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Snapshot of India's Oil & Gas data

November, 2016

Analysis • Knowledge • Information

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

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Highlights for the month

•	Indigenous crude oil production during November, 2016 was lower by 5.4% (164 TMT) than that of November, 2015. On overall basis, indigenous crude oil production was less by 3.5% (877 TMT) during April-November, 2016 in comparison with the corresponding period of last year.
•	Total crude oil processed by the refineries during November, 2016 was 19,923 TMT against 19,527 TMT in November, 2015 and a target of 20,596 TMT for the month of November, 2016. On cumulative basis, crude oil processed during April-November, 2016 by the refineries was 162,455 TMT against 150,410 TMT during April-November, 2015 and a target of 159,220 TMT for the period April-November, 2016.
•	Production of petroleum products during November, 2016 saw a marginal degrowth of 0.7% (134 TMT) over the corresponding month of the previous year. However, on a cumulative basis, growth of 7.0% (10,478 TMT) was recorded during April-November, 2016.
•	Export of POL products decreased marginally during November, 2016 by 0.8% (41 TMT) as compared to November, 2015. Further, imports increased by 34.7% (740 TMT) over the corresponding period of 2015. LPG, Lubes and Pet-coke imports contributed 81.1 % share of the total POL imports during November, 2016.

•	Petroleum product consumption registered a growth of 12.1% during November, 2016 as compared to 6.8% growth during November, 2015. Except for SKO and Lubes & Greases, all other products registered positive growth during November, 2016. During the period April-November 2016, petroleum product consumption registered a growth of 9.4% as compared to the same period last year.
•	Gross production of natural gas for the month of November, 2016 was 2,670 MMSCM which was lower by 1.7% compared with the corresponding month of the previous year (2,716 MMSCM). The cumulative gross production of natural gas 21,149 MMSCM for the current year till November, 2016 was lower by 3.7% compared with the corresponding period of the previous year (21,960 MMSCM).
•	LNG import for the month of November, 2016 was 2,019 MMSCM which was 15.5% higher than the corresponding month of the previous year (1,749 MMSCM). The cumulative import 16,852 MMSCM for the current year till November, 2016 was higher by 23.2% compared with the corresponding period of the previous year (13,677 MMSCM).
•	The prices of Brent crude averaged $45.13/bbl during November, 2016 as against $49.66/bbl during October, 2016. The Indian basket crude averaged $44.46/bbl during November, 2016 as against $49.25/bbl during the previous month.
•	The import bill of crude oil is estimated to increase by 7% from $ 64 billion in 2015-16 to $69 billion in 2016-17 considering Indian basket crude oil price of $ 50/bbl and $/Rs 67 for the balance part of the financial year.

1. Selected indicators of the Indian economy

	Economic indicators	Unit/Base	2012-13	2013-14	2014-15	2015-16 (P)
1	Population (as on 1st March, 2011)	Billion	1.2	-	-	-
2	GDP at Factor Cost (Constant prices)	Growth %	5.6 2nd RE (NS)	6.6 2nd RE (NS)	7.2 1st RE (NS)	7.6 (PE)
3	Agricultural Production (Food grains)	MMT	257.1	265.0	252.0	252.2 4th AE
		Growth %	-0.8	3.1	-4.9	0.1
4	Gross Fiscal Deficit	%	-4.9	-4.5	-4.1	-3.9 (RE)

	Economic indicators	Unit/ Base	2014-15	2015-16 (P)	November		April-November	
					2015	2016 (P)	2015	2016 (P)
5	Index of Industrial Production@	Growth %	2.8	2.4	9.9	-1.9	4.8	-0.3
6	Imports	$ Billion	448.0	381.0	29.9	33.0	263.3	241.1
7	Exports	$ Billion	310.3	262.3	19.6	20.0	174.7	174.9
8	Trade Balance	$ Billion	-137.7	-118.7	-10.3	-13.0	-88.6	-66.2
9	Foreign Exchange Reserves	$ Billion	341.4	355.6	351.6	365.3	-	-

@IIP is for the month of October 2016; NS-New Series; AE-Advanced Estimates; RE-Revised Estimates; PE- Provisional Estimates;

*As on November 27, 2015; ^As on November 25, 2016.

