Snapshot of India's Oil & Gas data

Monthly Ready Reckoner

March 2023

G20 भारत 2023 INDIA

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PPAC

Analysis • Knowledge • Information

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

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Petroleum Planning & Analysis Cell (PPAC), an attached office of the Ministry of Petroleum & Natural Gas (MoPNG), Government of India, collects and analyses data on the Oil and Gas sector. It disseminates many reports on the Oil & Gas sector to the various stakeholders. The data is obtained from the Public Sector companies, Government agencies as well as the Private companies. Given the ever-increasing demand for energy and transition of energy demand to renewables and Biofuels, Policy makers and Analysts need to be well informed about the updated trends in the Oil & Gas industry.

The Snapshot of India's Oil & Gas data (Monthly Ready Reckoner), released by PPAC, provides monthly data/information in a single volume for the latest month and historical time series. The Snapshot of India's Oil & Gas data is also published on PPAC's website (www.ppac.gov.in) and is accessible on mobile app-PPACE.

This publication is a concerted effort by all divisions of PPAC. The cooperation of the Oil and Gas industry is acknowledged for their timely inputs.

Note: Reported data may undergo change on receipt of actuals

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Highlights for the month

•	Indigenous crude oil and condensate production during March 2023 was down by 2.8 % than that of March 2022 as compared to a de-growth of 4.9 % during February 2022. OIL registered a growth of 7.2 % and ONGC registered a de - growth of 1.5 % during March 2023 as compared to March 2022. PSC registered de-growth of 11.1 % during March 2023 as compared to March 2022. De-growth of 1.7 % was registered in the total crude oil and condensate production during April - March 2023 over the corresponding period of the previous year.
•	'Crude oil processed during March 2023 was 23.0 MMT, which was 3.0 % higher than March 2022 as compared to a growth of 2.0 % during February 2022. Growth of 5.6 % was registered in the total crude oil processing during April- March 2023 over the corresponding period of the previous year.
•	Crude oil imports increased by 7.9% and 9.4% during March 2023 and April- March 2023 respectively as compared to the corresponding period of the previous year. The net import bill for Oil & Gas was $10.5 billion in March 2023 compared to $12.1 billion in March 2022. In this the crude oil imports constitutes $11.6 billion, LNG imports $1.5 billion and the exports were $4.6 billion during March 2023.
•	The price of Brent Crude averaged $78.56/bbl during March 2023 as against $82.49/bbl during February 2023 and $118.81/bbl during March 2022. The Indian basket crude price averaged $78.54/bbl during March 2023 as against $82.28/bbl during February 2023 and $112.87 /bbl during March 2022.
•	Production of petroleum products saw a growth of 1.5 % during March 2023 over March 2022 as compared to a growth of 3.3 % during February 2022. Growth of 4.8 % was registered in the total POL production during April- March 2023 over the corresponding period of the previous year.
•	POL products imports decreased by 7.8% and increased by 11.7% during March 2023 and April- March 2023 respectively as compared to the corresponding period of the previous year. Increase in POL product imports during April- March 2023 were mainly due to increase in import of all products except lubes/LOBS, fuel oil (FO) and bitumen etc.

•	Exports of POL products decreased by 24.1% and 4.1% during March 2023 and April- March 2023 respectively as compared to the corresponding period of the previous year. Decrease in POL products exports during April- March 2023 were mainly due to decrease in exports of motor spirit (MS), naphtha, superior kerosene oil (SKO), high speed diesel (HSD) and petcoke/CBFS etc.
•	The consumption of petroleum products during April-Mar 2023 with a volume of 222.3 MMT reported a growth of 10.2% compared to the volume of 201.7 MMT during the same period of the previous year. This growth was led by 13.4% growth in MS, 12% in HSD & 47.1% in ATF consumption besides FO/LSHS, Petcoke, LPG and others during the period. The consumption of petroleum products during Mar 2023 recorded a growth of 5.0% with a volume of 20.5 MMT compared to the same period of the previous year.
•	Ethanol blending with Petrol was 12.1% during March 2023 and cumulative ethanol blending during December 2022- March 2023 was 11.6%.
•	Total Natural Gas Consumption (including internal consumption) for the month of March 2023 was 5126 MMSCM which was 5.9% lower than the corresponding month of the previous year. The cumulative consumption of 60311 MMSCM for the current financial year till March 2023 was lower by 6.0 % compared with the corresponding period of the previous year.
•	Gross production of natural gas for the month of March 2023 (P) was 2956 MMSCM which was higher by 2.4% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 34450 MMSCM for the current financial year till March 2023 was higher by 1.3% compared with the corresponding period of the previous year.
•	LNG import for the month of March 2237 (P) was 2237 MMSCM which was 15.2% lower than the corresponding month of the previous year. The cumulative import of 26647(P) MMSCM for the current financial year till March 2023 was lower by 14.1% compared with the corresponding period of the previous year.

PART-A

Economic Indicators

1. Selected indicators of the Indian economy								
Economic indicators		Unit/ Base	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
1	Population (basis RGI projections)	Billion	1.309	1.323	1.337	1.351	1.365	1.377
2	GDP at constant (2011-12 Prices)	Growth %	6.8 3rd RE	6.5 2nd RE	4.0 1st RE	-6.6 1st RE	9.1 1st RE	7.0 2nd AE
3	Agricultural Production (Food grains)	MMT	285.0	285.2	297.5	310.7	315.7 4th AE	323.6 2nd AE
		Growth %	3.6	0.1	4.3	4.5	1.6	-
4	Gross Fiscal Deficit (as percent of GDP)	%	3.5	3.4	4.6	9.5 RE	6.7 RE	6.4 RE

Economic indicators		Unit/ Base	2020-21	2021-22 (P)	Mar		April-Mar	
					2021-22	2022-23 (P)	2021-22	2022-23 (P)
5	Index of Industrial Production (Base: 2011-12)	Growth %	-8.4	11.4	1.2*	5.6* QE	12.5#	5.5#
6	Imports^	$ Billion	394.4	611.9	63.1	58.1	613.1	714.2
7	Exports^	$ Billion	291.8	419.7	44.6	38.4	422.0	447.5
8	Trade Balance	$ Billion	-102.6	-192.2	-18.5	-19.7	-191.1	-266.8
9	Foreign Exchange Reserves @	$ Billion	579.3	617.6	606.5	578.4	-	-

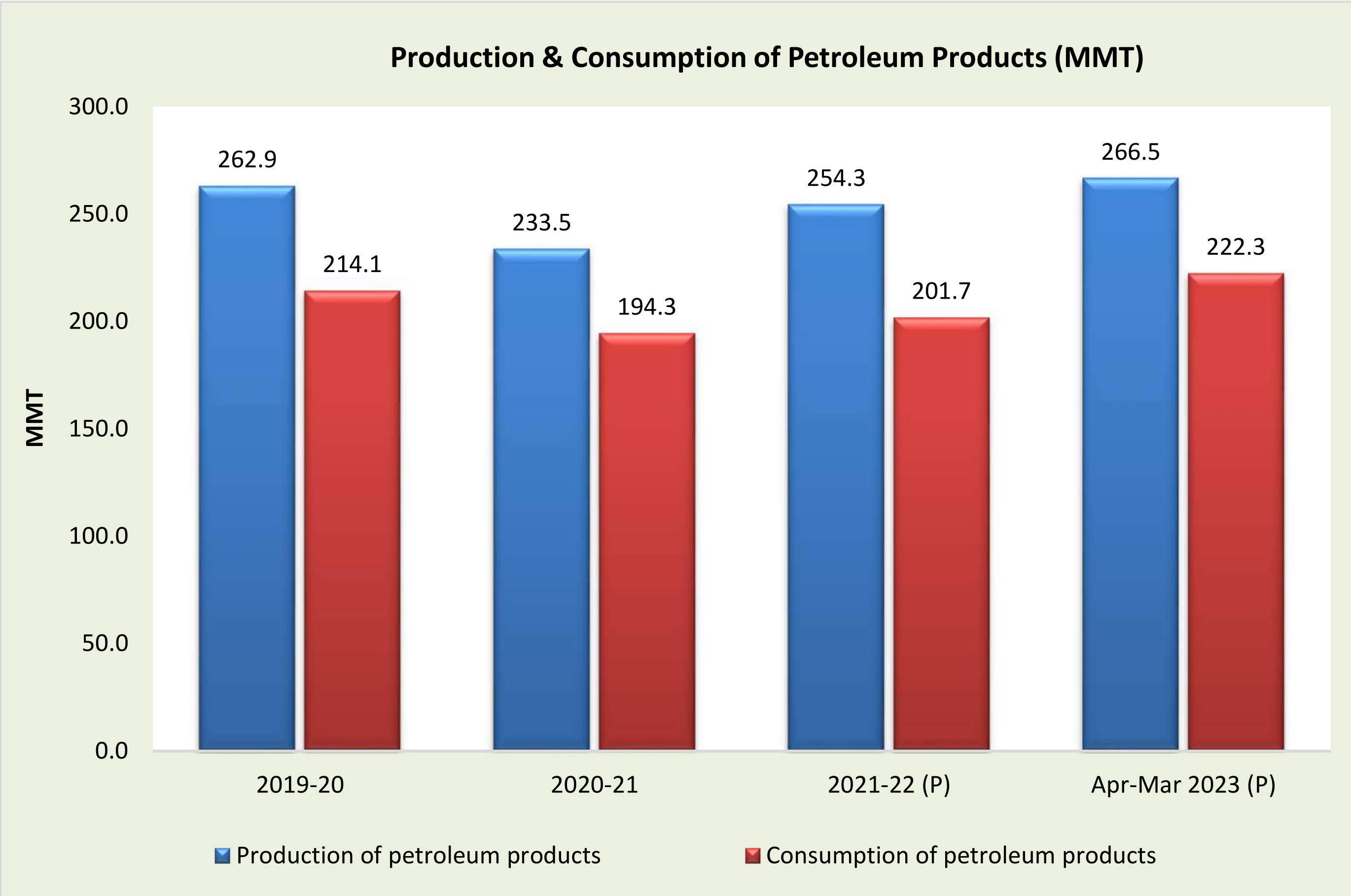
Population projection by RGI is taken as on 1st July for the year. IIP is for the month of *Feb and #April-Feb; @2020-21-as on March 26, 2021, 2021-22 - as on March 26, 2022, Mar 2022 as on Mar 25, 2022 and Mar 2023-as on Mar 31, 2023; ^Imports & Exports are for Merchandise for the month of March 23; E: Estimates; PE: Provisional Estimates; AE-Advanced Estimates; RE-Revised Estimates; QE-Quick Estimates.

