Ready Reckoner

Snapshot of India's Oil & Gas data

April, 2014

Analysis • Knowledge • Information

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

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Highlights

• Import dependency increased by 1.1% to 78.4% during April'14 as compared to April'13
• Domestic crude oil production during the month remained at the same level as compared to previous year at 3.1 MMT
• Crude oil processing by refineries was lower by 0.4 MMT during the month vis-à-vis April'13, primarily due to 0.8 MMT lower processing by Reliance's DTA refinery
• As compared to 2012-13, the GRMs of nearly all PSU refineries, except Guwahati, Digboi, Kochi, BPCL Mumbai and Vizag, showed improvements during 2013-14
• Net domestic Natural Gas production declined by -8.3% to 2.77 BCM during April'14 as compared to April'13 and consumption declined by -7.6% to 4.08 BCM
• Production of petroleum product was lower by 0.4 MMT during April'14 vis-à-vis April'13
• Consumption of petroleum products at 13.5 MMT registered a growth of 2.4% during the month as compared to April'13
• The turnover of all petroleum companies (PSU, Private and JVs) during 2013-14 was Rs. 17,34,702 crores and net profit was Rs. 65,043 crores
• Imports of petroleum products was higher by 0.4 MMT during the month vis-à-vis April'13 mainly due to higher imports of LPG and LSHS

1. Selected Indicators of the Indian Economy					
Economic Indicators		**Unit/Base**	**2011-12**	**2012-13**	**2013-14 (P)**
1	Population (as on 1st March 2011)	Billion	1.2	-	-
2	GDP at Factor Cost (Constant prices)	Growth %	6.3 2nd RE	4.5 1st RE	4.9 AE
3	Agricultural Production(Food grains)	MMT	259.3	257.1 FE	264.4 3rd AE
		Growth %	6.1	-0.8	5.2
4	Index of Industrial Production	Growth %	2.8	1.1	-0.1
5	Gross Fiscal Deficit	%	-5.75	-5.2	-4.6 (RE)
Economic Indicators		**Unit/Base**	**2013-14 (P)**	**April 2013**	**April 2014**
6	Imports	$ Billion	450.9	42.0	35.7
7	Exports	$ Billion	312.4	24.3	25.6
8	Trade Balance	$ Billion	-138.6	-17.7	-10.1
9	Foreign Exchange Reserves(28th Mar, 2014, 26th Apr, 2013, 25th Apr, 2014)	$ Billion	303.7	296.4	309.9

2. Import Dependency

	Petroleum & Natural Gas Sector	Unit/Base	2013-14 (P)	April 2013	April 2014
1	Crude Oil Production In India	MMT	37.8	3.2	3.1
2	Consumption Of Petroleum Products In India	MMT	158.2	13.2	13.5
3	Production Of Petroleum Products In India	MMT	220.2	17.5	17.1
4	Imports & Exports:				
	Crude Oil Imports	$ Billion	143.8	12.2	12.5
	Petroleum Products (POL) : Imports	$ Billion	12.0	0.9	1.1
	Gross Petroleum Imports (Crude + POL)	$ Billion	155.8	13.1	13.6
	Petroleum Products Exports	$ Billion	61.1	4.2	4.1
5	Petroleum Imports as % of India's Gross Imports	%	34.5	31.2	38.1
6	Petroleum Exports as % of India's Gross Exports	%	19.6	17.3	16.0
7	Import Dependency (Based On Consumption)	%	77.6	77.3	78.4

3. Indigenous Crude Oil Production (Million Metric Tonne)			
Details	**2013-14 (P)**	**April 2013**	**April 2014**
ONGC	19.2	1.6	1.5
OIL	3.5	0.3	0.3
Pvt / JVs	12.0	**1.0**	1.1
Total Crude Oil	**34.7**	**2.9**	**2.9**
Condensate	3.1	0.3	0.3
Total (Crude Oil +Condensate) (MMT)	**37.8**	**3.2**	**3.1**
Total (Crude Oil +Condensate) (Million Barrels)	277.04	22.8	22.8

4. Domestic Oil & Gas Production vis a vis Overseas Production			
Year	**2011-12**	**2012-13**	**2013-14 (P)**
Total Domestic (MMTOE)	85.7	78.5	73.1
Overseas production of OVL (MMTOE)	8.8	7.3	8.4
Overseas Production as % of Domestic	10.3%	9.3%	11.4%

