Snapshot of India's Oil & Gas data

Monthly Ready Reckoner

January 2024

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 January 2024 was 2.5 MMT. OIL registered a production of 0.3 MMT, ONGC registered a production of 1.6 MMT whereas PSC/RSC registered production of 0.6 MMT during January 2024. There is a growth of 0.7% in crude oil and condensate production during January 2024 as compared to January 2023.
- Total Crude oil processed during January 2024 was 22.6 MMT which is 1.1% lower than January 2023, where PSU/JV refiners processed 15.3 MMT and private refiners processed 7.3 MMT of crude oil. Total indigenous crude oil processed was 2.2 MMT and total Imported crude oil processed was 20.4 by all Indian refineries (PSU+JV+PVT). There was a growth of 2.8 % in total crude oil processed in April January FY 2023 – 24 as compared to same period of FY 2022 – 23.
- Crude oil imports increased by 5.7% and 0.9% during January 2024 and April-January 2023-24 respectively as compared to the corresponding period of the previous year. As compared to net import bill for Oil & Gas for January 2023 of $10.6 billion, the net import bill for Oil & Gas for January 2024 was $11.7 billion. Out of which, crude oil imports constitutes $12.1 billion, LNG imports $1.1 billion and the exports were $3.5 billion during January 2023.
- The price of Brent Crude averaged $80.32/bbl during January 2024 as against $77.91/bbl during December 2023 and $82.78/bbl during January 2023. The Indian basket crude price averaged $79.22/bbl during January 2024 as against $77.42/bbl during December 2023 and $80.92 /bbl during January 2023.
- Production of petroleum products was 23.0 MMT during January 2024 which is 4.3% lower than January 2023. Out of 23.0 MMT, 22.7 MMT was from refinery production & 0.3 MMT was from fractionator. There was a growth of 3.9 % in production of petroleum products in April-January FY 2023 – 24 as compared to same period of FY 2022 – 23. Out of total POL production, in January 2024, share of HSD is 41.4 %, MS 16.3 %, Naphtha 7.3 %, ATF 6.7 %, Pet Coke 5.6 %, LPG 4.8% which are of major products and rest are shared by Bitumen, FO/LSHS, LDO, Lubes & others.
- POL products imports increased by 4.9% and 9.4% during January 2024 and April-January 2023-24 respectively as compared to the corresponding period of the previous year. Increase in POL products imports during April-January 2023-24 were mainly due to increase in imports of petcoke, bitumen and fuel oil (FO).

•	Exports of POL products increased by 7.5% and 3.1% during January 2024 and April-January 2023-24 respectively as compared to the corresponding period of the previous year. Increase in POL products exports during April-January 2023-24 were mainly due to increase in exports of aviation turbine fuel (ATF), vacuum gas oil (VGO) and motor-spirit (MS).
•	The consumption of petroleum products during April-January 2024, with a volume of 192.7 MMT, reported a growth of 5.2 % compared to the volume of 183.1 MMT during the same period of the previous year. This growth was led by 6.1% growth in MS, 4.3% in HSD & 11.9% in ATF & 15.4% in Naptha consumption besides LPG, Lubes, Bitumen, Petcoke and LDO during the period. The consumption of petroleum products during January 2024 recorded growth of 8.3% with a volume of 20.0 MMT compared to the same period of the previous year.
•	Ethanol blending with Petrol was 12.2% during January 2024 and cumulative ethanol blending during November2023-January 2024 was 11.2%.
•	Total Natural Gas Consumption (including internal consumption) for the month of January 2024 was 5494 MMSCM which was 14% higher than the corresponding month of the previous year. The cumulative consumption of 55074 MMSCM for the current financial year till January 2024 was higher by 10% compared with the corresponding period of the previous year.
•	Gross production of natural gas for the month of January 2024 (P) was 3139 MMSCM which was higher by 6% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 30353 MMSCM for the current financial year till January 2024 was higher by 5 % compared with the corresponding period of the previous year.
•	LNG import for the month of January 2024 (P) was 2410 MMSCM which was 26% higher than the corresponding month of the previous year. The cumulative import of 25305 (P) MMSCM for the current financial year till January 2024 is higher by 15% compared with the corresponding period of the previous year.

PART-A

Economic Indicators

1. Selected indicators of the Indian economy

	Economic indicators	Unit/ Base	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	Population (basis RGI projections)	Billion	1.323	1.337	1.351	1.365	1.377	1.388
2	GDP at constant (2011-12 Prices)	Growth %	6.5 2nd RE	4.0 1st RE	-6.6 1st RE	9.1 1st RE	7.2 PE	7.3 H1, 2023-24 (E)
3	Agricultural Production (Food grains)	MMT	285.2	297.5	310.7	315.7 4th AE	323.6 2nd AE	-
		Growth %	0.1	4.3	4.5	1.6	2.5	-
4	Gross Fiscal Deficit (as percent of GDP)	%	3.4	4.6	9.5 RE	6.7 RE	6.4 RE	7.8 (Q1) E