Source: Registrar General India**,** Ministry of Commerce & Industry, Ministry of Statistics and Programme Implementation, Ministry of Agriculture & Farmer's Welfare, Ministry of Finance, Reserve Bank of India

2. Crude oil, LNG and petroleum products at a glance

	Details	Unit/ Base	2020-21	2021-22 (P)	Mar 2021-22 (P)	Mar 2022-23 (P)	April-Mar 2021-22 (P)	April-Mar 2022-23 (P)
1	Crude oil production in India#	MMT	30.5	29.7	2.5	2.5	29.7	29.2
2	Consumption of petroleum products*	MMT	194.3	201.7	19.5	20.5	201.7	222.3
3	Production of petroleum products	MMT	233.5	254.3	24.1	24.5	254.3	266.5
4	Gross natural gas production	MMSCM	28,672	34,024	2,886	2,956	34,024	34,450
5	Natural gas consumption	MMSCM	60,982	64,159	5,450	5,126	64,159	60,311
6	Imports & exports:							
	Crude oil imports	MMT	196.5	212.4	19.0	20.5	212.4	232.4
		$ Billion	62.2	120.7	14.9	11.6	120.7	158.3
	Petroleum products (POL) imports*	MMT	43.2	39.0	3.7	3.4	39.0	43.6
		$ Billion	14.8	23.7	2.7	2.1	23.7	26.7
	Gross petroleum imports (Crude + POL)	MMT	239.7	251.4	22.7	23.9	251.4	275.9
		$ Billion	77.0	144.3	17.6	13.6	144.3	185.1
	Petroleum products (POL) export	MMT	56.8	62.8	6.7	5.1	62.8	60.2
		$ Billion	21.4	44.4	7.0	4.6	44.4	57.5
	LNG imports*	MMSCM	33,198	31,028	2,637	2,237	31,028	26,647
		$ Billion	7.9	13.5	1.5	1.5	13.5	17.9
	Net oil & gas imports	$ Billion	63.5	113.4	12.1	10.5	113.4	145.4
7	Petroleum imports as percentage of India's gross imports (in value terms)	%	19.5	23.6	27.9	23.5	23.5	25.9
8	Petroleum exports as percentage of India's gross exports (in value terms)	%	7.3	10.6	15.6	12.0	10.5	12.9
9	Import dependency of crude oil (on POL consumption basis)	%	84.4	85.5	87.7	88.6	85.5	87.3

#Includes condensate; *Private direct imports are prorated for the period Jan'23 to Mar'23 for POL. RIL data prorated. LNG Imports figures from DGCIS are prorated for Feb-Mar 2023. Total may not tally due to rounding off.


Production & Consumption of Petroleum Products (MMT)
MMT
300.0
250.0
200.0
150.0
100.0
50.0
0.0
262.9
214.1
233.5
194.3
254.3
201.7
266.5
222.3
2019-20
2020-21
2021-22 (P)
Apr-Mar 2023 (P)
Production of petroleum products
Consumption of petroleum products

PART-B

Crude Oil, Refining & Production

3. Indigenous crude oil production (Million Metric Tonnes)

Details	2020-21	2021-22	Mar			April-Mar		
			2021-22	2022-23 Target*	2022-23 (P)	2021-22	2022-23 Target*	2022-23 (P)
ONGC	19.1	18.5	1.6	1.8	1.6	18.5	21.1	18.4
Oil India Limited (OIL)	2.9	3.0	0.3	0.3	0.3	3.0	3.4	3.2
Private / Joint Ventures (JVs)	7.1	7.0	0.6	0.8	0.5	7.0	7.4	6.2
Total Crude Oil	**29.1**	**28.4**	**2.4**	**2.9**	**2.3**	**28.4**	**31.9**	**27.8**
ONGC condensate	1.1	0.9	0.08	0.0	0.1	0.9	0.0	1.0
PSC condensate	0.3	0.30	0.02	0.0	0.03	0.30	0.0	0.31
Total condensate	**1.4**	**1.2**	**0.11**	**0.0**	**0.1**	**1.2**	**0.0**	**1.4**
Total (Crude + Condensate) (MMT)	**30.5**	**29.7**	**2.5**	**2.9**	**2.5**	**29.7**	**31.9**	**29.2**
Total (Crude + Condensate) (Million Bbl/Day)	0.61	0.60	0.60	0.69	0.58	0.60	0.64	0.59

*Provisional targets inclusive of condensate.

4. Domestic and overseas oil & gas production (by Indian Companies)

Details	2020-21	2021-22 (P)	Mar		April-Mar	
			2021-22 (P)	2022-23 (P)	2021-22 (P)	2022-23 (P)
Total domestic production (MMTOE)	59.2	63.7	5.4	5.4	63.7	63.6
Overseas production (MMTOE)	21.9	21.8	1.8	1.7	21.8	19.5

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

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

Details		2020-21	2021-22	Mar		April-Mar	
				2021-22	2022-23 (P)	2021-22	2022-23 (P)
1	High Sulphur crude	161.4	185.0	17.3	18.0	185.0	197.9
2	Low Sulphur crude	60.3	56.7	5.1	5.1	56.7	57.3
Total crude processed (MMT)		**221.8**	**241.7**	**22.3**	**23.0**	**241.7**	**255.2**
Total crude processed (Million Bbl/Day)		4.45	4.85	5.28	5.44	4.85	5.13
Percentage share of HS crude in total crude oil processing		**72.8%**	**76.6%**	**77.4%**	**78.0%**	**76.6%**	**77.5%**

6. Quantity and value of crude oil imports			
Year	**Quantity (MMT)**	**$ Million**	**Rs. Crore**
2020-21	196.5	62,248	4,59,779
2021-22 (P)	212.4	120,675	9,01,262
April-Mar 2022-23(P)	232.4	158,309	12,65,810

7. Self-sufficiency in petroleum products (Million Metric Tonnes)							
Particulars		**2020-21**	**2021-22 (P)**	**Mar**		**April-Mar**	
				2021-22 (P)	**2022-23 (P)**	**2021-22 (P)**	**2022-23 (P)**
1	Indigenous crude oil processing	28.0	27.0	2.2	2.2	27.0	26.4
2	Products from indigenous crude (93.3% of crude oil processed)	26.1	25.2	2.1	2.0	25.2	24.7
3	Products from fractionators (Including LPG and Gas)	4.2	4.1	0.3	0.3	4.1	3.5
4	Total production from indigenous crude & condensate **(2 + 3)**	30.3	29.3	2.4	2.3	29.3	28.2
5	Total domestic consumption	194.3	201.7	19.5	20.5	201.7	222.3
% Self-sufficiency (4 / 5)		**15.6%**	**14.5%**	**12.3%**	**11.4%**	**14.5%**	**12.7%**