5. Coal Bed Methane (CBM) Gas development in India		
Prognosticated CBM Resources	92	TCF
Established CBM resources	8.92	TCF
Total available Coal bearing area	26000	Sq. KM
Exploration Initiated	17000	Sq. KM
Blocks Awarded*	33	Nos.
Commercial production of CBM gas	**0.23**	**MMSCMD**

6. Refineries: Installed Capacity and Crude Oil Processing (MMTPA / MMT)						
	Company	Refinery	Installed Capacity (as on 01.04.2014)	Crude Oil Processing		
				2013-14 (P)	April 2013	April 2014
1	IOCL	Barauni	6.0	6.5	0.5	0.5
2		Gujarat	13.7	13.0	0.9	1.1
3		Haldia	7.5	8.0	0.7	0.6
4		Mathura	8.0	6.6	0.7	0.7
5		Panipat	15.0	15.1	1.1	1.2
6		Guwahati	1.0	1.0	0.1	0.1
7		Digboi	0.7	0.7	0.06	0.04
8		Bongaigaon	2.4	2.3	0.2	0.2
		IOCL TOTAL	**54.2**	**53.1**	**4.1**	**4.6**
9	HPCL	Mumbai	6.5	7.7	0.6	0.6
10		Visakhapatnam	8.3	7.8	0.7	0.7
11	HMEL	HMEL-Bhatinda	9.0	9.3	0.6	0.8
		HPCL-TOTAL	**23.8**	**24.8**	**1.9**	**2.1**
12	BPCL	Mumbai	12.0	12.7	0.7	0.8
13		Kochi	9.5	10.3	0.9	0.8
14	BORL	Bina	6.0	5.4	0.5	0.5
		BPCL-TOTAL	**27.5**	**28.4**	**2.1**	**2.1**

	Company	Refinery	Installed Capacity (as on 01.04.2014)	Crude Oil Processing (MMT)		
				2013-14 (P)	**April 2013**	**April 2014**
15	CPCL	Manali	10.5	10.1	0.9	0.8
16		CBR	1.0	0.6	0.03	0.08
		CPCL-TOTAL	**11.5**	**10.6**	**0.9**	**0.9**
17	NRL	Numaligarh	3.0	**2.6**	**0.2**	**0.2**
18	ONGC	Tatipaka	0.1	0.1	0.005	0.004
19		MRPL-Mangalore	15.0	14.6	1.2	1.1
		ONGC TOTAL	**15.1**	**14.7**	**1.2**	**1.1**
20	RIL	Jamnagar (DTA)	33.0	30.3	2.7	1.9
21		Jamnagar (SEZ)*	27.0	37.7	3.1	3.1
22	EOL	Vadinar	20.0	20.2	1.7	1.7
	All India		**215.1**	**222.4**	**18.0**	**17.6**

7. High Sulphur (HS) & Low Sulphur (LS) Crude Oil Processing (MMT)

	Type of crude	2013-14 (P)	April 2013	April 2014
1	HS Crude	158.3	12.9	12.5
2	LS Crude	64.1	5.1	5.0
Total Crude		**222.4**	**18.0**	**17.5**
Share of HS Crude of total crude processing		**71.2%**	**71.7%**	**71.4%**

8. Gross Refining Margins (GRM) of Refineries ($/bbl)				
Company	**Refinery**	**2011-12**	**2012-13**	**2013-14**
IOCL	Barauni	0.39	2.40	6.68
	Gujarat	5.07	4.61	4.52
	Haldia	2.38	0.85	2.84
	Mathura	0.59	0.55	2.10
	Panipat	4.39	3.34	3.62
	Guwahati	11.94	9.52	6.38
	Digboi	14.85	20.81	15.41
	Bongaigaon	6.25	5.26	6.71
	Average	**3.63**	**3.16**	**4.24**
BPCL	Kochi	3.20	5.36	4.80
	Mumbai	3.12	4.67	3.95
	Average	**3.16**	**4.97**	**4.33**
HPCL	Mumbai	1.74	2.08	5.38
	Visakhapatnam	2.95	2.08	1.50
	Average	**2.39**	**2.08**	**3.43**
CPCL	Chennai	4.16	0.99	4.06
MRPL	Mangalore	5.60	2.45	2.67
NRL	Numaligarh	12.45	10.52	12.09
BORL	Bina	-	7.00	7.70
RIL	Jamnagar	8.60	9.20	8.10
Essar	Vadinar	4.23	7.96	7.98