2. Crude oil, LNG and petroleum products at a glance									
Details		Unit/ Base	2014-15	2015-16	November		April-November		
					2015	2016 (P)	2015	2016 (P)
1	Crude oil production in India	MMT	37.5	36.9	3.0	2.9	24.9	24.0
2	Consumption of petroleum products	MMT	165.5	184.7	14.8	16.6	118.8	130.0
3	Production of petroleum products	MMT	220.7	231.2	19.8	19.7	149.9	160.4
4	Imports & exports:							
Crude oil imports		MMT	189.4	202.9	16.6	18.8	131.6	143.8
		$ Billion	112.7	64.0	4.8	6.0	48.3	44.2
Petroleum products (POL) imports		MMT	21.3	29.5	2.1	2.9	19.0	24.6
		$ Billion	12.1	10.0	0.7	0.8	7.1	6.6
Gross petroleum imports (Crude + POL)		MMT	210.7	232.3	18.8	21.6	150.6	168.5
		$ Billion	124.9	73.9	5.5	6.8	55.5	50.8
Petroleum products exports		MMT	63.9	60.5	5.3	5.2	38.9	43.7
		$ Billion	47.3	27.1	2.3	2.3	19.5	18.6
LNG imports		$ Billion	9.2	6.7	0.6	0.5	5.0	3.8
5	Petroleum imports as % of India's gross imports (in value)	%	27.9	19.4	18.4	20.6	21.1	21.1
6	Petroleum exports as % of India's gross exports (in value)	%	15.2	10.3	11.7	11.6	11.2	10.6
7	Import dependency of crude (On consumption)	%	78.5%	80.9%	79.6%	83.1%	80.0%	82.4%

3. Indigenous crude oil production (Million Metric Tonne)

Details	2014-15	2015-16	November			April-November		
			2015	2016 (Target)*	2016 (P)	2015	2016 (Target)*	2016 (P)
ONGC	18.6	18.5	1.5	1.9	1.5	12.4	14.9	12.2
Oil India Limited (OIL)	3.4	3.2	0.3	0.3	0.3	2.2	2.2	2.1
Private / Joint Ventures (JVs)	11.7	11.3	0.9	0.9	0.8	7.7	7.3	7.1
Total Crude Oil	**33.8**	**33.1**	**2.7**	**3.0**	**2.6**	**22.3**	**24.4**	**21.4**
Condensate	3.7	3.8	0.3		0.3	2.6		2.5
Total (Crude + Condensate) (MMT)	**37.5**	**36.9**	**3.0**	**3.0**	**2.9**	**24.9**	**24.4**	**24.0**
Total (Crude + Condensate) (Million Bbl)	**274.7**	**270.8**	**22.3**	**22.3**	**21.1**	**182.3**	**179.0**	**175.9**

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

4. Domestic oil & gas production vis-à-vis overseas production

Details	2014-15	2015-16 (P)	November		April-November	
			2015	2016 (P)	2015	2016 (P)
Total domestic production (MMTOE)	71.1	69.2	5.8	5.5	46.8	45.1
Overseas production (MMTOE)	9.6	9.7	0.8	1.2	6.4	8.2
Overseas production as % of domestic production	**13.5%**	**14.0%**	**13.5%**	**22.0%**	**13.7%**	**18.3%**

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

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

	Details	2014-15	2015-16 (P)	November		April-November	
				2015	2016 (P)	2015	2016 (P)
1	High Sulphur crude	161.4	166.1	13.8	14.5	107.2	117.8
2	Low Sulphur crude	61.9	66.7	5.7	5.5	43.3	44.7
Total Crude		**223.3**	**232.9**	**19.5**	**19.9**	**150.4**	**162.5**
Share of HS crude in total crude oil processing		**72.3%**	**71.3%**	**70.8%**	**72.6%**	**71.2%**	**72.5%**

6. Quantity and value of crude oil imports			
Year	**Quantity (MMT)**	**$ Million**	**Rs. Crore**
2015-16 (Actuals)	202.85	63,972	4,16,579
2016-17 (Estimated)	210.10	68,686	4,60,161

Note:: April-November 2016 imports are based on actuals and for December 2016-March 2017, the imports are estimated at $50/bbl and Rs.67/$.