8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)										
Sl. no.	Refinery	Installed capacity (01.01.2022) MMTPA	Crude oil processing (MMT)							
			2020-21	2021-22	Mar			April-Mar		
					2021-22	2022-23 (Target)	2022-23 (P)	2021-22	2022-23 (Target)	2022-23 (P)
1	Barauni (1964)	6.0	5.5	5.6	0.6	0.6	0.6	5.6	6.5	6.8
2	Koyali (1965)	13.7	11.6	13.5	1.3	1.3	1.3	13.5	14.3	15.6
3	Haldia (1975)	8.0	6.8	7.3	0.7	0.7	0.7	7.3	8.2	8.5
4	Mathura (1982)	8.0	8.9	9.1	0.9	0.8	0.9	9.1	9.4	9.6
5	Panipat (1998)	15.0	13.2	14.8	1.3	1.3	1.3	14.8	14.9	13.8
6	Guwahati (1962)	1.0	0.8	0.7	0.09	0.0	0.1	0.73	1.0	1.1
7	Digboi (1901)	0.65	0.6	0.7	0.06	0.06	0.06	0.7	0.6	0.7
8	Bongaigaon(1979)	2.70	2.5	2.6	0.2	0.2	0.3	2.6	2.7	2.8
9	Paradip (2016)	15.0	12.5	13.2	1.4	1.4	1.4	13.2	14.0	13.6
	IOCL-TOTAL	**70.1**	**62.4**	**67.7**	**6.6**	**6.4**	**6.7**	**67.7**	**71.6**	**72.4**
10	Manali (1969)	10.5	8.2	9.0	1.1	0.9	1.0	9.0	10.7	11.3
11	CBR (1993)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CPCL-TOTAL	**10.5**	**8.2**	**9.0**	**1.1**	**0.9**	**1.0**	**9.0**	**10.7**	**11.3**
12	Mumbai (1955)	12.0	12.9	14.4	1.3	1.3	1.4	14.4	14.0	14.5
13	Kochi (1966)	15.5	13.3	15.4	1.5	1.4	1.5	15.4	15.5	16.0
14	Bina (2011)	7.8	6.2	7.4	0.7	0.7	0.7	7.4	7.8	7.8
	BPCL-TOTAL	**35.3**	**32.4**	**37.2**	**3.5**	**3.3**	**3.6**	**37.2**	**37.2**	**38.4**
15	Numaligarh (1999)	3.0	2.7	2.6	0.2	0.2	0.2	2.6	2.9	3.1

Sl. no.	Refinery	Installed capacity (1.01.2022) (MMTPA)	Crude oil processing (MMT)							
			2020-21	2021-22	Mar			April-Mar		
					2021-22	2022-23 (Target)	2022-23 (P)	2021-22	2022-23 (Target)	2022-23 (P)
16	Tatipaka (2001)	0.066	0.081	0.075	0.006	0.004	0.005	0.075	0.063	0.073
17	MRPL-Mangalore (1996)	15.0	11.5	14.9	1.5	1.5	1.5	14.9	17.0	17.1
	ONGC-TOTAL	**15.1**	**11.6**	**14.9**	**1.5**	**1.5**	**1.5**	**14.9**	**17.1**	**17.2**
18	Mumbai (1954)	9.5	7.4	5.6	0.7	0.8	0.9	5.6	8.5	9.8
19	Visakh (1957)	8.3	9.1	8.4	0.8	1.0	0.9	8.4	9.3	9.3
20	HMEL-Bathinda (2012)	11.3	10.1	13.0	1.1	1.0	1.1	13.0	11.5	12.7
	HPCL- TOTAL	**29.1**	**26.5**	**27.0**	**2.6**	**2.7**	**2.9**	**27.0**	**29.3**	**31.8**
21	RIL-Jamnagar (DTA) (1999)	33.0	34.1	34.8	3.1	3.1	2.8	34.8	34.8	34.4
22	RIL-Jamnagar (SEZ) (2008)	35.2	26.8	28.3	2.1	2.1	2.5	28.3	28.3	27.9
23	NEL-Vadinar (2006)	20.0	17.1	20.2	1.7	1.7	1.7	20.2	20.2	18.7
All India (MMT)		**251.2**	**221.8**	**241.7**	**22.3**	**21.8**	**23.0**	**241.7**	**252.0**	**255.2**
All India (Million Bbl/Day)		**5.02**	**4.45**	**4.85**	**5.28**	**5.16**	**5.44**	**4.85**	**5.06**	**5.13**

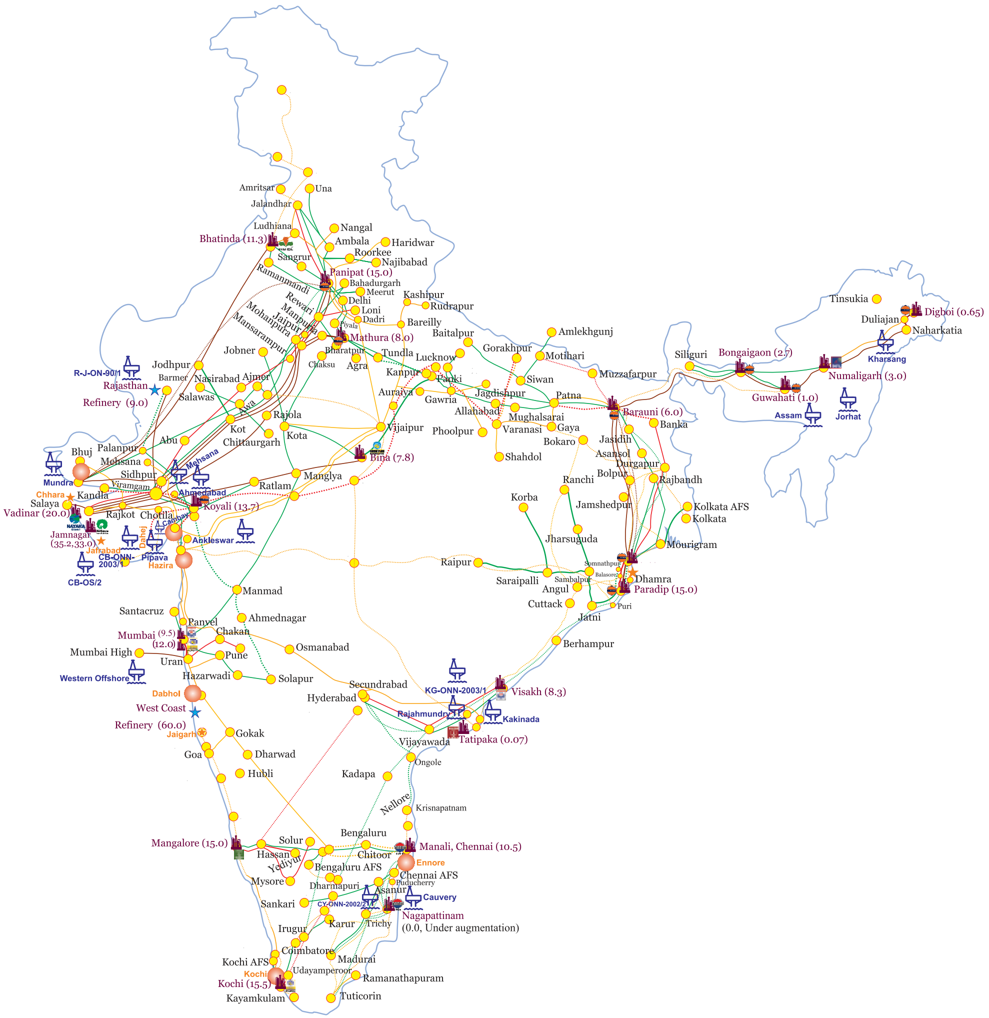
Note: Provisional Targets; Some sub-totals/ totals may not add up due to rounding off at individual levels.

9. Major crude oil and product pipeline network (as on 01.04.2023)

Details		ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Others*	Total
Crude Oil	Length (KM)	1,284	1,193	688	1,017	5,301	937			**10,420**
	Cap (MMTPA)	60.6	9.0	10.7	11.3	48.6	7.8			**147.9**
Products	Length (KM)		654			11,731	2,596	5,121	2,386	**22,488**
	Cap (MMTPA)		1.7			70.6	22.6	36.3	9.4	**140.6**

*Others include GAIL and Petronet India. HPCL and BPCL lubes pipeline included in products pipeline data

OIL & GAS MAP OF INDIA



LEGENDS

Refineries

Refineries (Capacity in MMTPA)

Producing Fields

Major Producing Fields

LNG Terminals

Dabhol, Dahej, Hazira, Kochi, Mundra, Ennore

(Upcoming Terminals) Dhamra, Jafrabad, Jaigarh, Chhara

LEGENDS

Pipelines Network

- Crude Oil Pipeline
- Ongoing Crude Oil Pipeline
- Product Pipeline
- Ongoing Product Pipeline
- LPG Pipeline
- Ongoing LPG Pipeline
- Gas Pipeline
- Ongoing Gas Pipeline