	Economic indicators	Unit/ Base	2021-22	2022-23	January		April-January	
					2022-23	2023-24 (P)	2022-23	2023-24 (P)
5	Index of Industrial Production (Base: 2011-12)	Growth %	11.4	5.5#	5.1*	3.8* QE	5.5#	6.1#
6	Imports^	$ Billion	611.9	714.2	52.8	54.4	601.5	561.1
7	Exports^	$ Billion	422.0	451.0	35.8	36.9	372.1	353.9
8	Trade Balance	$ Billion	-189.9	-263.2	-17.0	-17.5	-229.4	-207.2
9	Foreign Exchange Reserves @	$ Billion	617.6	578.4	576.8	616.7	-	-

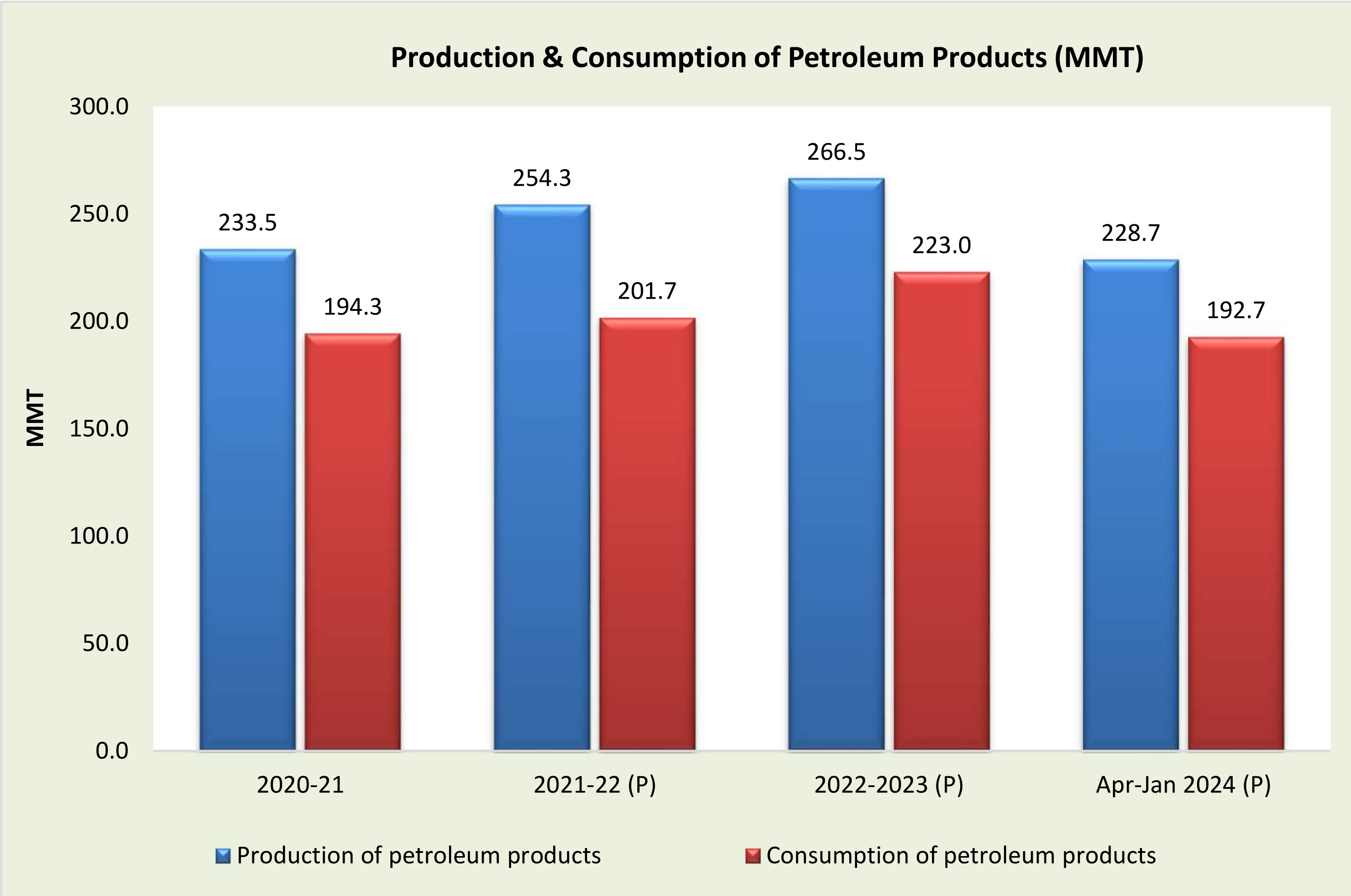
Population projection by RGI is taken as on 1st July for the year. IIP is for the month of *Dec'23 and #April-Dec'23; @ 2021-22 - as on March 25, 2022, 2022-23 as on March 31, 2023, January 2023 as on January 30, 2023 and January, 2024 as on January 26, 2024; ^Imports & Exports are for Merchandise for the month of January 2024; 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	2021-22 (P)	2022-23 (P)	January 2022-23 (P)	January 2023-24 (P)	April-January 2022-23 (P)	April-January 2023-24 (P)
1	Crude oil production in India#	MMT	29.7	29.2	2.5	2.5	24.6	24.5
2	Consumption of petroleum products*	MMT	201.7	223.0	18.5	20.0	183.1	192.7
3	Production of petroleum products	MMT	254.3	266.5	24.0	23.0	220.2	228.7
4	Gross natural gas production	MMSCM	34,024	34,450	2,975	3,139	28,843	30,353
5	Natural gas consumption	MMSCM	64,159	59,969	4,823	5,494	50,100	55,074
6	Imports & exports:							
	Crude oil imports	MMT	212.4	232.7	20.2	21.4	192.5	194.2
		$ Billion	120.7	157.5	11.4	12.1	136.2	110.5
	Petroleum products (POL) imports*	MMT	39.0	44.6	3.8	4.0	36.5	40.0
		$ Billion	23.7	26.9	2.0	2.0	22.5	19.2
	Gross petroleum imports (Crude + POL)	MMT	251.4	277.3	24.0	25.4	229.0	234.1
		$ Billion	144.3	184.4	13.4	14.1	158.8	129.7
	Petroleum products (POL) export	MMT	62.8	61.0	4.5	4.8	49.9	51.5
		$ Billion	44.4	57.3	3.8	3.5	48.8	39.2
	LNG imports*	MMSCM	31,028	26,304	1,909	2,410	21,920	25,305
		$ Billion	13.5	17.1	1.1	1.1	14.8	10.9
	Net oil & gas imports	$ Billion	113.4	144.2	10.6	11.7	124.8	101.3
7	Petroleum imports as percentage of India's gross imports (in value terms)	%	23.6	25.8	21.8	24.2	28.9	25.7
8	Petroleum exports as percentage of India's gross exports (in value terms)	%	10.5	12.7	10.0	9.0	14.5	12.4
9	Import dependency of crude oil (on POL consumption basis)	%	85.5	87.4	87.1	88.2	87.0	87.6