9. **GRM of North East Refineries** excluding Excise Duty Benefit				
				$/bbl
Company	**Refinery**	**2011-12**	**2012-13**	**2013-14**
IOCL	Guwahati	3.73	2.42	0.88
	Digboi	6.41	13.25	8.50
	Bongaigaon	0.56	0.27	2.34
NRL	Numaligarh	5.80	4.83	6.98

10. Natural Gas at a Glance			
			(MMSCM)
	2013-14 (P)	**April 2013**	**April 2014**
Gross Production	35390.91	2999.43	2770.55
Net Production (Excluding Flair Gas)	34554.64	2943.98	2700.12
LNG Import	**14257.0**	**1472.07**	**1380.65**
Total Consumption (Net Production + Import)	**48811.64**	**4416.05**	**4080.77**
Total Consumption (in BCM)	**48.81**	**4.41**	**4.08**

(Reliance import figure is not included)

11. Consumption of Petroleum Products (Million Metric Tonnes)

Products	2013-14 (P)		April 2013		April 2014	
	Production	Consumption	Production	Consumption	Production	Consumption
LPG	10.1	16.3	0.8	1.2	0.8	1.3
MS	30.3	17.1	2.3	1.3	2.3	1.5
NAPHTHA/NGL	18.4	11.5	1.6	0.9	1.5	0.9
ATF	11.2	5.5	1.0	0.5	0.8	0.5
SKO	7.4	7.2	0.7	0.6	0.7	0.6
HSD	93.7	68.4	7.3	6.2	7.3	5.9
LDO	0.4	0.4	0.0	0.0	0.0	0.0
LUBES	0.9	2.9	0.1	0.2	0.1	0.2
FO/LSHS	13.5	6.2	1.0	0.5	0.8	0.5
BITUMEN	4.8	4.9	0.5	0.6	0.6	0.6
OTHERS	29.4	17.8	2.2	1.2	2.2	1.5
ALL INDIA	**220.2**	**158.2**	**17.5**	**13.2**	**17.1**	**13.5**
Growth (%)	**1.1**	**0.7**			**(2.3%)**	**2.4**

12. Self Sufficiency in Petroleum Products (Million Metric Tonnes)

Details	2013-14 (P)	April 2013	April 2014
1. Indigenous Crude Oil Production:	37.8	3.2	3.1
a) Products from Indigenous Crude	32.4	2.7	2.7
b) Products from Fractionators (Including LPG and Gas)	3.1	0.3	0.3
2. Total Production from Indigenous Crude & Condensate **(a + b)**	35.5	3.0	3.0
3. Total Domestic Consumption	158.2	13.2	13.5
% Self Sufficiency (2 / 3)	22.4	22.7	21.6

1. Production of petroleum products from indigenous crude considered at 93.3% of indigenous crude oil processing

13. Industry Marketing Infrastructure (as on 31.3.2014) (Provisional)								
Particulars	**IOCL**	**BPCL**	**HPCL**	**RIL**	**ESSAR**	**SHELL**	**Others**	**Total**
Terminal/ Depots **(Nos.)**	135	82	95	5	2		1	**320**
Aviation Fuel Stations **(Nos.)**	98	36	33	27	3	5	2	**204**
Retail Outlets (total) **(Nos.)**	23993	12503	12869	1400	1382	98	3	**52248**
LPG Distributors (total) **(Nos.)**	7035	3355	3506					**13896**
SKO/LDO Dealers **(Nos.)**	3930	1014	1638					**6582**
LPG Bottling **(TMTPA)**	7170	3075	2960					**13205**
Rural ROs **(Nos.)**	6002							**6002**
CNG Stations **(Nos.)**	140	208	189		29		239	**805**
RGGLVY **(Nos.)**	1421	817	798					**3036**
LPG Consumers **(Nos. Crores)**	8.18	4.12	4.33					**16.63**

14. Major Pipeline network (as on 1.4.2014)									
Nature of Pipeline		**GAIL**	**Reliance**	**GSPCL**	**AGC**	**IOCL**	**ONGC**		**Total**
Natural Gas	Length (KM)	10841	1469	1874	1000	132	24		**15340**
	Cap (MMSCMD)	243.5	80.0	50.0	6.0	9.5	6.0		**395.0**

		ONGC	**OIL**	**Cairn**	**HMEL**	**IOCL**	**BPCL**	**HPCL**	**Other**	**Total**
Crude Oil	Length (KM)	1195	1193	670	1017	4448	937	-	-	**9460**
	Cap (MMTPA)	56.9	8.4	8.7	9.0	40.4	6.0	-	-	**129.4**
Products	Length (KM)	-	654	-	-	6632	1697	2407	2693	**14083**
	Cap (MMTPA)	-	1.7	-	-	36.6	17.5	20.5	8.7	**85.1**

