(b) Net production (excluding flare gas and loss)	31,129	30,848	2,503		2,653	15,190		15,956
(c) LNG import	21,388	24,686	2,305		2,414	12,652		12,446
(d) Total consumption including internal consumption (Net production+Import) (b+c)	52,517	55,534	4,808		5,067	27,842		28,402
(e) Total consumption (in BCM)	52.5	55.5	4.8		5.1	27.8		28.4
(f) Import dependency based on consumption **(%)**, {c/d*100}	40.7	44.5	47.9		47.7	45.4		43.8

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		17,200	Sq. KM
Blocks awarded		33	Nos.
Production of CBM gas	September, 2017 (P)	63.58	MMSCM
Production of CBM gas-Cumulative	April-September 2017 (P)	333.42	MMSCM

18. Gas pipelines under execution / construction as on 01.09.2017

Network/ Region	Entity	Length sanctioned (KM)	Design cap. (MMSCMD)	Pipeline size
Kochi-Kottanad-Bengaluru-Mangalore	GAIL (India) Ltd	1,063	16	24"/18"/12"
Dabhol - Bengaluru (DBPL)	GAIL (India) Ltd	315	16	36"/30"/24"/18"
Surat - Paradip	GAIL (India) Ltd	2,112	74.81	36"/24"/18"
Jagdishpur- Haldia-Bokaro-Dhamra	GAIL (India) Ltd	2,539	16	30"/24"/18"/12"/8"/4"
Mallavaram – Bhopal - Bhilwara	GSPC India Transco Ltd	2,042	78.25	42"/36"/30"/24"/18"/12"
Mehsana - Bathinda	GSPC India Gasnet Ltd	2,052	77.11	36"/24"/18"/12"
Bathinda - Jammu - Srinagar	GSPC India Gasnet Ltd	725	42.42	24"/18"/16"/12"/8"/6"
Kakinada - Vizag - Srikakulam	AP Gas Distribution Co.	391	90	24"/18"/8"/4"
Ennore - Nellore	Gas Transmission India Pvt. Ltd	250	36	24"/18"
Ennore-Thiruvallur-Bengaluru-Puducherry-Nagapattinam-Madurai-Tuticorin	Indian Oil Corporation Limited	1,385	84.67	28"/24"/16"/12" /10"
Jaigarh-Mangalore	H-Energy Pvt..Ltd.	635	17	24"
Total		**13,509**		

19. Existing LNG terminals

Location	Promoters	Capacity (MMTPA) as on 01.09.2017	Capacity utilisation in % (April-August 2017)
Dahej	Petronet LNG Ltd (PLL)	15 MMTPA	99.93
Hazira	Hazira LNG Pvt Ltd (HLPL)	5 MMTPA	52.95
Dabhol	RGPPL (GAIL - NTPC JV)	1.692 MMTPA in phase-1 without break water to be increased to 5 MMTPA	10.80
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	13.25
Total Capacity		**26.692 MMTPA**	

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

State	Entity operating	Geographical region	CNG stations	PNG connections			No. of CNG vehicles
				Domestic	Industrial	Commercial	
			As on 01.09.2017	As on 01.09.2017	As on 01.09.2017	As on 01.09.2017	As on 01.09.2017
Haryana	Haryana City Gas, Adani Gas Limited, GAIL Gas Ltd.	Sonepat, Faridabad, Gurgaon	37	66,856	268	198	1,25,227
Andhra Pradesh	Bhagyanagar Gas Ltd	Kakinada, Vijayawada	12	5,122	1	41	23,980
Telangana	Bhagyanagar Gas Ltd	Hyderabad	27	3,937	5	6	16,208
Assam	Assam Gas Co. Ltd	Tinsukia, Dibrugarh, Sibsagar, Jorhat, Golaghat	0	30,661	404	1,029	0
Gujarat	Sabarmati Gas Ltd, Gujarat Gas Ltd, Adani Energy Ltd, Vadodara Gas Ltd, Hindustan Petroleum Corporation Ltd, Charotar Gas Sahakari Mandal Ltd	Gandhinagar, Mehsana, Sabarkantha, Nadiad, Halol, Hazira, Rajkot, Khambhat, Karjan-Palej, Valsad, Navsari, Surendernagar, Vadodara, Ahmedabad, Surat, Ankleshwar, Bharuch & surrounding areas, Bhavnagar, Jamnagar, Vapi, Anand	403	17,15,656	4,401	17,455	8,82,575
Madhya Pradesh	Aavantika Gas Ltd, GAIL Gas Ltd	Dewas, Vijaipur, Indore including Ujjain, Gwalior, Pithampura	26	18,898	108	82	26,290
Rajasthan	GAIL Gas Ltd	Kota	3	185	15	2	6,304