#Includes condensate; *Private direct imports are prorated for the period Nov'23 to Jan'24 for POL. LNG Imports figure from DGCIS are prorated for Dec'23 to Jan'24.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
233.5
194.3
254.3
201.7
266.5
223.0
228.7
192.7
2020-21
2021-22 (P)
2022-2023 (P)
Apr-Jan 2024 (P)
Production of petroleum products
Consumption of petroleum products

PART-B

Crude Oil, Refining & Production

3. Indigenous crude oil production (Million Metric Tonnes)

Details	2021-22	2022-23 (P)	January			April-January		
			2022-23 (P)	2023-24 Target*	2023-24 (P)	2022-23 (P)	2023-24 Target*	2023-24 (P)
ONGC	18.5	18.4	1.6	1.6	1.5	15.5	16.1	15.1
Oil India Limited (OIL)	3.0	3.2	0.3	0.3	0.3	2.6	2.8	2.8
Private / Joint Ventures (JVs)	7.0	6.2	0.5	0.6	0.5	5.3	6.2	4.8
Total Crude Oil	**28.4**	**27.8**	**2.4**	**2.5**	**2.3**	**23.4**	**25.1**	**22.7**
ONGC condensate	0.9	1.0	0.1	0.0	0.1	0.9	0.0	0.9
PSC condensate	0.3	0.31	0.03	0.0	0.1	0.3	0.0	0.9
Total condensate	**1.2**	**1.4**	**0.13**	**0.0**	**0.2**	**1.1**	**0.0**	**1.8**
Total (Crude + Condensate) (MMT)	**29.7**	**29.2**	**2.5**	**2.5**	**2.5**	**24.6**	**25.1**	**24.5**
Total (Crude + Condensate) (Million Bbl/Day)	0.60	0.59	0.59	0.60	0.59	0.59	0.60	0.59

*Provisional targets inclusive of condensate.

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

Details	2021-22	2022-23 (P)	January		April-January	
			2022-23 (P)	2023-24 (P)	2022-23 (P)	2023-24 (P)
Total domestic production (MMTOE)	63.7	63.6	5.5	5.6	53.4	54.9
Overseas production (MMTOE)	21.8	19.5	1.7	1.7	16.3	16.6

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

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

	Details	2021-22	2022-23 (P)	January		April-January	
				2022-23 (P)	2023-24 (P)	2022-23 (P)	2023-24 (P)
1	High Sulphur crude	185.0	197.9	17.6	18.2	163.3	169.7
2	Low Sulphur crude	56.7	57.4	5.3	4.4	48.1	47.6
Total crude processed (MMT)		**241.7**	**255.2**	**22.8**	**22.6**	**211.4**	**217.3**
Total crude processed (Million Bbl/Day)		4.85	5.13	5.39	5.34	5.06	5.21
Percentage share of HS crude in total crude oil processing		**76.6%**	**77.5%**	**77.0%**	**80.5%**	**77.2%**	**78.1%**

