Ready Reckoner

Snapshot of India's Oil & Gas data

March, 2014

Analysis • Knowledge • Information

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

Index of Tables

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	Imports	$ Billion	489.3	490.7	450.9
6	Exports	$ Billion	306.0	300.6	312.4
7	Trade Balance	$ Billion	-183.3	-190.3	-138.6
8	Foreign Exchange Reserves	$ Billion	294.4	292.6	303.7
9	Gross Fiscal Deficit	%	-5.75	-5.2	-4.6 (RE)

2. Import Dependency					
Petroleum & Natural Gas Sector		Unit/Base	2011-12	2012-13	2013-14 (P)
1	Crude Oil Production In India	MMT	38.1	37.9	37.8
2	Consumption Of Petroleum Products In India	MMT	148.1	157.1	158.2
3	Production Of Petroleum Products In India	MMT	204.0	217.8	220.2
4	Imports & Exports:				
	Crude Oil Imports	$ Billion	139.7	144.3	143.8
	Petroleum Products (POL) : Imports	$ Billion	14.2	12.5	12.0
	Gross Petroleum Imports (Crude + POL)	$ Billion	153.9	156.8	155.8
	Petroleum Products Exports	$ Billion	59.3	58.8	61.1
5	Petroleum Imports as % of India's Gross Imports	%	31.5	32.0	34.5
6	Petroleum Exports as % of India's Gross Exports	%	19.4	19.6	19.6
7	Import Dependency (Based On Consumption)	%	75.9	77.0	77.6

3. Indigenous Crude Oil Production (Million Metric Tonne)			
Details	**2011-12**	**2012-13**	**2013-14 (P)**
ONGC	20.8	19.5	19.2
OIL	3.8	3.7	3.5
Pvt / JVs	**10.4**	**11.6**	12.0
Total Crude Oil	**35.1**	**34.7**	**34.7**
Condensate	3.0	3.2	3.1
Total (Crude Oil +Condensate) (MMT)	**38.1**	**37.9**	**37.8**
Total (Crude Oil +Condensate) (Million Barrels)	279.3	277.8	277.0

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**		
				2011-12	**2012-13**	**2013-14 (P)**
1	IOCL	Barauni	6.0	5.7	6.3	6.5
2		Gujarat	13.7	14.3	13.2	13.0
3		Haldia	7.5	8.1	7.5	8.0
4		Mathura	8.0	8.2	8.6	6.6
5		Panipat	15.0	15.5	15.1	15.1
6		Guwahati	1.0	1.1	1.0	1.0
7		Digboi	0.7	0.6	0.7	0.7
8		Bongaigaon	2.4	2.2	2.4	2.3
		IOCL TOTAL	**54.2**	**55.6**	**54.8**	**53.1**
9	HPCL	Mumbai	6.5	7.5	7.7	7.7
10		Visakhapatnam	8.3	8.7	8.0	7.8
11	HMEL	HMEL-Bhatinda	9.0	-	4.9	9.3
		HPCL-TOTAL	**23.8**	**16.2**	**20.6**	**24.8**
12	BPCL	Mumbai	12.0	13.0	12.7	12.7
13		Kochi	9.5	9.5	10.1	10.3
14	BORL	Bina	6.0	2.0	5.7	5.4
		BPCL-TOTAL	**27.5**	**24.5**	**28.5**	**28.4**

	Company	Refinery	Installed Capacity (as on 01.04.2014)	Crude Oil Processing (MMT)		
				2011-12	2012-13	2013-14 (P)
15	CPCL	Manali	10.5	10.0	9.1	10.1
16		CBR	1.0	0.6	0.6	0.6
		CPCL-TOTAL	**11.5**	**10.6**	**9.7**	**10.6**
17	NRL	Numaligarh	3.0	**2.8**	**2.5**	**2.6**
18	ONGC	Tatipaka	0.1	0.1	0.1	0.1
19		MRPL-Mangalore	15.0	12.8	14.4	14.6
		ONGC TOTAL	**15.1**	**12.9**	**14.5**	**14.7**
20	RIL	Jamnagar (DTA)	33.0	32.5	32.6	30.3
21		Jamnagar (SEZ)*	27.0	35.2	37.3	37.7
22	EOL	Vadinar	20.0	13.5	19.8	20.2
	All India		**215.1**	**203.8**	**220.3**	**222.4**