CHT, MoP&NG
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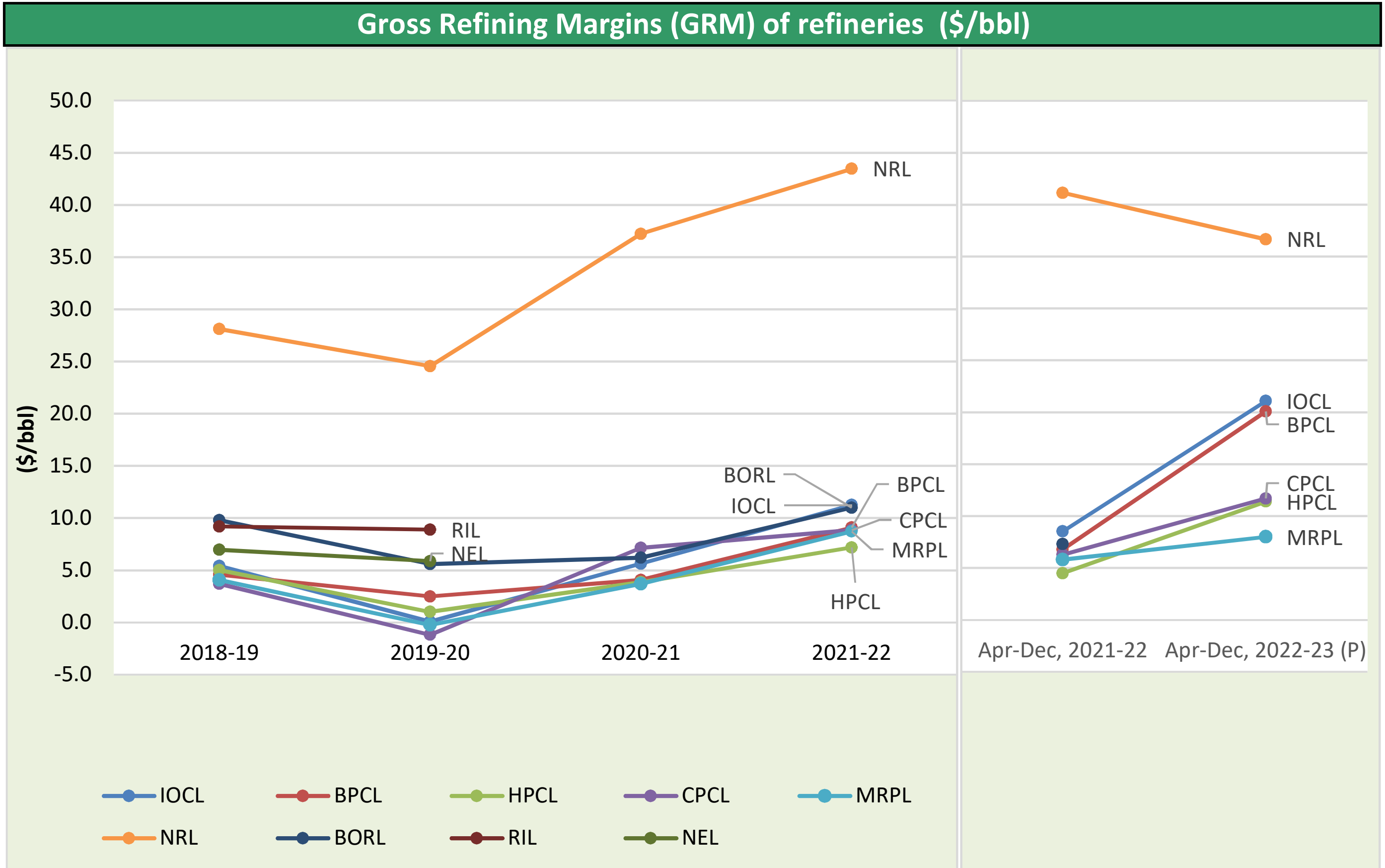
10. Gross Refining Margins (GRM) of refineries ($/bbl)

Company	2019-20	2020-21	2021-22	Apr - Dec	
				2021-22	2022-23 (P)
IOCL	0.08	5.64	11.25	8.52	21.08
BPCL	2.50	4.06	9.09	6.78	20.08
HPCL	1.02	3.86	7.19	4.50	11.40
CPCL	-1.18	7.14	8.85	6.28	11.70
MRPL	-0.23	3.71	8.72	5.80	8.00
NRL	24.55	37.23	43.46	41.14	36.65
BORL	5.60	6.20	11.00	7.30	#
RIL	8.90	*	*	*	*
NEL	5.88	*	*	*	*