6. Quantity and value of crude oil imports

Year	Quantity (MMT)	$ Million	Rs. Crore
2021-22	212.4	1,20,675	9,01,262
2022-23	232.7	1,57,531	12,60,372
April-Jan 2023-24(P)	194.2	1,10,458	9,14,457

7. Self-sufficiency in petroleum products (Million Metric Tonnes)

Particulars		2021-22	2022-23 (P)	January		April-January	
				2022-23 (P)	2023-24 (P)	2022-23 (P)	2023-24 (P)
1	Indigenous crude oil processing	27.0	26.4	2.2	2.2	22.4	22.5
2	Products from indigenous crude (93.3% of crude oil processed)	25.2	24.7	2.1	2.1	20.9	21.0
3	Products from fractionators (Including LPG and Gas)	4.1	3.5	0.3	0.3	3.0	2.9
4	Total production from indigenous crude & condensate **(2 + 3)**	29.3	28.2	2.4	2.4	23.8	23.9
5	Total domestic consumption	201.7	223.0	18.5	20.0	183.1	192.7
% Self-sufficiency (4 / 5)		**14.5%**	**12.6%**	**12.9%**	**11.8%**	**13.0%**	**12.4%**

8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)										
Sl. no.	Refinery	Installed capacity (01.04.2023) MMTPA	Crude oil processing (MMT)							
			2021-22	2022-23 (P)	January			April-January		
					2022-23 (P)	2023-24 (Target)	2023-24 (P)	2022-23 (P)	2023-24 (Target)	2023-24 (P)
1	Barauni (1964)	6.0	5.6	6.8	0.6	0.6	0.5	5.7	5.5	5.5
2	Koyali (1965)	13.7	13.5	15.6	1.3	1.3	1.2	13.0	11.9	12.6
3	Haldia (1975)	8.0	7.3	8.5	0.7	0.7	0.7	7.1	6.2	6.6
4	Mathura (1982)	8.0	9.1	9.6	0.8	0.9	0.6	7.9	7.7	7.5
5	Panipat (1998)	15.0	14.8	13.8	1.3	1.4	1.2	11.3	12.1	12.5
6	Guwahati (1962)	1.0	0.7	1.1	0.09	0.09	0.1	0.9	0.8	0.8
7	Digboi (1901)	0.65	0.7	0.7	0.06	0.05	0.07	0.6	0.6	0.6
8	Bongaigaon(1979)	2.70	2.6	2.8	0.3	0.1	0.3	2.3	2.3	2.5
9	Paradip (2016)	15.0	13.2	13.6	1.4	1.3	1.4	11.0	12.7	12.5
	IOCL-TOTAL	**70.1**	**67.7**	**72.4**	**6.5**	**6.4**	**6.1**	**59.8**	**59.8**	**61.1**
10	Manali (1969)	10.5	9.0	11.3	1.0	0.9	1.0	9.4	8.4	9.6
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**	**9.0**	**11.3**	**1.0**	**0.9**	**1.0**	**9.4**	**8.4**	**9.6**
12	Mumbai (1955)	12.0	14.4	14.5	1.4	1.3	1.2	11.9	12.0	12.3
13	Kochi (1966)	15.5	15.4	16.0	1.5	1.4	1.6	13.1	13.2	14.6
14	Bina (2011)	7.8	7.4	7.8	0.7	0.7	0.7	6.4	5.7	5.8
	BPCL-TOTAL	**35.3**	**37.2**	**38.4**	**3.6**	**3.3**	**3.5**	**31.4**	**30.9**	**32.7**
15	Numaligarh (1999)	3.0	2.6	3.1	0.3	0.3	0.3	2.6	2.3	2.0

Sl. no.	Refinery	Installed capacity (01.04.2023) MMTPA	Crude oil processing (MMT)							
			2021-22	2022-23	January			April-January		
					2022-23 (P)	2023-24 (Target)	2023-24 (P)	2022-23 (P)	2023-24 (Target)	2023-24 (P)
16	Tatipaka (2001)	0.07	0.08	0.07	0.01	0.006	0.006	0.06	0.05	0.05
17	MRPL-Mangalore (1996)	15.0	14.9	17.1	1.5	1.5	1.5	14.2	13.1	13.5
	ONGC-TOTAL	**15.1**	**14.9**	**17.2**	**1.5**	**1.5**	**1.5**	**14.3**	**13.1**	**13.6**
18	Mumbai (1954)	9.5	5.6	9.8	0.8	0.8	0.9	8.1	7.4	8.4
19	Visakh (1957)	11.0	8.4	9.3	0.8	1.1	1.2	7.7	9.8	10.1
20	HMEL-Bathinda (2012)	11.3	13.0	12.7	1.1	1.0	0.9	10.6	9.5	10.7
	HPCL- TOTAL	**31.8**	**27.0**	**31.8**	**2.8**	**2.9**	**2.9**	**26.4**	**26.8**	**29.2**
21	RIL-Jamnagar (DTA) (1999)	33.0	34.8	34.4	2.8	2.8	3.0	29.0	29.0	28.7
22	RIL-Jamnagar (SEZ) (2008)	35.2	28.3	27.9	2.5	2.5	2.6	23.1	23.1	23.5
23	NEL-Vadinar (2006)	20.0	20.2	18.7	1.7	1.7	1.7	15.4	15.4	17.0
All India (MMT)		**253.9**	**241.7**	**255.2**	**22.8**	**22.4**	**22.6**	**211.4**	**208.8**	**217.3**
All India (Million Bbl/Day)		**5.02**	**4.85**	**5.13**	**5.39**	**5.29**	**5.34**	**5.06**	**5.00**	**5.21**