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

State	Entity operating	Geographical region	CNG stations	PNG connections			No. of CNG vehicles
				Domestic	Industrial	Commercial	
			As on 01.09.2017	As on 01.09.2017	As on 01.09.2017	As on 01.09.2017	As on 01.09.2017
Maharashtra	Mahanagar Gas Ltd, Maharashtra Natural Gas Ltd, GAIL Gas Ltd , Gujarat Gas Limited	Mumbai, Greater Mumbai, Thane & adjoining contiguous areas including Mira Bhayender, Navi Mumbai, Thane City, Ambernath, Bhiwandi, Kalyan, Dombivily, Badlapur, Ulhasnagar, Panvel, Kharghar & Taloja, Pune City including Pimpri-Chinchwad and adjoining contiguous areas of Chakan, Hinjewadi, Talegaon GA & Thane Rural.	252	10,71,469	202	3,525	7,31,711
Tripura	Tripura Natural Gas Co. Ltd	Agartala	6	30,832	50	366	9,917
West Bengal	Great Eastern Energy Corporation Ltd	Kolkata	7	0	0	0	3,274
Uttar Pradesh	GAIL Gas Ltd, Sanwariya Gas, Green Gas, Central U.P. Gas, Siti Energy Ltd	Agra, Allahabad, Bareilly, Divyapur, Firozabad, Kanpur, Khurja, Lucknow, Mathura, Meerut & Moradabad	62	63,766	506	310	1,22,026

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

State	Entity operating	Geographical region	CNG stations	PNG connections			No. of CNG vehicles
				Domestic	Industrial	Commercial	
			As on 01.09.2017	As on 01.09.2017	As on 01.09.2017	As on 01.09.2017	As on 01.09.2017
New Delhi	Indraprastha Gas Ltd	NCT of Delhi (Including Noida & Ghaziabad)	423	7,91,988	1,056	2,015	9,85,317
Karnataka	Gail Gas Ltd.	Bengaluru	3	3,536	12	25	232
Chandigarh	IndianOil- Adani Gas	Chandigarh	2	4,346	0	0	1,500
Kerala	IndianOil- Adani Gas	Ernakulam	0	691	0	2	0
Dadra & Nagar Haveli	Gujarat Gas Ltd.	Dadra & Nagar Haveli	0	153	0	0	0
Total			**1,263**	**38,08,096**	**7,028**	**25,056**	**29,34,561**

21. Major natural gas pipeline network

Nature of pipeline		GAIL	Reliance	GSPL	ARN	IOCL	ONGC	Total
Natural gas (as on 01.09.2017)	Length (KM)	11,077	1,784	1,612	817	140	24	**16,454**
	Cap (MMSCMD)	242*	83.5	43.0	3.2	9.5	6.0	**387.3**

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

22. Domestic natural gas price and gas price ceiling

Period	Domestic Natural Gas price in US$/MMBTU (GCV basis)	Gas price ceiling in US$/MMBTU (GCV basis)
November 2014 - March 2015	5.05	-
April 2015 - September 2015	4.66	-
October 2015 - March 2016	3.82	-
April 2016 - September 2016	3.06	6.61
October 2016 - March 2017	2.50	5.30
April 2017 - September 2017	2.48	5.56
October 2017 - March 2018	2.89	6.30

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

International prices/ Exchange rates ($/bbl)

Particulars	2015-16	2016-17	Apr-Sep' 17
Crude (Indian Basket)	46.17	47.16	50.35
Petrol	61.72	57.71	62.48
Diesel	55.02	56.12	61.85
Kerosene	55.71	56.46	60.56
LPG ($/MT)	394.71	377.52	421.41
FO ($/MT)	235.13	255.92	298.90
Naphtha ($/MT)	420.14	412.09	435.52
Exchange (Rs./$)	65.46	67.21	64.37

Customs & excise duty rates (w.e.f. 04.10.2017)

Product	Basic customs duty	Excise duty	GST rates
Petrol	2.50%	Rs 19.48/Ltr	**
Diesel	2.50%	Rs 15.33/Ltr	**
PDS SKO	Nil	Nil	5.00%
Non-PDS SKO	5.00%	Nil	18.00%
Sub. Dom LPG	Nil	Nil	5.00%
Non Domestic LPG	5.00%	Nil	18.00%
Furnace Oil (Non-Fert)	5.00%	Nil	18.00%
Naphtha (Non-Fert)	5.00%	Nil	18.00%
ATF	Nil	14% *	**
Crude Oil	Nil+Rs.50/ -MT as NCCD	Nil+ Cess@ 20%+Rs.50 /-MT NCCD	**

*8% for scheduled commuter airlines from regional connectivity scheme airports;
** Crude oil, Petrol, Diesel, ATF and Natural Gas are outside GST regime.

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

Particulars	Petrol*	Diesel*
Price before taxes and dealer commission	30.18	30.10
Central taxes	20.04	15.91
State taxes	14.52	8.41
Dealer commission	3.55	2.49
Retail selling price (RSP)	**68.29**	**56.91**

Particulars	**PDS SKO***	**Sub. Dom LPG***
Price before taxes and dealer commission	19.66	568.95
GST(incl GST on dealer commission)	1.07	30.90
Dealer commission	1.80	49.12
Retail Selling Price	**22.53**	649.00
Less cash compensation (CC) under DBTL		142.66
CC by OMCs towards uncompensated cost		15.21
Effective cost to consumer after subsidy		**491.13**

* SKO at Mumbai and Subsidized Dom LPG at Delhi are as on 1st October 2017 ; Petrol and Diesel at Delhi as on 16th October 2017. RSP of Subsidized Dom LPG is rounded.