GRM of North Eastern refineries are including excise duty benefit

BPCL figures effective 2022-23 includes BORL also after its merger with BPCL

*Not available



GRM of North Eastern refineries are including excise duty benefit

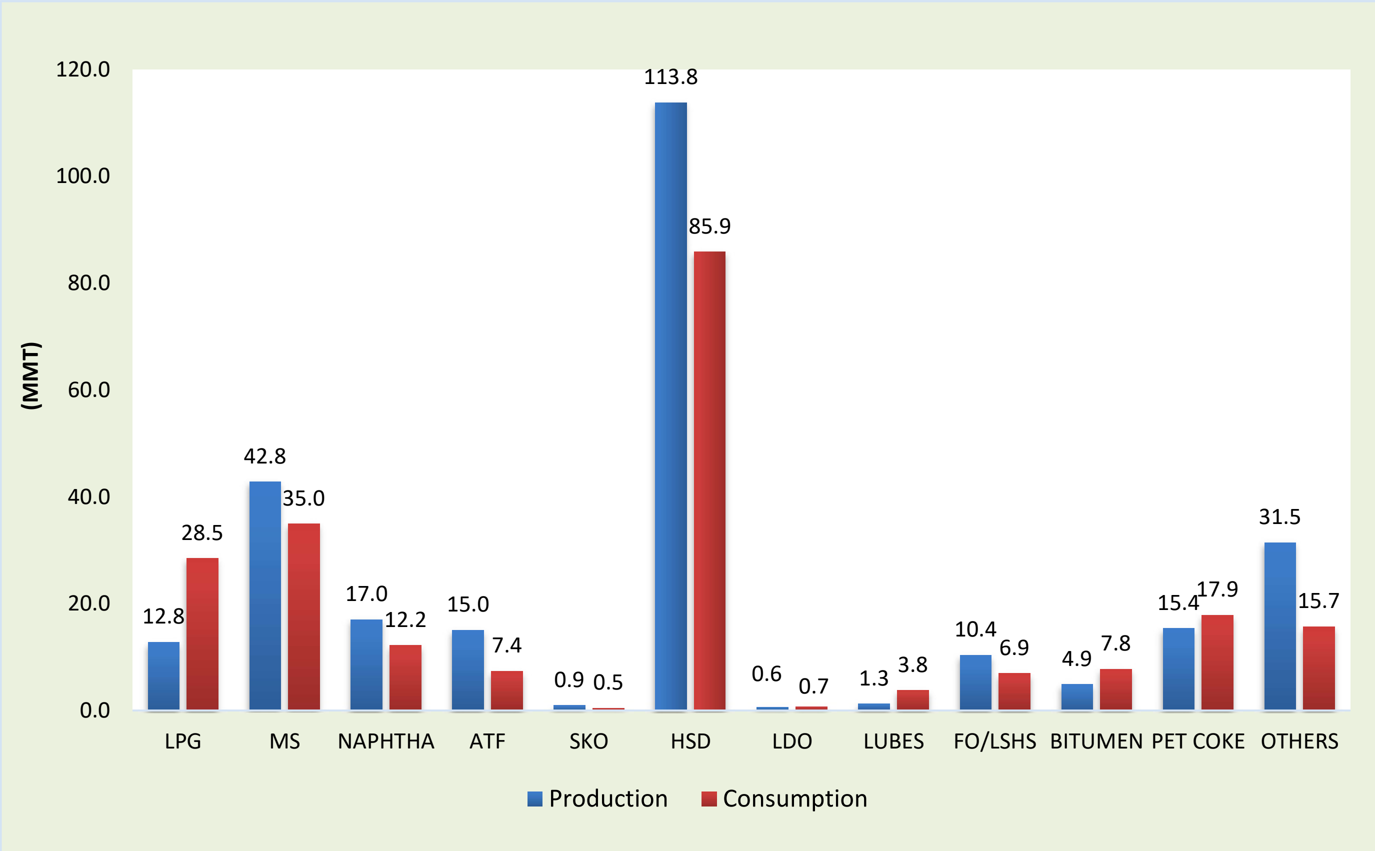
PART-C

Consumption

11. Production and consumption of petroleum products (Million Metric Tonnes)												
Products	**2020-21**		**2021-22 (P)**		**Mar 2022**		**Mar 2023 (P)**		**Apr-Mar 2022**		**Apr-Mar 2023 (P)**	
	Prod	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**
LPG	12.1	27.6	12.2	28.3	1.1	2.5	1.1	2.4	12.2	28.3	12.8	28.5
MS	35.8	28.0	40.2	30.8	3.9	2.9	4.1	3.1	40.2	30.8	42.8	35.0
NAPHTHA	19.4	14.1	20.0	13.2	1.8	1.1	1.5	1.1	20.0	13.2	17.0	12.2
ATF	7.1	3.7	10.3	5.0	1.0	0.5	1.4	0.7	10.3	5.0	15.0	7.4
SKO	2.4	1.8	1.9	1.5	0.1	0.1	0.1	0.0	1.9	1.5	0.9	0.5
HSD	100.4	72.7	107.2	76.7	10.5	7.7	10.3	7.8	107.2	76.7	113.8	85.9
LDO	0.7	0.9	0.8	1.0	0.10	0.08	0.08	0.08	0.8	1.0	0.6	0.7
LUBES	1.1	4.1	1.2	4.5	0.1	0.5	0.1	0.4	1.2	4.5	1.3	3.8
FO/LSHS	7.4	5.6	8.9	6.3	0.8	0.6	0.8	0.6	8.9	6.3	10.4	6.9
BITUMEN	4.9	7.5	5.1	7.8	0.6	0.9	0.6	0.9	5.1	7.8	4.9	7.8
PET COKE	12.0	15.6	15.5	14.3	1.5	1.4	1.4	1.4	15.5	14.3	15.4	17.9
OTHERS	30.2	12.8	30.9	12.3	2.6	1.1	3.0	1.9	30.9	12.3	31.5	15.7
ALL INDIA	**233.5**	**194.3**	**254.3**	**201.7**	**24.1**	**19.5**	**24.5**	**20.5**	**254.3**	**201.7**	**266.5**	**222.3**
Growth (%)	**-11.0%**	**-8.9%**	**8.9%**	**3.8%**	**5.8%**	**4.8%**	**1.5%**	**5.0%**	**8.9%**	**3.8%**	**4.8%**	**10.2%**

Note: Prod - Production; Cons - Consumption

Petroleum Products: April-Mar 2023 (P) (MMT)



12. Kerosene allocation vs upliftment (Kilo Litres)

Product	2019-20		2020-21		2021-22		2022-23 (P)*	
	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment
PDS Kerosene	31,21,328	27,93,217	23,15,008	20,38,790	17,83,344	16,59,906	12,43,644	3,96,115

* Allocation is for Q1, Q2, Q3 & Q4 2022-23 and upliftment is for Apr-Mar 2022-23

13. Ethanol blending programme

Particulars	Ethanol Supply Year *				
	2019-20	2020-21	2021-22	2022-23 (P)	
				Mar-23	Dec'22-Mar'23
Ethanol received by PSU OMCs under EBP Program (in Cr. Litrs)	173.0	296.1	408.1	53.2	185.5
Ethanol blended under EBP Program (in Cr. Litrs)	170.5	302.3	433.6	48.2	173.1
Average Percentage of Blending Sales (EBP%)	5.0%	8.1%	10.0%	12.1%	11.6%

***Ethanol Supply Year :** Ethanol supplies take place between 1st December of the present year to 30th November of the following year.

Note: With effect from 01.04.2019, EBP Programme has been extended to whole of India except UTs of Andaman and Nicobar Islands and Lakshadweep.

14. Industry marketing infrastructure (as on 01.04.2023) (Provisional)

Particulars	IOCL	BPCL	HPCL	RIL/RBML/RSIL	NEL	SHELL	Others	Total
POL Terminal/ Depots **(Nos.)**[$]	120	82	81	18	3		6	**310**
Aviation Fuel Stations **(Nos.)**[@]	132	65	54	30			2	**283**
Retail Outlets (total) **(Nos.),**[^]	36,285	21,029	21,186	1,555	6,386	351	63	**86,855**
out of which Rural ROs	11,732	5,253	5,237	130	2,092	85	21	**24,550**
SKO/LDO agencies **(Nos.)**	3,871	927	1,638					**6,436**
LPG Distributors (total) **(Nos.) (PSUs only)**	12,859	6,244	6,283					**25,386**
LPG Bottling plants **(Nos.) (PSUs only)**[#]	97	53	55				3	**208**
LPG Bottling capacity **(TMTPA) (PSUs only)**[&]	10,722	4,890	6,410				203	**22,225**
LPG active domestic consumers **(Nos. crore) (PSUs only)**	14.7	8.1	8.6					**31.4**

[$](Others=4 MRPL & 2 NRL); [@](Others=ShellMRPL); [^](Others=MRPL); [#](Others=NRL-1, OIL-1, CPCL-1); [&](Others=NRL-60, OIL-23, CPCL-120); RBML- Reliance BP Mobility Limited; RSIL- RBML Solutions India Ltd.

Industry Alternate fuel infrastructure at Retail outlets (Nos. of ROs as on 01.04.2023) (Provisional)

Alternate fuel	PSU	Private	Total
CNG_LNG	4775	51	4826
EV Charging	8195	166	8361
Auto LPG	526	113	639
Compressed Bio-Gas outlets	111	0	111
Total Retail outlets with at least one Alternate fuel	11884	328	12212

PART-D

LPG

15. LPG consumption (Thousand Metric Tonne)

LPG category	2020-21	2021-22	Mar			April-Mar		
			2021-22	2022-23 (P)	Growth (%)	2021-22	2022-23 (P)	Growth (%)
1. PSU Sales :								
LPG-Packed Domestic	25,128.1	25,501.6	2,215.1	2,181.2	-1.5%	25,501.6	25,381.5	-0.5%
LPG-Packed Non-Domestic	1,886.0	2,238.8	206.6	192.5	-6.8%	2,238.8	2,606.0	16.4%
LPG-Bulk	361.9	390.9	39.6	24.8	-37.4%	390.9	408.9	4.6%
Auto LPG	118.4	122.0	11.0	7.9	-28.2%	122.0	106.7	-12.5%
Sub-Total (PSU Sales)	27,494.3	28,253.3	**2,472.3**	**2,406.4**	**-2.7%**	**28,253.3**	**28,503.1**	**0.9%**
2. Direct Private Imports*	64.2	0.1	0.00	0.0	3583.8%	0.1	0.1	0.2%
Total (1+2)	27,558.4	28,253.4	**2,472.3**	**2,406.4**	**-2.7%**	**28,253.4**	**28,503.2**	**0.9%**

*Jan'23 -Mar'23 DGCIS data is prorated

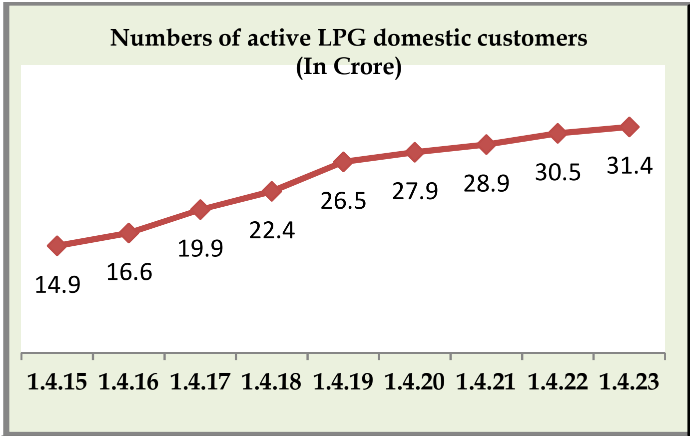
16. LPG marketing at a glance

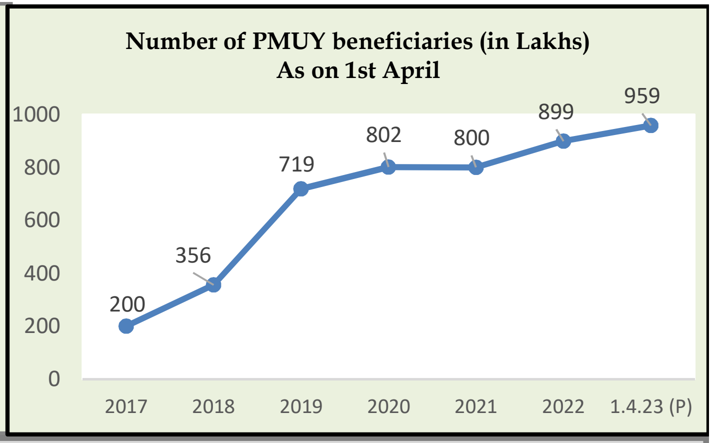
Particulars (As on 1st of April)	Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	1.04.23 (P)
LPG Active Domestic Customers	(Lakh)					1486	1663	1988	2243	2654	2787	2895	3053	3140
	Growth						11.9%	19.6%	12.8%	18.3%	5.0%	3.9%	5.5%	2.9%
LPG Coverage (Estimated)	(Percent)					56.2	61.9	72.8	80.9	94.3	97.5	99.8	-	-
	Growth						10.1%	17.6%	11.1%	16.5%	3.4%	2.3%	-	-
PMUY Beneficiaries	(Lakh)							200	356	719	802	800.4	899.0	958.6
	Growth								77.7%	101.9%	11.5%	-0.2%	12.2%	6.6%
LPG Distributors	(No.)	10541	11489	12610	13896	15930	17916	18786	20146	23737	24670	25083	25269	25386
	Growth	8.8%	9.0%	9.8%	10.2%	14.6%	12.5%	4.9%	7.2%	17.8%	3.9%	1.7%	0.7%	0.5%
Auto LPG Dispensing Stations	(No.)	604	652	667	678	681	676	675	672	661	657	651	601	526
	Growth	12.7%	7.9%	2.3%	1.6%	0.4%	-0.7%	-0.1%	-0.4%	-1.6%	-0.6%	-0.9%	-8.5%	-12.5%
Bottling Plants	(No.)	183	184	185	187	187	188	189	190	192	196	200	202	208
	Growth	0.5%	0.5%	0.5%	1.1%	0.0%	0.5%	0.5%	0.5%	1.1%	2.1%	2.0%	1.0%	4.5%