Note: Provisional Targets; Some sub-totals/ totals may not add up due to rounding off at individual levels. The Inputs to Refinery includes both Crude Oil and Other Inputs (OI), however Other Inputs (OI) do not form part of the above data.

9. Major crude oil and product pipeline network (as on 01.02.2024)

Details		ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Others*	Total
Crude Oil	Length (KM)	1,284	1,193	688	1,017	5,822	937			**10,941**
	Cap (MMTPA)	60.6	9.0	10.7	11.3	53.8	7.8			**153.1**
Products	Length (KM)		654			12,344	2,600	5,123	2,399	**23,120**
	Cap (MMTPA)		1.7			70.6	22.6	35.2	10.2	**140.3**

*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

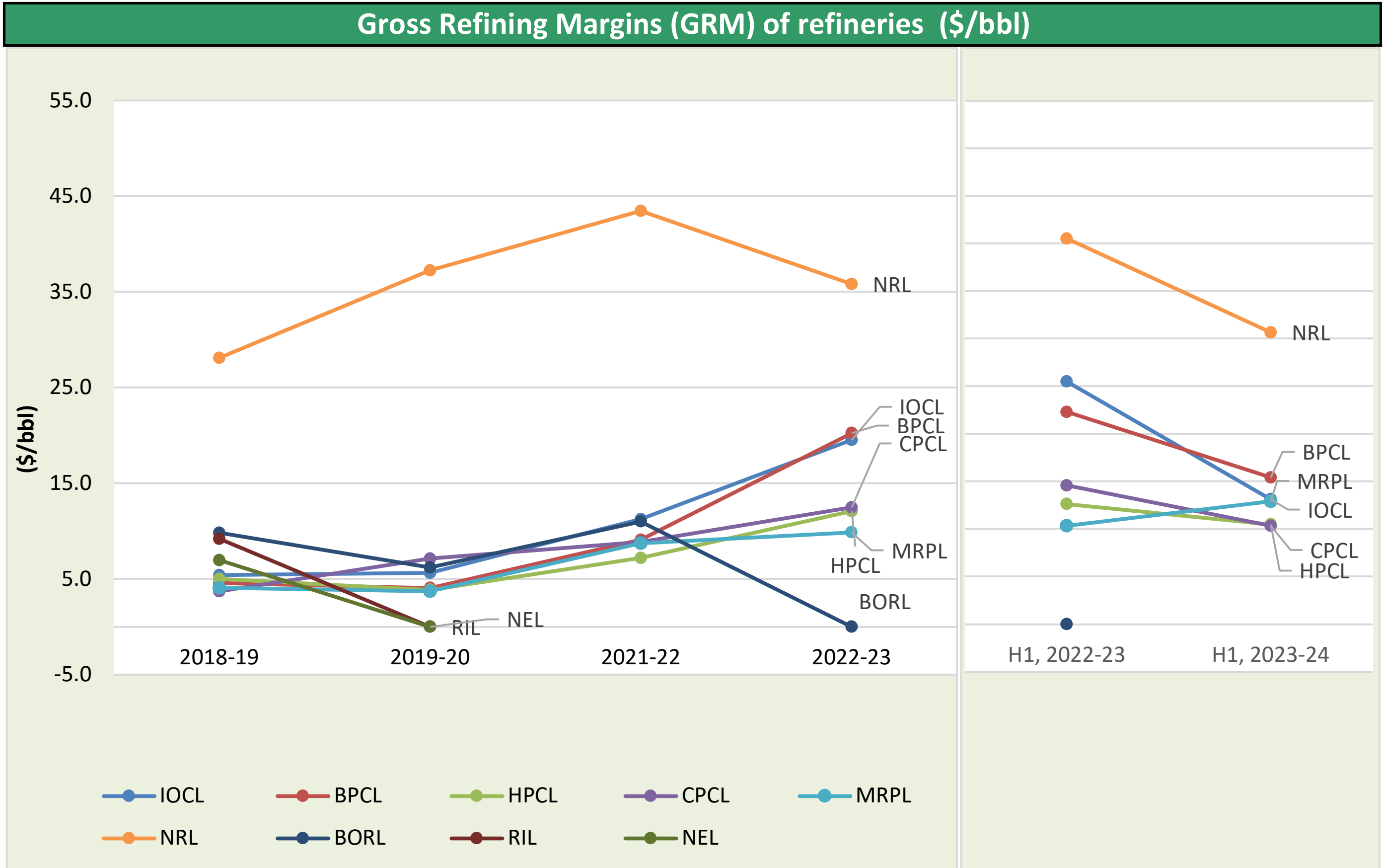
- Crude Oil Pipeline
- Ongoing Crude Oil Pipeline
- Product Pipeline
- Ongoing Product Pipeline
- LPG Pipeline
- Ongoing LPG Pipeline
- Gas Pipeline
- Ongoing Gas Pipeline