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

If crude prices increase by one $/bbl - Net Import bill increases by Rs.3,275 crores ($ 0.49 bn)

If exchange rate of $ increases by Rs. 1/$ - Net Import bill increases by Rs. 2,444 crores ($ 0.36 bn)

7. Self-sufficiency in petroleum products (Million Metric Tonnes)				November		April-November	
Details		**2014-15**	**2015-16 (P)**	**2015**	**2016 (P)**	**2015**	**2016 (P)**
1	Indigenous crude oil processing :	34.2	34.1	2.9	2.7	23.0	22.1
a)	Products from indigenous crude (93.3% of crude oil processed)	32.0	31.8	2.7	2.5	21.4	20.6
b)	Products from fractionators (Including LPG and Gas)	3.7	3.4	0.3	0.3	2.3	2.3
2	Total production from indigenous crude & condensate **(a + b)**	35.6	35.2	3.0	2.8	23.7	22.9
3	Total domestic consumption	165.5	184.7	14.8	16.6	118.8	130.0
% Self-sufficiency (2 / 3)		**21.5%**	**19.1%**	**20.4%**	**16.9%**	**20.0%**	**17.6%**

8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)										
Com-pany	Refinery	Installed capacity (1.4.2016)	2014-15	2015-16 (P)	Crude oil processing					
					November			April-November		
					2015 (Actual)	2016 (Target)	2016 (P)	2015 (Actual)	2016 (Target)	2016 (P)
IOCL	Barauni (1964)	6.0	5.9	6.5	0.6	0.5	0.5	4.3	4.1	4.3
	Koyali (1965)	13.7	13.3	13.8	1.2	1.1	1.2	9.0	9.2	9.6
	Haldia (1975)	7.5	7.7	7.8	0.7	0.5	0.5	5.0	5.2	5.3
	Mathura (1982)	8.0	8.5	8.9	0.7	0.7	0.7	5.8	5.9	6.1
	Panipat (1998)	15.0	14.2	15.3	1.3	1.2	1.3	10.0	10.0	10.3
	Guwahati (1962)	1.0	1.0	0.9	0.1	0.1	0.1	0.7	0.7	0.6
	Digboi (1901)	0.7	0.6	0.6	0.04	0.1	0.0	0.4	0.4	0.3
	Bongaigaon(1979)	2.4	2.4	2.4	0.2	0.2	0.2	1.6	1.6	1.7
	Paradip (2016)	15.0	-	1.8	0.0	1.1	0.6	0.0	5.7	4.2
	IOCL TOTAL	**69.2**	**53.6**	**58.0**	**4.8**	**5.5**	**5.1**	**36.8**	**42.9**	**42.4**
CPCL	Manali (1969)	10.5	10.2	9.1	0.7	0.9	0.8	5.9	7.0	7.1
	CBR (1993)	1.0	0.5	0.5	0.0	0.0	0.04	0.4	0.4	0.4
	CPCL-TOTAL	**11.5**	**10.8**	**9.6**	**0.7**	**0.9**	**0.9**	**6.3**	**7.4**	**7.4**
BPCL	Mumbai (1955)	12.0	12.8	13.4	1.1	1.2	1.2	8.8	9.4	9.5
	Kochi (1966)	9.5	10.4	10.7	0.9	1.0	1.0	7.1	7.3	7.5
BORL	Bina (2011)	6.0	6.2	6.4	0.5	0.5	0.2	4.2	3.9	4.1
NRL	Numaligarh (1999)	3.0	2.8	2.5	0.2	0.3	0.3	1.6	1.8	1.7
	BPCL-TOTAL	**30.5**	**32.2**	**33.0**	**2.7**	**3.0**	**2.7**	**21.6**	**22.4**	**22.8**

Com-pany	Refinery	Installed capacity (1.4.2016)	2014-15	2015-16 (P)	Crude oil processing					
					November			April-November		
					2015 (Actual)	2016 (Target)	2016 (P)	2015 (Actual)	2016 (Target)	2016 (P)
ONGC	Tatipaka (2001)	0.1	0.1	0.1	0.007	0.004	0.01	0.04	0.03	0.06
MRPL	Mangalore (1996)	15.0	14.6	15.5	1.3	1.4	1.4	9.6	9.8	10.5
	ONGC TOTAL	**15.1**	**14.7**	**15.6**	**1.3**	**1.4**	**1.4**	**9.6**	**9.8**	**10.5**
HPCL	Mumbai (1954)	6.5	7.4	8.0	0.7	0.7	0.7	5.1	5.4	5.6
	Visakh (1957)	8.3	8.8	9.2	0.8	0.8	0.8	5.9	5.8	6.0
HMEL	Bathinda (2012)	9.0	7.3	10.7	0.9	0.8	0.8	7.3	6.3	7.1
	HPCL- TOTAL	**23.8**	**23.5**	**27.9**	**2.4**	**2.2**	**2.3**	**18.3**	**17.5**	**18.6**
RIL*	Jamnagar (DTA) (1999)	33.0	30.9	32.4	2.7	2.7	2.7	21.4	21.4	22.0
	Jamnagar (SEZ) (2008)	27.0	37.2	37.1	3.1	3.1	3.2	24.3	24.3	24.7
EOL	Vadinar (2006)	20.0	20.5	19.1	1.7	1.7	1.7	12.1	13.6	14.0
	All India	**230.1**	**223.3**	**232.9**	**19.5**	**20.6**	**19.9**	**150.4**	**159.2**	**162.5**