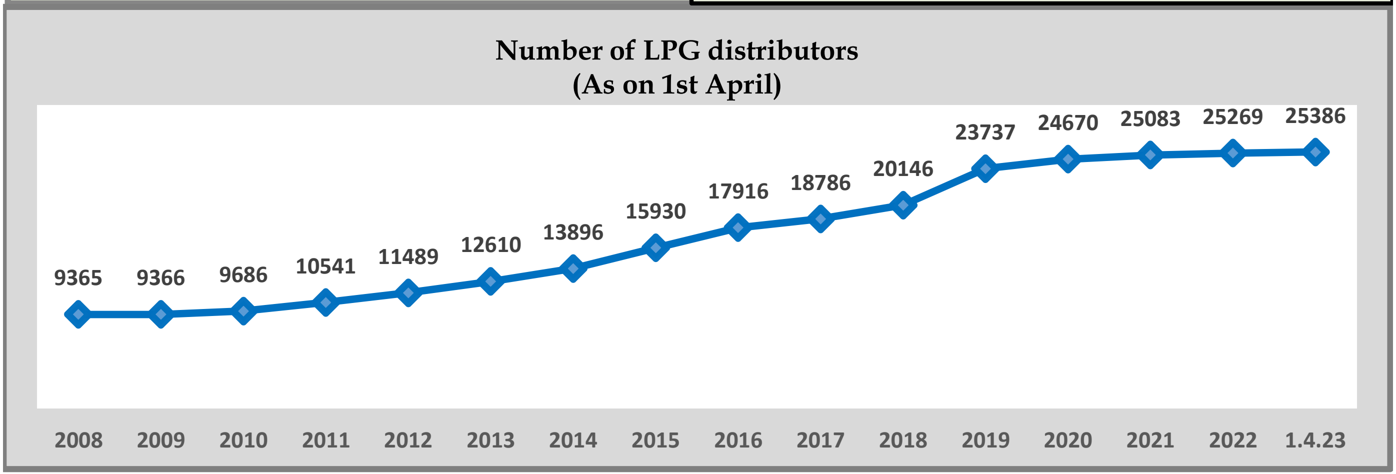
Source: PSU OMCs (IOCL,BPCL and HPCL)

1.Growth rates as on 01.04.2023 are with respect to figs as on 01.04.2022. Growth rates as on 1 April of any year are with respect to figs as on 1 April of previous year.

2. The LPG coverage is calculated by PSU OMCs based upon the active LPG domestic connections and the estimated number of households. The number of households has been projected by PSU OMCs based on 2011 census data. Factors like increasing nuclearization of families, migration of individuals/ families due to urbanization and reduction in average size of households etc. impact the growth of number of households. Due to these factors, the estimated no. of households through projection of 2011 census data may slightly differ from the actual no. of households in a State/UT. Further, this methodology does not include PNG (domestic) connections.

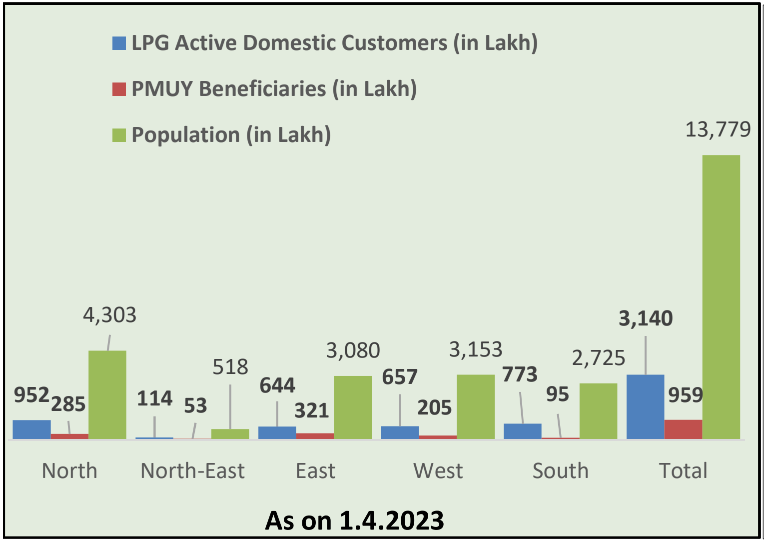

Numbers of active LPG domestic customers
(In Crore)
14.9
16.6
19.9
22.4
26.5
27.9
28.9
30.5
31.4
1.4.15
1.4.16
1.4.17
1.4.18
1.4.19
1.4.20
1.4.21
1.4.22
1.4.23

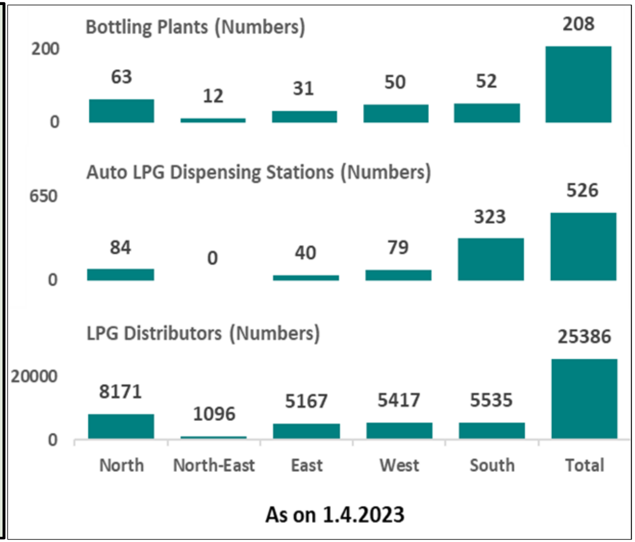

Number of PMUY beneficiaries (in Lakhs)
As on 1st April
1000
800
600
400
200
0
200
356
719
802
800
899
959
2017
2018
2019
2020
2021
2022
1.4.23 (P)


Number of LPG distributors
(As on 1st April)
9365
9366
9686
10541
11489
12610
13896
15930
17916
18786
20146
23737
24670
25083
25269
25386
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
1.4.23

17-Region-wise data on LPG marketing (As on 01.03.2023)						
Particulars	**North**	**North-East**	**East**	**West**	**South**	**Total**
LPG Active Domestic Customers (in Lakh)	952.2	113.9	643.9	657.2	773.1	3140.3
Population^ (in Lakh)	4302.6	518.2	3080.4	3152.8	2724.7	13778.7
PMUY Beneficiaries (in Lakh)	285.2	53.0	320.8	204.7	94.8	958.6
LPG Distributors (Numbers)	8171	1096	5167	5417	5535	25386
Auto LPG Dispensing Stations (Numbers)	84	0	40	79	323	526
Bottling Plants* (Numbers)	63	12	31	50	52	208

*Includes Numaligarh BP, Duliajan BP and CPCL BP. ^Population as on 1st July 2022 taken from RGI POPULATION PROJECTIONS 2011 – 2036





PART-E

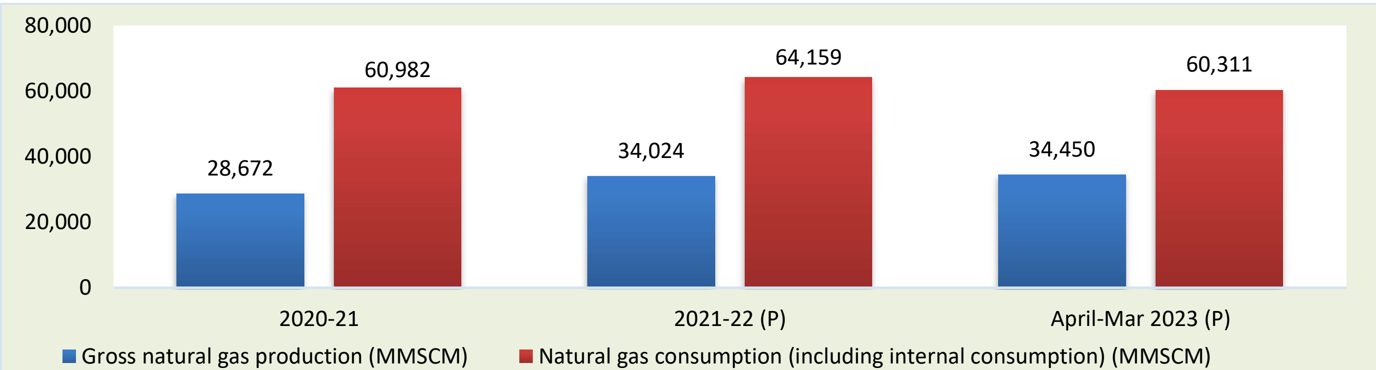
Natural Gas

18. Natural gas at a glance

(MMSCM)