10. Gross Refining Margins (GRM) of refineries ($/bbl)					
Company	**2020-21**	**2021-22**	**2022-23**	**Apr - Sept**	
				2022-23	**2023-24**
IOCL	5.64	11.25	19.52	25.49	13.12
BPCL	4.06	9.09	20.24	22.30	15.42
HPCL	3.86	7.19	12.09	12.62	10.49
CPCL	7.14	8.85	12.48	14.58	10.34
MRPL	3.71	8.72	9.88	10.33	12.91
NRL	37.23	43.46	35.82	40.51	30.65
BORL	6.20	11.00	#	#	#
RIL	*	*	*	*	*
NEL	*	*	*	*	*

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

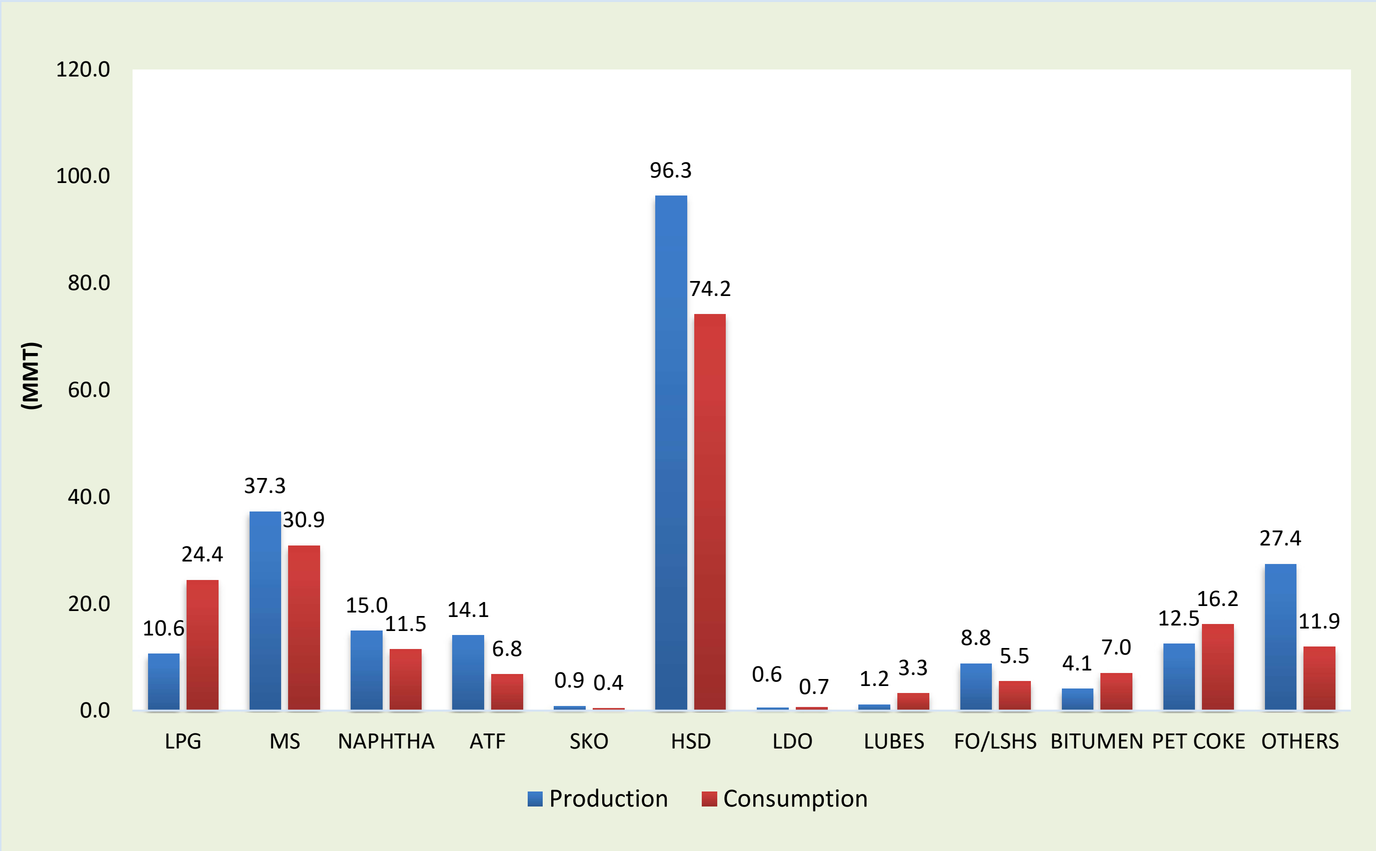
PART-C

Consumption

11. Production and consumption of petroleum products (Million Metric Tonnes)												
Products	**2021-22**		**2022-23 (P)**		**Jan- 2023 (P)**		**Jan-2024 (P)**		**Apr-Jan 2023 (P)**		**Apr-Jan 2024 (P)**	
	Prod	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**	**Prod**	**Cons**
LPG	12.2	28.3	12.8	28.5	1.1	2.5	1.1	2.7	10.7	23.7	10.6	24.4
MS	40.2	30.8	42.8	35.0	3.8	2.8	3.8	3.1	35.2	29.1	37.3	30.9
NAPHTHA	20.0	13.2	17.0	12.2	1.5	1.1	1.7	1.3	14.2	9.9	15.0	11.5
ATF	10.3	5.0	15.0	7.4	1.4	0.7	1.5	0.7	12.3	6.1	14.1	6.8
SKO	1.9	1.5	0.9	0.5	0.1	0.0	0.1	0.0	0.7	0.4	0.9	0.4
HSD	107.2	76.7	113.8	85.9	10.2	7.2	9.5	7.4	94.1	71.1	96.3	74.2
LDO	0.8	1.0	0.6	0.7	0.07	0.1	0.05	0.1	0.5	0.6	0.6	0.7
LUBES	1.2	4.5	1.3	3.7	0.1	0.3	0.1	0.3	1.1	3.0	1.2	3.3
FO/LSHS	8.9	6.3	10.4	7.0	0.8	0.6	0.8	0.6	8.8	5.8	8.8	5.5
BITUMEN	5.1	7.8	4.9	8.0	0.4	0.7	0.5	0.8	3.8	6.1	4.1	7.0
PET COKE	15.5	14.3	15.4	18.3	1.4	1.4	1.3	1.7	12.7	14.8	12.5	16.2
OTHERS	30.9	12.3	31.5	15.8	3.0	1.1	2.6	1.3	26.0	12.5	27.4	11.9
ALL INDIA	**254.3**	**201.7**	**266.5**	**223.0**	**24.0**	**18.5**	**23.0**	**20.0**	**220.2**	**183.1**	**228.7**	**192.7**
Growth (%)	**-3.1%**	**-5.4%**	**4.8%**	**10.6%**	**4.5%**	**-2.1%**	**-4.3%**	**8.3%**	**5.3%**	**24.6%**	**3.9%**	**5.2%**

Note: Prod - Production; Cons - Consumption

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



12. Kerosene allocation vs upliftment (Kilo Litres)

Product	2020-21		2021-22		2022-23		2023-24 (P)*	
	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment
PDS Kerosene	23,15,008	20,38,790	17,83,344	16,59,906	12,43,644	3,96,115	9,35,412	6,07,131

* Allocation is for Apr-Mar 2023-24 and upliftment is for Apr-Jan' 2024

13. Ethanol blending programme

Particulars	Ethanol Supply Year *				
	2020-21	2021-22	2022-23 (Dec'22- Oct'23)	Jan'24	Nov'23-Jan'24
Ethanol received by PSU OMCs under EBP Program (in Cr. Litrs)	296.1	408.1	494.0	52.7	116.7
Ethanol blended under EBP Program (in Cr. Litrs)	302.3	433.6	508.8	46.8	128.9
Average Percentage of Blending Sales (EBP%)	8.1%	10.0%	12.1%	12.2%	11.2%

*Ethanol Supply Year : Ethanol supply year for 2022-23 taken for Dec'22-Oct'23 & thereafter changed to ethanol supplies between 1st January of the present year to 31st October 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 01.02.2024) (Provisional)

Particulars	IOCL	BPCL	HPCL	RIL/RBML/RSIL	NEL	SHELL	MRPL & Others	Total
POL Terminal/ Depots **(Nos.)**[$]	126	83	81	17	3		6	**316**
Aviation Fuel Stations **(Nos.)**[@]	129	65	55	29			1	**279**
Retail Outlets (total) **(Nos.),**[^]	37,098	21,596	21,670	1,700	6,592	341	80	**89,077**
out of which Rural ROs	12,058	5,442	5,367	130	2,110	88	27	**25,222**
SKO/LDO agencies **(Nos.)**	3,830	927	1,638					**6,395**
LPG Distributors (total) **(Nos.) (PSUs only)**	12,871	6,247	6,336					**25,454**
LPG Bottling plants **(Nos.) (PSUs only)**[#]	98	53	56				3	**210**
LPG Bottling capacity **(TMTPA) (PSUs only)**[&]	10,913	4,980	6,530				203	**22,626**
LPG active domestic consumers **(Nos. crore) (PSUs only)**	15.0	8.3	8.8					**32.2**

[$](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 01.02.2024) (Provisional)

Alternate fuel	IOCL	BPCL	HPCL	RBML/RSIL	NEL	SHELL	MRPL	Total
CNG_LNG	2023	1740	1590	27	37	0	2	**5419**
EV Charging	8035	1836	2644	54	384	287	6	**13246**
Auto LPG	323	44	105	56	51	0	0	**579**
Compressed Bio-Gas outlets	71	41	4	4	0	0	0	**120**
Total Retail outlets with at least one	9569	3269	3975	119	470	287	8	**17697**
Solarization at Retail outlets	23652	6409	12576	74	979	0	0	**43690**