* RIL target for 2016-17 is previous year crude processing. Note: Some sub-totals/ totals may not add up due to rounding off at individual levels.

9. Major crude oil and product pipeline network

		ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Other	Total
Crude Oil	Length (KM)	1,180	1,193	670	1,017	4,867	937		-	**9,864**
(as on 1.4.2016)	Cap (MMTPA)	57.1	8.4	8.7	9.0	40.4	6.0	-	-	**129.6**
Products	Length (KM)	-	654	-	-	6,739	1,935	2,957	2,687	**14,972**
(as on 1.4.2016)	Cap (MMTPA)	-	1.7	-	-	40.2	14.9	31.6	9.3	**97.7**

Other includes GAIL and Petronet India.

10. Gross Refining Margins (GRM) of refineries ($/bbl)

Company	Refinery	2013-14	2014-15	2015-16	Apr-Sep`16
IOCL	Barauni	6.68	-1.20	2.93	6.17
	Koyali	4.52	4.79	6.80	7.22
	Haldia	2.84	-1.51	3.96	6.94
	Mathura	2.10	-2.19	3.30	6.11
	Panipat	3.62	-1.97	4.15	7.33
	Guwahati	6.38	8.68	15.88	22.44
	Digboi	15.41	13.73	16.17	22.74
	Bongaigaon	6.71	-0.26	11.09	18.12
	Paradip	-	-	-0.65	1.43
	Average	**4.24**	**0.27**	**5.06**	**7.19**
BPCL	Kochi	4.80	3.17	6.87	4.50
	Mumbai	3.95	3.97	6.37	4.61
	Average	**4.33**	**3.62**	**6.59**	**4.56**
HPCL	Mumbai	5.38	4.88	8.09	5.89
	Visakhapatnam	1.50	1.12	5.46	4.40
	Average	**3.43**	**2.84**	**6.68**	**5.12**
CPCL	Chennai	4.08	1.97	5.27	5.59
MRPL	Mangalore	2.67	-0.64	5.20	7.26
NRL	Numaligarh	12.09	16.67	23.68	28.24
BORL	Bina	7.70	6.10	11.70	11.50
RIL	Jamnagar	8.10	8.60	10.80	10.80
Essar	Vadinar	7.98	8.37	Not available	

11. GRM of North-East refineries excluding excise duty benefit ($/bbl)					
Company	**Refinery**	**2013-14**	**2014-15**	**2015-16**	**Apr-Sep`16**
IOCL	Guwahati	0.88	0.96	1.26	1.15
	Digboi	8.50	5.42	4.16	6.84
	Bongaigaon	2.34	-6.51	0.08	5.17
NRL	Numaligarh	6.98	9.46	8.06	8.40

12. Production and consumption of petroleum products (Million Metric Tonnes)										
Products	**April-March 2016**		**November 2015**		**November 2016 (P)**		**April-November 2015**		**April-November 2016 (P)**	
	Prod^n	**Consump^n**	**Prod^n**	**Consump^n**	**Prod^n**	**Consump^n**	**Prod^n**	**Consump^n**	**Prod^n**	**Consump^n**
LPG	10.6	19.6	0.9	1.6	0.9	1.9	6.7	12.5	7.2	14.0
MS	35.3	21.8	3.1	1.0	2.9	1.1	22.9	8.7	24.1	9.0
NAPHTHA	17.9	13.3	1.4	1.8	1.7	2.0	11.4	14.3	13.0	16.0
ATF	11.8	6.3	0.9	0.5	1.1	0.6	7.2	4.1	9.0	4.5
SKO	7.5	6.8	0.6	0.6	0.4	0.4	5.0	4.6	4.2	3.8
HSD	98.6	74.6	8.6	6.1	8.5	6.7	64.2	48.7	67.4	50.7
LDO	0.4	0.4	0.03	0.03	0.07	0.04	0.3	0.3	0.3	0.3
LUBES	1.0	3.6	0.09	0.3	0.08	0.3	0.7	2.2	0.7	2.2
FO/LSHS	10.7	6.6	1.0	0.5	1.0	0.6	7.4	4.1	8.2	4.9
BITUMEN	5.2	5.9	0.4	0.4	0.5	0.5	3.0	3.4	3.3	3.6
OTHERS	32.2	25.6	2.8	2.0	2.5	2.5	21.1	15.9	22.9	20.9
ALL INDIA	**231.2**	**184.7**	**19.8**	**14.8**	**19.7**	**16.6**	**149.9**	**118.8**	**160.4**	**130.0**
Growth (%)	**4.8%**	**11.6%**	**4.9%**	**6.8%**	**-0.7%**	**12.1%**	**3.0%**	**10.0%**	**7.0%**	**9.4%**