Details	2020-21 (P)	2021-22 (P)	Mar			April-Mar		
			2021-22 (P)	2022-23 (Target)	2022-23 (P)	2021-22 (P)	2022-23 (Target)	2022-23 (P)
(a) Gross production	28,672	34,024	2,886	3,373	2,956	34,024	36,782	34,450
- ONGC	21,872	20,629	1,756	1,877	1,696	20,629	21,568	19,969
- Oil India Limited (OIL)	2,480	2,893	250	284	261	2,893	3,245	3,041
- Private / Joint Ventures (JVs)	4,321	10,502	880	1,212	999	10,502	11,968	11,440
(b) Net production (excluding flare gas and loss)	27,784	33,131	2,813		2,889	33,131		33,664
(c) LNG import#	33,198	31,028	2,637		2,237	31,028		26,647
(d) Total consumption including internal consumption (b+c)	60,982	64,159	5,450		5,126	64,159		60,311
(e) Total consumption **(in BCM)**	61.0	64.2	5.5		5.1	64.2		60.3
(f) Import dependency based on consumption (%), {c/d*100}	54.4	48.4	48.4		43.6	48.4		44.2

Feb - Mar 2023 DGCIS data prorated.



19. Coal Bed Methane (CBM) gas development in India

Prognosticated CBM resources		91.8	TCF
Established CBM resources		10.4	TCF
CBM Resources (33 Blocks)		62.8	TCF
Total available coal bearing areas (India)		32760	Sq. KM
Total available coal bearing areas with MoPNG/DGH		17652	Sq. KM
Area awarded		20460	Sq. KM
Blocks awarded*		36	Nos.
Exploration initiated (Area considered if any boreholes were drilled in the awarded block)		10670***	Sq. KM
Production of CBM gas	April-Mar 2023 (P)	673.45	MMSCM
Production of CBM gas	Mar 2023 (P)	55.77	MMSCM

*ST CBM Block awarded & relinquished twice- in CBM Round II and Round IV -Area considered if any boreholes were drilled in the awarded block. **MoPNG awarded 04 new CBM Blocks (Area 3862 sq. km) under Special CBM Bid Round 2021 in September 2022. ***Area considered if any boreholes were drilled in the awarded block.

19a. Status of Compressed Bio Gas (CBG) projects under SATAT (as on 01.04.2023) (Provisional)

Particulars	Units	IOCL	HPCL	BPCL	GAIL	IGL	Total
LOIs issued	No. of plants	3043	457	240	307	42	**4089**
Expected CBG production against LOI issued	Tons per day	22391	2506	956	1795	201	**27849**
No. of CBG plants commissioned/ Sale initiated	No. of plants	22	4	2[$]	9	3	**40**
Start of CBG sale from retail outlet(s)	Nos.	46	25*	41**	1		**113**
Injection/Supply of CBG in CGD network	GA Nos.	-	-	-	16[#]	2	**18**
Total Sale of CBG (since Sep'2019)	Tons	11086	1854*	2741**			**15,681**
Total Sale of CBG by GAIL under synchronization scheme	Tons				5333[##]		**5,333**

Total no. of GA where supply of CBG initiated is 16. ## Sale of CBG by GAIL includes sales through its own channels as well as through other CGDs for CBG sourced under synchronization scheme from OMCs & IGL's LoI holders. *2 HPCL Retail Outlets sourcing CBG from HPCL LOI holder plants, 23 HPCL Retail Outlets sourcing CBG from other than HPCL LOI holder plants. ** BPCL initiated CBG sales from 41 ROS. Out of 41 ROS, for one RO BPCL is sourcing CBG from its own LOI holder in other ROs CBG is being sourced from other OMC's LOI. [$] Total No. of CBG and Bio gas plants commissioned is 8.

20. Common Carrier Natural Gas pipeline network as on 31.12.2022

Nature of pipeline		GAIL	GSPL	PIL	IOCL	AGCL	RGPL	GGL	DFPCL	ONGC	GIGL	GITL	Others*	Total
Operational	Length	9,582	2,695	1,479	143	107	304	73	42	24				**14,449**
	Capacity	167.2	43.0	85.0	20.0	2.4	3.5	5.1	0.7	6.0				**-**
Partially commissioned[#]	Length	4,778			282						1,255	365		**6,680**
	Capacity				-						-	-		**-**
Total operational length		**14,360**	**2,695**	**1,479**	**425**	**107**	**304**	**73**	**42**	**24**	**1,255**	**365**	**0**	**21,129**
Under construction	Length	5,095	100		1,149						1,077	1,666	2,915	**12,002**
	Capacity	-	3.0		-						-	-	-	**-**
Total length		**19,455**	**2,795**	**1,479**	**1,574**	**107**	**304**	**73**	**42**	**24**	**2,332**	**2,031**	**2,915**	**33,131**

Source: PNGRB; Length in KMs ; Authorized Capacity in MMSCMD; *Others-APGDC, HEPL, IGGL, IMC, Consortium of H-Energy. Total authorized Natural Gas pipelines including Tie-in connectivity, dedicated & STPL is 35335 Kms (P)

21. Existing LNG terminals

Location	Promoters	Capacity as on 01.04.2023	% Capacity utilisation (April-Feb 2023)
Dahej	Petronet LNG Ltd (PLL)	17.5 MMTPA	77.8
Hazira	Shell Energy India Pvt. Ltd.	5.2 MMTPA	36.2
Dabhol	Konkan LNG Limited	*5 MMTPA	36.5
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	18.4
Ennore	Indian Oil LNG Pvt Ltd	5 MMTPA	13.0
Mundra	GSPC LNG Limited	5 MMTPA	16.7
Total Capacity		**42.7 MMTPA**	

* To increase to 5 MMTPA with breakwater. Only HP stream of capacity of 2.9 MMTPA is commissioned

22. Status of PNG connections and CNG stations across India (Nos.), as on 28.02.2023(P)

State/UT (State/UTs are clubbed based on the GAs authorised by PNGRB)	CNG Stations	PNG connections		
		Domestic	Commercial	Industrial
Andhra Pradesh	161	248,716	420	32
Andhra Pradesh, Karnataka & Tamil Nadu	35	170	0	5
Assam	2	48,958	1,332	439
Bihar	88	89,907	67	3
Bihar & Jharkhand	1	6,567	0	0
Bihar & Uttar Pradesh	3	0	0	0
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	25	25,214	118	23
Dadra & Nagar Haveli (UT)	7	10,968	56	55
Daman & Diu (UT)	4	5,134	47	43
Daman and Diu & Gujarat	14	1,764	3	0
Goa	12	10,644	15	30
Gujarat	974	2,948,293	22,269	5,735
Haryana	323	308,722	799	1,622
Haryana & Himachal Pradesh	10	0	0	0
Haryana & Punjab	22	2	0	0
Himachal Pradesh	7	5,120	4	0
Jharkhand	69	104,957	5	0
Karnataka	271	381,437	514	291
Kerala	104	39,690	19	15
Kerala & Puducherry	9	343	0	0
Madhya Pradesh	207	200,197	330	425
Madhya Pradesh and Chhattisgrah	5	0	0	0
Madhya Pradesh and Rajasthan	28	255	0	0
Madhya Pradesh and Uttar Pradesh	16	0	0	2
Maharashtra	677	2,774,007	4,633	845
Maharashtra & Gujarat	60	140,711	4	14
Maharashtra and Madhya Pradesh	1	0	0	0
National Capital Territory of Delhi (UT)	473	1,385,730	3,502	1,801
Odisha	51	80,545	5	0
Puducherry	1	0	0	0
Puducherry & Tamil Nadu	8	163	0	0
Punjab	191	65,621	321	234
Rajasthan	220	199,090	81	246
Tamil Nadu	171	71	0	6
Telangana	143	189,462	77	95
Telangana and Karnataka	1	0	0	0
Tripura	18	58,959	506	62
Uttar Pradesh	738	1,333,977	2,165	2,620
Uttar Pradesh & Rajasthan	40	18,958	37	340
Uttar Pradesh and Uttrakhand	17	6,940	0	0
Uttrakhand	29	65,173	57	83
West Bengal	47	49	0	0
Total	**5,283**	**10,756,514**	**37,386**	**15,066**

Source: PNGRB

Note: 1. All the GAs where PNG connections/CNG Stations have been established are considered as Operational, 2. Under normal conditions. Operation of any particular GA commences within around one year of authorization. 3. State/UTs wherever clubbed are based on the GAs authorised by PNGRB.