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

	Type of crude	2011-12	2012-13	2013-14 (P)
1	HS Crude	139.0	154.4	158.3
2	LS Crude	64.8	65.8	64.1
Total Crude		**203.8**	**220.3**	**222.4**
Share of HS Crude of total crude processing		**68.2%**	**70.1%**	**71.2%**

8. Gross Refining Margins (GRM) of Refineries ($/bbl)				
Company	**Refinery**	**2011-12**	**2012-13**	**2013-14**
IOCL	Barauni	0.39	0.94	6.68
	Gujarat	5.07	4.75	4.52
	Haldia	2.38	(0.56)	2.84
	Mathura	0.59	(0.67)	2.10
	Panipat	4.39	2.31	3.62
	Guwahati	11.94	8.41	6.38
	Digboi	14.85	19.47	15.41
	Bongaigaon	6.25	3.99	6.71
	Average	**3.63**	**2.26**	**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	2.31	0.88
	Digboi	6.41	11.91	8.50
	Bongaigaon	0.56	(1.00)	2.34
NRL	Numaligarh	5.80	4.83	6.98

10. Natural Gas at a Glance

			(MMSCMD)
	2011-12	**2012-13**	**2013-14 (P)**
Gross Production	130.25	111.30	96.67
Net Production (Excluding Flair Gas)	126.91	108.78	94.38
LNG Import	**41.86**	**39.24**	**38.73**
Total Consumption (Net Production + Import)	**168.77**	**148.02**	**133.11**
Total Consumption (in BCM)	**61.59**	**54.02**	**48.58**

(Reliance import figure is not included)

11. Consumption of Petroleum Products (Million Metric Tonnes)						
Products	**2011-12**		**2012-13**		**2013-14 (P)**	
	Production	**Consumption**	**Production**	**Consumption**	**Production**	**Consumption**
LPG	9.6	15.3	9.8	15.6	10.1	16.3
MS	27.2	15.0	30.1	15.7	30.3	17.1
NAPHTHA/NGL	18.7	11.2	18.9	12.3	18.4	11.4
ATF	10.1	5.5	10.1	5.3	11.2	4.9
SKO	8.0	8.2	8.1	7.5	7.4	7.1
HSD	82.9	64.8	91.1	69.1	93.7	68.3
LDO	0.5	0.4	0.4	0.4	0.4	0.3
LUBES	1.0	2.6	0.9	2.6	0.9	2.8
FO/LSHS	19.4	9.3	15.8	7.6	13.5	6.1
BITUMEN	4.6	4.6	4.7	4.6	4.8	4.9
OTHERS	22.0	11.1	28.0	16.4	29.4	18.9
ALL INDIA	**204.0**	**148.1**	**217.8**	**157.1**	**220.2**	**158.1**
Growth (%)	**4.2**	**5.0**	**6.8**	**6.0**	**1.1**	**0.7**

12. Self Sufficiency in Petroleum Products (Million Metric Tonnes)			
Details	**2011-12**	**2012-13**	**2013-14 (P)**
1. Indigenous Crude Oil Production:	33.7	34.2	37.8
a) Products from Indigenous Crude	31.4	31.9	32.4
b) Products from Fractionators (Including LPG and Gas)	4.2	4.1	3.1
2. Total Production from Indigenous Crude & Condensate **(a + b)**	35.6	36	35.5
3. Total Domestic Consumption	148	156.5	158.2
% Self Sufficiency (2 / 3)	24.1	23.0	22.4
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 1.4.2013)

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 (2038 KM / 3.24 MMTPA) and Petronet India (655 KM / 5.44 MMTPA)*

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	43.37
Central taxes	10.38	4.52
State taxes	11.90	6.41
Dealer comm.	2.0	1.19
Retail Selling Price	71.41	55.49
	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
ATF	47.95	54.45	60.50
Exchange (Rs./$)			
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
HPCL	**22994**	**23839**	**16739**
BPCL	29831	33789	34196

*Borrowings as on 31st December, 2013

1. 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

Exclusive Economic Zone

200 Nautical Miles	370.4 Kilometers

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

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	10000 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	4128 SCM/day
1 MT of LNG	1314 SCM	Power generation from 1 MMSCMD of gas	242 MW