Note: Prod^n - Production; Consump^n - Consumption

13. LPG consumption (Thousand Metric Tonne)								
LPG category	2014-15	2015-16	November			April-November		
			2015	2016(P)	Gr (%)	2015	2016(P)	Gr (%)
1. PSU Sales :								
LPG-Packed Domestic	16,040.4	17,181.7	1415.6	1641.7	16.0	10991.2	12202.3	11.0
LPG-Packed Non-Domestic	1,051.0	1,464.4	129.0	157.4	22.0	915.9	1144.9	25.0
LPG-Bulk	315.7	317.2	26.4	30.6	15.8	215.9	239.3	10.8
Auto LPG	163.8	170.9	13.6	13.9	2.3	113.3	110.0	-2.9
Sub-Total (PSU Sales)	**17,570.9**	**19,134.2**	**1,584.6**	**1,843.6**	**16.3**	**12,236.3**	**13,696.5**	**11.9**
2. Direct Private Imports	429.2	489.0	31.4	37.9	**20.6**	286.6	262.4	**-8.4**
Total (1+2)	**18,000.1**	**19,623.2**	**1,616.0**	**1,881.5**	**16.4**	**12,522.9**	**13,958.9**	**11.5**

14. Industry marketing infrastructure (as on 1.10.2016) (Provisional)								
Particulars	IOCL	BPCL	HPCL	RIL	ESSAR	SHELL	Others	Total
Terminal/ Depots **(Nos.)**	129	84	86	18$		2	4*	323
Aviation Fuel Stations **(Nos.)**	102	42	37	27			1@	209
Retail Outlets (total) **(Nos.)**	25,627	13,619	13,978	1,400	2,682	83	4^	57,393
LPG Distributors (total) **(Nos.) (PSUs only)**	9,289	4,560	4,365					18,214
SKO/LDO agencies **(Nos.)**	3,905	1,001	1,638					6,544
LPG Bottling plants **(Nos.) (PSUs only)**	91	51	46					188
LPG Bottling capacity **(TMTPA) (PSUs only)**	8,365	3,585	3,552					15,502
Rural ROs **(Nos.)**	6,811	2,401	2,891	127	840	10		13,080
RGGLVY **(Nos.)**	2,810	1,404	1,366					5,580
LPG registered domestic consumers (Nos. crore) (PSUs only)	10.53	5.44	5.59					21.56

* 4 MRPL ; @ 1 AFS -Shell MRPL ; ^ 4-MRPL; $RIL= 5 Terminal and 13 Mini Depot

15. Natural gas at a glance

(MMSCM)

Details	2014-15	2015-16 (P)	November 2015 (P)	November 2016 (Target)	November 2016 (P)	April-November 2015 (P)	April-November 2016 (Target)	April-November 2016 (P)
(a) Gross production	33,657	32,249	2,716	2,885	2,670	21,960	22,122	21,149
- ONGC	22,023	21,177	1,777	1,940	1,867	14,453	14,684	14,493
- Oil India Limited (OIL)	2,722	2,838	256	243	245	1,854	2,014	1,965
- Private / Joint Ventures (JVs)	8,912	8,235	684	702	558	5,653	5,425	4,690
(b) Net production (excluding flare gas and loss)	32,693	31,138	2,636		2,584	21,187		20,445
(c) LNG import	18,536	21,309	1,749		2,019	13,677		16,852
(d) Total consumption including internal consumption (Net production+Import) (b+c)	51,229	52,448	4,385		4,603	34,864		37,297
(e) Total consumption (in BCM)	51.23	52.45	4.38		4.60	34.86		37.30
(f) Import dependency based on consumption [c/d*100]	36.18	40.63	39.88		43.87	39.23		45.18