Others *include GAIL and Petronet India*

15. Information on Prices, Taxes and Under-recoveries

Sales & profit of Petroleum Sector (Rs. Crores)

2013-14	Turnover	PAT
Upstream Cos.	149527	29451
Downstream Cos.	955147	12814
Standalone Refineries	130373	668
Private/JVs	499655	22110

Customs & Excise Duty rates

	Customs duty	Excise duty
Crude oil	Nil+Rs.50/MT as NCCD	NIL+Rs.4500/ MT Cess + Rs. 50/ MT NCCD
Petrol	2.5%	Rs.9.48/Ltr
Diesel	2.5%	Rs.3.56/Ltr
PDS SKO	Nil	NIL
Non PDS SKO	5%	14%
Sub. Dom LPG	Nil	Nil
Non Domestic LPG	5%	8%
Furnace Oil	5%	14%
Naphtha	5%	14%
ATF	NIL	8%

Price buildup of Petroleum products (Rs./litre/Cy.) at Delhi

	Petrol	Diesel
Price before taxes and dealer comm.	47.13	44.45
Central taxes	10.38	4.52
State taxes	11.90	6.55
Dealer comm.	2.0	1.19
Retail Selling Price	71.41	56.71
	PDS SKO	**Sub. Dom LPG**
Price before taxes and dealer comm.	12.96	373.41
Central taxes	0.00	0.00
State taxes	0.71	0.00
Dealer comm.	1.29	40.71
Retail Selling Price	14.96	414.00

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

(Rs. Crores)	Rs.1/$ Ex. Rate	$1/bbl Crude
Impact on Under-recovery	8000	4500

15. Information on Prices, Taxes and Under-recoveries

Under-recoveries & Burden Sharing

	2011-12	2012-13	2013-14
Per unit under-recovery (Rs./litre/Cyl.)			
Diesel	10.39	11.26	8.39
PDS SKO	26.46	31.16	33.98
Sub. Dom LPG	320.30	427.14	499.52
Total Under-recoveries (Rs. Crores)			
Diesel	81192	92061	62837
PDS SKO	27352	29410	30575
Sub. Dom LPG	29997	39558	46458
Total	138541	161029	139869
Burden Sharing (Rs. Crores)			
Govt.	83500	100000	70772
Upstream	55000	60000	67021
OMCs	41	1029	2076
Fiscal Subsidy under Govt. Schemes (Rs. Crores)			
PDS SKO	868	746	681
Sub. Dom LPG	2155	2007	1920
Subsidy as a % of GDP			
Petroleum Subsidy	0.76	0.97	Pending

International Prices/ Exchange rates ($/bbl)

	2011-12	2012-13	2013-14
Crude (Indian Basket)	111.89	107.97	105.52
Petrol	121.60	118.98	114.31
Diesel	125.38	121.97	119.41
Kerosene	125.99	123.11	118.80
LPG ($/MT)	899.42	885.2	880.49
FO ($/MT)	667.41	632.52	595.79
Naphtha ($/MT)	931.61	888.49	881.30
Exchange (Rs./$)	47.95	54.45	60.50
Petroleum Sector Contribution to Central/State Govt.			
Central Government	119850	117422	83619*
State Government	112919	126516	101510*
Total (Rs. Crores)	**232769**	**243939**	**185129***
Borrowings of OMCs (Rs. Crores)			
IOCL	75447	80894	83174
BPCL	**22994**	**23839**	**16739**
HPCL	29831	33789	34196

*Contribution to Ex-chequer is for Apr-Dec 2013

16. 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	1.4110	8.50
Diesel (HSD)	1	1.2100	7.45
Kerosene (SKO)	1	1.2850	7.90
ATF	1	1.2880	7.90
Light Diesel Oil (LDO)	1	1.0720	6.75
Furnace Oil (FO)	1	1.0424	6.55
Crude Oil	1	1.1700	7.33

Volume Conversion

From	To
1 bbl (British Barrel)	159 litres
1 bbl (British Barrel)	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)	3412 Btu

Exclusive Economic Zone

200 Nautical Miles	370.4 Kilometers

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	1314 SCM

1 MMBTU	25.2 SCM @10000 kcal/SCM
GCV (Gross Calorific Value	10000 kcal/SCM
NCV (Net Calorific Value)	90% of GCV
Gas required for 1 MW power generation	4128 SCM/day
Power generation from 1 MMSCMD of gas	242 MW