23. Domestic natural gas price and gas price ceiling (GCV basis)

Period	Domestic Natural Gas price in	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	2.5	5.3
April 2017 - September 2017	2.48	5.56
October 2017 - March 2018	2.89	6.3
April 2018 - September 2018	3.06	6.78
October 2018 - March 2019	3.36	7.67
April 2019 - September 2019	3.69	9.32
October 2019 - March 2020	3.23	8.43
April 2020 - September 2020	2.39	5.61
October 2020 - March 2021	1.79	4.06
April 2021 - September 2021	1.79	3.62
October 2021 - March 2022	2.9	6.13
April 2022 - September 2022	6.1	9.92
October 2022 - March 2023	8.57	12.46
1 April 2023 - 7 April 2023	9.16	12.12

Period	Domestic Gas calculated price in US$/MMBTU	Domestic Gas ceiling price for ONGC/OIL in US$/MMBTU	Period	HP-HT Gas price ceiling in US$/MMBTU
8 April 2023 - 30 April 2023	7.92	6.50	April 2023 - September 2023	12.12

Natural Gas prices are on GCV basis

24. CNG/PNG prices

City	CNG (Rs/Kg)	PNG (Rs/SCM)	Source
Delhi	73.59	48.59	IGL website (09.04.2023)
Mumbai	79.00	49.00	MGL website (08.04.2023)

Indian Natural Gas Spot Price for Physical Delivery

IGX Price Index Month	Avg. Price		Volume (MMSCM)	Source
	INR/MMBtu	$/MMBtu		
Mar 2022	1169	14.21	7.90	As per IGX website: www.igxindia.com

*Prices are weighted average prices |$1=INR 82.28| 1 MMBtu=25.2 SCM (Data Excluding Ceiling Price Gas)

PART-F

Taxes & Duties on Petroleum Products

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

International FOB prices/ Exchange rates ($/bbl)

Particulars	2020-21	2021-22	Mar 2023
Crude oil (Indian Basket)	44.82	79.18	78.54
Petrol	47.68	89.66	94.29
Diesel	47.86	88.45	98.33
Kerosene	43.60	85.31	94.51
LPG ($/MT)	415.17	692.67	732.00
FO ($/MT)	259.30	445.25	390.25
Naphtha ($/MT)	378.93	698.25	612.01
Exchange (Rs./$)	74.20	74.51	82.29

Customs, excise duty & GST rates

Product	Basic customs duty #	Excise duty	GST rates
Petrol	2.50%	Rs 19.90/Ltr	**
Diesel	2.50%	Rs 15.80/Ltr	**
PDS SKO	5.00%	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)	2.50%		18.00%
Naphtha (Non-Fert)	2.50%^^		18.00%
ATF	5.00%	11% *	**
Crude Oil	Rs.1/MT+ Rs.50/-MT as NCCD	Rs.1/MT+ Cess@20% + Rs.50 /-MT NCCD + Rs. Nil/ MT SAED ^^^	**

*2% for scheduled commuter airlines from regional connectivity scheme airports ** GST Council shall recommend the date on which GST shall be levied on petroleum crude , HSD, MS, natural gas and ATF; # Social welfare surcharge @ 10% is levied on aggregate duties of Customs excluding CVD in lieu 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, ^^ effective 02.02.2023 ,^^^ Effective 04.04.2023 SAED on crude oil.

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

Particulars	Petrol	Diesel
Price charged to dealers (excluding Excise Duty and VAT)	57.36	58.17
Excise Duty	19.90	15.80
Dealers' Commission (Average)	3.75	2.54
VAT (incl VAT on dealers' commission)	15.71	13.11
Retail Selling Price	**96.72**	**89.62**

Particulars	PDS SKO	Subsidised Domestic LPG
Price before taxes and dealers'/distributors' commission	58.94	985.63
Dealers'/distributors' commission	2.66	64.84
GST (incl GST on dealers'/distributors' commission)	3.08	52.53
Retail Selling Price	**64.68**	**1103.00**

*Petrol and Diesel at Delhi as per IOCL are as on 01st April 2023. PDS SKO at Mumbai as on 1st April 2023 and Subsidised Domestic LPG at Delhi as on 1st April 2023.

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

PDS Kerosene /DBTL Subsidy

PDS Kerosene

Product	2018-19	2019-20	2020-21
	Rs./Crore		
Under recovery	5,950	1,833	0
Subsidy under DBTK #	98	42	0
Total	**6,048**	**1,875**	**0**

#DBTK subsidy excludes cash incentive/ assistance for establishment of institutional mechanisam for direct transfer of subsidy paid to States/UTs. DBTK subsidy for 2019-20 is till Oct 2019.

Domestic LPG under DBTL (Direct benefit transfer for LPG)

Particulars	2018-19	2019-20	2020-21
	Rs./Crore		
DBTL subsidy	31,447	22,635	3,559
PME &IEC^	92	91	99
Total	**31,539**	**22,726**	**3,658**

^ on payment basis (PME & IEC- Project Management Expenditure & Information Education and Communication)

Sales & profit of petroleum sector (Rs. Crores)

Particulars	2021-22		9M-2022-23 (P)	
	Turnover	PAT	Turnover	PAT
Upstream/midstream Companies (PSU)	215,625	54,557	246,934	48,797
Downstream Companies (PSU)	15,29,502	39,355	14,44,032	-18,621
Standalone Refineries (PSU)	169,984	7,859	188,695	6,194
Private-RIL	466,425	39,084	438,963	30,384

Borrowings of OMCs (Rs. Crores), As on

Company	Mar\`21	Mar'22	Dec\`22 (P)
IOCL	102,327	110,799	144,065
BPCL	26,315	24,123	40,256
HPCL	40,009	43,193	64,245

Petroleum sector contribution to Central/State Govt.

Particulars	2020-21	2021-22	9M-2022-23 (P)
Central Government	4,55,069	492,303	307,913
% of total revenue receipts	28%	24%	
State Governments	2,17,650	282,122	237,089
% of total revenue receipts	8%	8%	
Total (Rs. Crores)	**6,72,719**	**7,74,425**	**545,002**

Total Subsidy as a percentage of GDP (at current prices)

Particulars	2018-19	2019-20	2020-21
Petroleum subsidy	0.23	0.13	0.06

Note: GDP figure for 2018-19, 2019-20 and 2020-21 are Revised Estimates.

**Totals may not tally due to roundoff.

PART-G

Miscellaneous

26. Capital expenditure of PSU oil companies

(Rs in crores)

Company	2019-20	2020-21	2021-22 (P)	2022-23 (P)	
				Target (Annual)	April -Mar 23
ONGC Ltd	30,115	26,441	26,621	29,950	29,209
ONGC Videsh Ltd (OVL)	5,363	5,351	4,836	8,180	2,723
Oil India Ltd (OIL)	3,724	12,802	4,239	4,302	5,057
GAIL (India) Ltd	4,381	5,560	6,970	7,500	8,313
Indian Oil Corp. Ltd. (IOCL)	28,316	27,195	29,604	28,549	35,205
Hindustan Petroleum Corp. Ltd (HPCL)	13,773	14,036	16,205	14,500	13,847
Bharat Petroleum Corp. Ltd (BPCL)	10,255	10,697	11,449	10,000	11,527
Mangalore Refinery & Petrochem Ltd (MRPL)	1,318	2,218	604	815	641
Chennai Petroleum Corp. Ltd (CPCL)	969	592	575	584	609
Numaligarh Refinery Ltd (NRL)	536	981	3,403	6,774	6,615
Balmer Lawrie Co. Ltd (BL)	40	42	23	40	46
Engineers India Ltd (EIL)	164.43	730	67	160	60
Total	**98,955**	**106,642**	**104,596**	**111,354**	**113,853**

Includes expenditure on investment in JV/subsidiaries.

(P) Provisional

Totals may not tally due to roundoff.

27. 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
Aviation Turbine Fuel (ATF)	1	1.288	8.10
Light Diesel Oil (LDO)	1	1.172	7.37
Furnace Oil (FO)	1	1.0424	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 (SCM)	35.31 Cubic Feet	1 MMBTU	25.2 SCM @10000 kcal/SCM
1 Billion Cubic Metres (BCM)/year of Gas	2.74 MMSCMD	GCV (Gross Calorific Value)	10,000 kcal/SCM
1 Trillion Cubic Feet (TCF) of Gas Reserve	3.88 MMSCMD	NCV (Net Calorific Value)	90% of GCV
1 Million Metric Tonne Per Annum (MMTPA) of LNG	3.60 MMSCMD	Gas required for 1 MW power generation	4,541 SCM/day
1 MT of LNG	1,325 SCM	Power generation from 1 MMSCMD of gas	220 MW

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