16. 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	November, 2016	50.286	MMSCM
Production of CBM gas-Cumulative	April-November, 2016	367.510	MMSCM

17. Gas pipelines under execution / construction as on 30.9.2016

Network/ Region	Entity	Length (KM)	Design Cap. (MMSCMD)	Pipeline Size
Kochi-Kottanad-Bengaluru-Mangalore	GAIL (India) Ltd	1,063	16	24"/18"/12"
Dabhol - Bengaluru (DBPL)	GAIL (India) Ltd	315	16	36"/30"/24"/18"
Surat - Paradip	GAIL (India) Ltd	2,112	74.81	36"/24"/18"
Jagdishpur- Haldia-Bokaro Dhamra	GAIL (India) Ltd	2,539	16	30"/24"/18"/12"/8"/4"
Mallavaram – Bhopal - Bhilwara	GSPC India Transco Ltd	2,042	78.25	42"/36"/30"/24"/18"/12"
Mehsana - Bathinda	GSPC India Gasnet Ltd	2,052	77.11	36"/24"/18"/12"
Bathinda - Jammu - Srinagar	GSPC India Gasnet Ltd	725	42.42	24"/18"/16"/12"/8"/6"
Kakinada - Vizag - Srikakulam	AP Gas Distribution Co.	391	90	24"/18"/8"/4"
Shahdol - Phulpur	Reliance Gas Pipelines Ltd	312	3.5	16"
Ennore - Nellore	Gas Transmission India Pvt. Ltd	250	36	24"/18"
Ennore-Thiruvallur-Bengaluru-Puducherry-Nagapattinam-Madurai-Tuticorin	Indian Oil Corporation Limited	1,385	84.67	28"/24"/16"/12" /10"
Jaigarh-Mangalore	H-Energy Pvt..Ltd.	635	17	24"
Total		**13,821**		

18. Existing LNG terminals as on 30.9.2016

Existing	Promoters	Capacity (MMTPA)	Capacity Utilisation in % (Apr-Sep 2016)
Dahej	Petronet LNG Ltd (PLL)	10 MMTPA up to July, 2016 increased to 15 MMTPA from August, 2016	Apr -July, 2016- 125.00 Aug-Sep, 2016 - 98.00
Hazira	Hazira LNG Pvt Ltd (HLPL)	5 MMTPA	83.6
Dabhol	RGPPL (GAIL - NTPC JV)	1.692 MMTPA in phase-1 without break water to be increased to 5 MMTPA	40.4
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	5.0

19. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.)							
State	**Entity operating**	**Geographical region**	**CNG stations**	**PNG connections**			**No. of CNG vehicles**
				Domestic	**Industrial**	**Commercial**	
			As on 1.10.2016	**As on 1.11.2016**	**As on 1.10.2016**	**As on 1.10.2016**	**As on 1.10.2016**
Haryana	Haryana City Gas, Adani Gas Limited, GAIL Gas Ltd.	Sonepat, Faridabad, Gurgaon	28	36,477	221	138	1,28,197
Andhra Pradesh	Bhagyanagar Gas Ltd	Kakinada, Vijayawada	13	3,406	0	41	15,606
Telangana	Bhagyanagar Gas Ltd	Hyderabad	21	2,148	5	5	23,448
Assam	Assam Gas Co. Ltd	Tinsukia, Dibrugarh, Sibsagar, Jorhat, Golaghat	0	29,416	392	967	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	371	15,80,151	4,100	15,372	9,84,684
Madhya Pradesh	Aavantika Gas Ltd, GAIL Gas Ltd	Dewas, Vijaipur, Indore including Ujjain, Gwalior, Pithampura	22	9,032	82	44	22,352
Rajasthan	GAIL Gas Ltd	Kota	3	187	16	1	4,872