Change in Ex. Rate/ Crude price : Impact on under-recoveries/subsidy on PDS SKO and Sub.Dom LPG

(Rs. Crores)	Rs.1/$ Ex. Rate	$1/bbl Crude
Impact on under-recovery/subsidy	1,080	1,270

Note: The above calculation for SKO & LPG are based on RTP for October 2017 (Crude Price $53.94/bbl & Ex. Rate Rs. 64.29/USD for the pricing cycle)

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

Under-recoveries/subsidy & burden sharing

Product	2015-16	2016-17	Apr-Jun'2017
Per unit under-recovery/subsidy (Rs./litre/Cylinder)			
Diesel	Deregulated	Deregulated	Deregulated
PDS SKO	13.47	11.39	10.18
Sub. Dom LPG	150.82*	108.78*	181.85*
Total under-recoveries including DBTL Subsidy (Rs. Crores)			
Diesel	Deregulated	Deregulated	Deregulated
PDS SKO	11,496	7,595	1,280
DBTL Sub. Dom LPG#	16,074	12,133	5,039
Total	**27,570**	**19,728**	**6,319**

Burden sharing (Rs. Crores)

Particulars	2015-16	2016-17	Apr-Jun'2017
Government	26,301	19,728	6,319
Upstream	1,251	0	0
OMCs	18	0	0

Fiscal subsidy under Govt. schemes (Rs. Crores)

PDS SKO	Scheme was extended till 31.3.2015
Sub. Dom LPG	

*Average of DBTL and under-recovery towards non-DBTL; #Includes subsidy under DBTL (2015-16: Rs.16,056 Cr).

Sales & profit of petroleum sector (Rs. Crores)

April 2017-June 2017	Turnover	PAT
Upstream Companies (PSU)	32,540	5,361
Downstream Companies (PSU)	250,679	6,218
Standalone Refineries (PSU)	23,030	639
Private-RIL	70,434	8,196

Borrowings of OMCs (Rs. Crores)

Company	As on Mar`16	As on Mar`17	As on June`17
IOCL	52,469	54,820	34,922
BPCL	15,976	23,159	17,917
HPCL	21,337	21,250	12,208

Petroleum sector contribution to Central/State Govt.

Particulars	2015-16	2016-17	Apr-Jun'2017
Central Government	2,58,443	3,34,534	63,458
% to total revenue receipt	21%	24%	-
State Governments	1,60,209	1,89,770	51,050
% to total revenue receipt	8%	8%	-
Total (Rs. Crores)	**4,18,652**	**5,24,304**	**1,14,508**

Subsidy as a % of GDP (at current prices)

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

Note - GDP figure for 2014-15 and 2015-16 at RE and 2016-17 at PE

24. Capital expenditure of PSU oil companies

(Rs in crores)

Company	2013-14	2014-15	2015-16 (P)	2016-17(P)	2017-18	
					Target*	Apr-Sep (P)
ONGC Ltd	32,470	29,997	29,502	28,010	29,968	19,586
ONGC Videsh Ltd (OVL)	35,357	7,172	6,783	18,360	7,088	2,742
Oil India Ltd (OIL)	9,351	3,774	3,550	10,514	9,252	1,608
GAIL (India) Ltd **	4,070	1,632	1,880	2,180	2,053	1,209
Indian Oil Corp. Ltd. (IOCL)	16,661	14,314	14,368	21,918	20,162	7,548
Hindustan Petroleum Corp. Ltd (HPCL)	2,642	2,670	5,459	5,861	7,110	2,257
Bharat Petroleum Corp. Ltd (BPCL)	4,374	6,875	10,926	16,810	7,101	2,787
Mangalore Refinery & Petrochem Ltd (MRPL)	1,449	2,747	1,550	614	1,138	252
Chennai Petroleum Corp. Ltd (CPCL)	229	466	1,318	1,293	845	362
Numaligarh Refinery Ltd (NRL)	372	103	237	500	1,261	160
Balmer Lawrie Co. Ltd (BL)	120	80	38	73	50	61
TOTAL	**1,07,095**	**69,830**	**75,611**	**106,133**	**86,028**	**38,572**

* Targets are for full financial year 2017-18 (both Plan and Non-Plan).

** Excludes Rs 1200 crores Gross Budgetary Support for Phulpur-Dhamra-Haldia pipeline project.

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	8.50
Diesel (HSD)	1	1.210	7.45
Kerosene (SKO)	1	1.285	7.90
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 BCM/year of Gas	2.74 MMSCMD
1 TCF of Gas Reserve	3.88 MMSCMD
1 MMTPA of LNG	3.60 MMSCMD
1 MT of LNG	1,314 SCM

1 MMBTU	25.2 SCM @10000 kcal/SCM
GCV (Gross Calorific Value	10,000 kcal/SCM
NCV (Net Calorific Value)	90% of GCV
Gas required for 1 MW power generation	4,541 SCM/day
Power generation from 1 MMSCMD of gas	220 MW