19. Status of PNG connections, CNG stations and CNG vehicles across India (Nos.)							
State	Entity operating	Geographical region	CNG stations	PNG connections			No. of CNG vehicles
				Domestic	Industrial	Commercial	
			As on 1.10.2016	As on 1.11.2016	As on 1.10.2016	As on 1.10.2016	As on 1.10.2016
Maharashtra	Mahanagar Gas Ltd, Maharashtra Natural Gas Ltd, GAIL Gas Ltd	Mumbai, Greater Mumbai, Thane & adjoining contiguous areas including Mira Bhayender, Navi Mumbai, Thane City, Ambernath, Bhiwandi, Kalyan, Dombivily, Badlapur, Ulhasnagar, Panvel, Kharghar & Taloja, Pune City including Pimpri-Chinchwad and adjoining contiguous areas of Chakan, Hinjewadi & Talegaon GA	230	9,42,450	178	3,176	6,18,718
Tripura	Tripura Natural Gas Co. Ltd	Agartala	5	25,639	48	340	8,590
West Bengal	Great Eastern Energy Corporation Ltd	Kolkata	7	0	0	0	2,882
Uttar Pradesh	GAIL Gas Ltd, Sanwariya Gas, Green Gas, Central U.P. Gas, Siti Energy Ltd	Meerut, Mathura, Agra, Kanpur, Bareilly, Lucknow, Moradabad, Ferozabad, Khurja, Divyapur	47	2,36,519	478	244	1,11,981

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

State	Entity operating	Geographical region	CNG stations	PNG connections			No. of CNG vehicles
				Domestic	Industrial	Commercial	
			As on 1.10.2016	As on 1.11.2016	As on 1.10.2016	As on 1.10.2016	As on 1.10.2016
New Delhi	Indraprastha Gas Ltd	NCT of Delhi (Including Noida & Ghaziabad)	418	4,84,935	864	1,858	9,23,276
Karnataka	Gail Gas Ltd.	Bengaluru	2	1,066	3	13	10
Total			**1,167**	**33,51,426**	**6,387**	**22,199**	**28,44,616**

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

20. Major natural gas pipeline network

Nature of pipeline		GAIL	Reliance	GSPL	ARN	IOCL	ONGC	Total
Natural gas (as on 1.10.2016)	Length (KM)	11,077	1,469	2,600	811	140	24	**16,121**
	Cap (MMSCMD)	206	80	43	3.26	9.5	6	**347.8**

21. 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)
Nov,14 - Mar,15	5.05	-
Apr,15 - Sep,15	4.66	-
Oct, 15 - Mar,16	3.82	-
Apr,16 - Sep,16	3.06	6.61
Oct,16 - Mar, 17	2.50	5.3

22. Information on Prices, Taxes and Under-recoveries

International prices/ Exchange rates ($/bbl)

	2014-15	2015-16	Apr-Nov`16
Crude (Indian Basket)	84.16	46.17	44.76
Petrol	95.45	61.72	54.67
Diesel	96.64	55.02	53.54
Kerosene	96.98	55.71	53.88
LPG ($/MT)	683.87	394.71	341.31
FO ($/MT)	471.99	235.13	234.80
Naphtha ($/MT)	717.44	420.14	387.72
Exchange (Rs./$)	61.15	65.46	67.01

Customs & excise duty rates (w.e.f. 1.3.2016)

	Basic customs duty	Excise duty
Petrol	2.50%	Rs 21.48/Ltr
Diesel	2.50%	Rs 17.33/Ltr
PDS SKO	Nil	NIL
Non-PDS SKO	5.00%	14.00%
Sub. Dom LPG	NIL	NIL
Non Domestic LPG	5.00%	8.00%
Furnace Oil (Non-Fert)	5.00%	14.00%
Naphtha (Non-Fert)	5.00%	14.00%
ATF	NIL	14% *
Crude Oil	NIL+Rs.50/ -MT as NCCD	NIL+ Cess@ 20%+Rs.50 /-MT NCCD

*8% for scheduled commuter airlines from regional connectivity scheme airports

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

	Petrol*	Diesel*
Price before taxes and dealer commission	29.67	28.78
Central taxes	22.03	17.87
State taxes	14.66	8.38
Dealer commission	2.58	1.65
Retail selling price (RSP)	68.94	56.68

	PDS SKO*	Sub. Dom LPG*
Price before taxes and dealer commission	15.80	536.76
Central taxes	0	0
State taxes	0.53	0
Dealer commission	1.69	47.69
Retail Selling Price	18.02	584.00
Less cash compensation (CC) under DBTL		123.17
CC by OMCs towards uncompensated cost		28.12
Effective cost to consumer after subsidy		432.71

* SKO at Mumbai as on 16th Dec., 2016. Petrol and diesel at Delhi as on 17th Dec, 2016 and LPG as on 1st Dec., 2016 at Delhi. RSP of Subsidized Dom LPG rounded.

Change in Ex. Rate/ Crude price : Impact on under-recoveries

(Rs. Crores)	Rs.1/$ Ex. Rate	$1/bbl Crude
Impact on under-recovery	950	1420

Note: The above calculation for SKO & LPG are based on RTP for Dec., 2016 at level of Crude Price $44.84/bbl & Ex. Rate Rs.67.46/USD

22. Information on Prices, Taxes and Under-recoveries

Under-recoveries & burden sharing

	2014-15	2015-16	Apr-Sep`16
Per unit under-recovery (Rs./litre/Cylinder)			
Diesel	2.70^	Deregulated	Deregulated
PDS SKO	27.93	13.47	10.76
Sub. Dom LPG	409.72	150.82*	71.02*
Total under-recoveries including DBTL (Rs. Crores)			
Diesel	10,935^	Deregulated	Deregulated
PDS SKO	24,799	11,496	4,123
Sub. Dom LPG#	40,551	16,074	3,707
Total	76,285	27,570	7,830

Burden sharing (Rs. Crores)

	2014-15	2015-16	Apr-Sep`16
Government	31,279	26301**	7,827**
Upstream	42,822	1,251	0
OMCs	2,184	18	3

Fiscal subsidy under Govt. schemes (Rs. Crores)

PDS SKO	681	Scheme was extended till 31.3.2015
Sub. Dom LPG	1,920	

*Average of DBTL and under-recovery towards non-DBTL; #Includes subsidy under DBTL (2014-15: Rs.3,971 crore, 2015-16: Rs.16,056 crore Apr-Sep`16 Rs. 3,704 crore; ** Govt. compensation pending disbursement(2015-16 Rs. 375 crore., Apr-Sep`16 Rs.4,123 crore); ^up to 18.10.2014 only.

Sales & profit of petroleum sector (Rs. Crores)

Apr-Sep`16	Turnover	PAT
Upstream Companies (PSU)	63,184	12,542
Downstream Companies (PSU)	4,15,246	18,116
Standalone Refineries (PSU)	52,165	2,569
Private-RIL	1,53,102	14,319

Borrowings of OMCs (Rs. Crores)

	As on Mar`15	As on Mar`16	As on Sep`16
IOCL	55,248	52,469	41,885
BPCL	13,098	15,976	16,056
HPCL	20,335	21,337	18,070

Petroleum sector contribution to Central/State Govt.

	2014-15	2015-16	Apr-Sep`16
Central Government	1,72,066	2,58,443	1,40,183
% to total revenue receipt	0.16	0.21	N.A
State Governments	1,60,554	1,60,209	83,962
% to total revenue receipt	0.09	0.08	NA
Total (Rs. Crores)	**3,32,620**	**4,18,652**	**2,24,145**

Subsidy as a % of GDP(at current prices)

	2013-14	2014-15	2015-16
Petroleum subsidy	1.30	0.62	0.25

Note - GDP figure for 2013-14 are 2nd RE, 2014-15 are RE and 2015-16 are PE

23. Capital expenditure of PSU oil companies

Company	2013-14	2014-15	2015-16 (P)	April-November	
				Target*	2016 (P)
ONGC Videsh Ltd (OVL)	35,357	7,172	6,783	14,843	16,108
ONGC Ltd	32,470	29,997	29,502	29,307	16,740
Oil India Ltd (OIL)	9,351	3,774	3,550	4,020	8,867
GAIL (India) Ltd	4,070	1,632	1,880	1,929	745
Indian Oil Corp. Ltd. (IOCL)	16,661	14,314	14,368	15,395	7,468
Hindustan Petroleum Corp. Ltd (HPCL)	2,642	2,670	5,459	6,862	2,796
Bharat Petroleum Corp. Ltd (BPCL)	4,374	6,875	10,926	13,097	11,036
Mangalore Refinery & Petrochem Ltd (MRPL)	1,449	2,747	1,550	600	149
Chennai Petroleum Corp. Ltd (CPCL)	229	466	1,318	1,148	648
Numaligarh Refinery Ltd (NRL)	372	103	237	352	259
Balmer Lawrie Co. Ltd (BL)	120	80	38	50	24
TOTAL	**1,07,095**	**69,830**	**75,611**	**87,603**	**64,841**

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

24. 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 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