PART-D

LPG

15. LPG consumption (Thousand Metric Tonne)								
LPG category	2021-22	2022-23	January			April-January		
			2022-23	2023-24 (P)	Growth (%)	2022-23	2023-24 (P)	Growth (%)
1. PSU Sales :								
LPG-Packed Domestic	25,501.6	25,381.5	2,224.9	2,382.2	7.1%	21,116.3	21,570.4	2.2%
LPG-Packed Non-Domestic	2,238.8	2,606.0	238.2	254.3	6.8%	2,160.4	2,309.4	6.9%
LPG-Bulk	390.9	408.9	35.0	54.2	54.6%	338.0	488.5	44.5%
Auto LPG	122.0	106.7	8.3	6.9	-17.2%	90.7	75.1	-17.2%
Sub-Total (PSU Sales)	28,253.3	28,503.1	**2,506.5**	**2,697.6**	**7.6%**	**23,705.4**	**24,443.4**	**3.1%**
2. Direct Private Imports*	0.1	0.1	0.00	0.01	-	0.05	0.06	31.4%
Total (1+2)	28,253.4	28,503.2	**2,506.5**	**2,697.6**	**7.6%**	**23,705.5**	**24,443.4**	**3.1%**

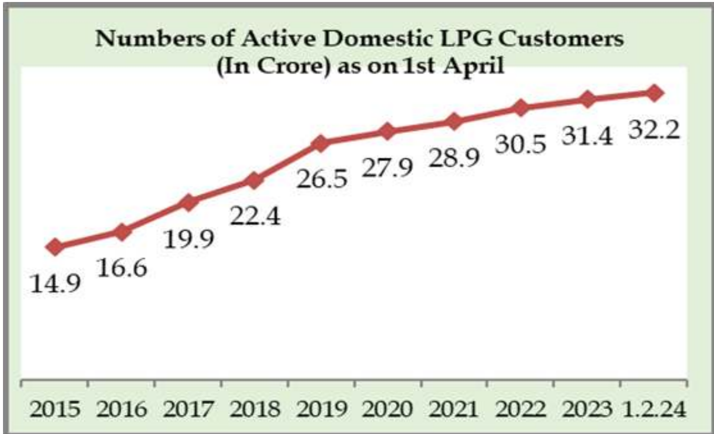
*Nov-Jan'24 DGCIS data is prorated

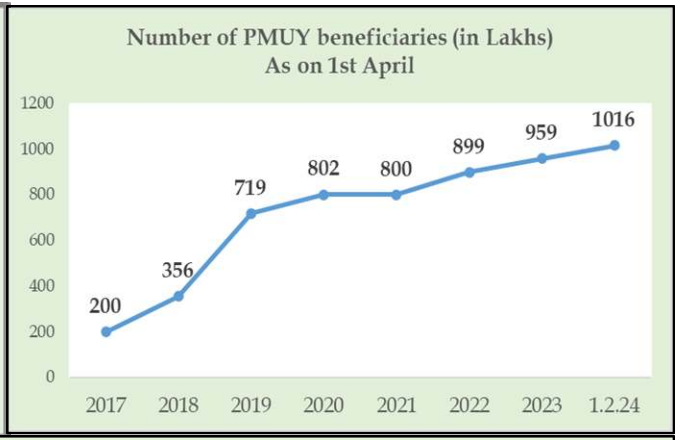
16. LPG marketing at a glance													
Particulars (As on 1st of April)	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	1.02.24 (P)
LPG Active Domestic Customers	(Lakh)				1486	1663	1988	2243	2654	2787	2895	3053	3140	3217
	Growth					11.9%	19.6%	12.8%	18.3%	5.0%	3.9%	5.5%	2.9%	2.5%
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)						200.3	356	719	802	800	899.0	958.6	1015.7
	Growth							77.7%	101.9%	11.5%	-0.2%	12.2%	6.6%	5.9%
LPG Distributors	(No.)	11489	12610	13896	15930	17916	18786	20146	23737	24670	25083	25269	25386	25454
	Growth	9.0%	9.8%	10.2%	14.6%	12.5%	4.9%	7.2%	17.8%	3.9%	1.7%	0.7%	0.5%	0.4%
Auto LPG Dispensing Stations	(No.)	652	667	678	681	676	675	672	661	657	651	601	526	472
	Growth	7.9%	2.3%	1.6%	0.4%	-0.7%	-0.1%	-0.4%	-1.6%	-0.6%	-0.9%	-8.5%	-12.5%	-10.4%
Bottling Plants	(No.)	184	185	187	187	188	189	190	192	196	200	202	208	210
	Growth	0.5%	0.5%	1.1%	0.0%	0.5%	0.5%	0.5%	1.1%	2.1%	2.0%	1.0%	4.5%	1.9%

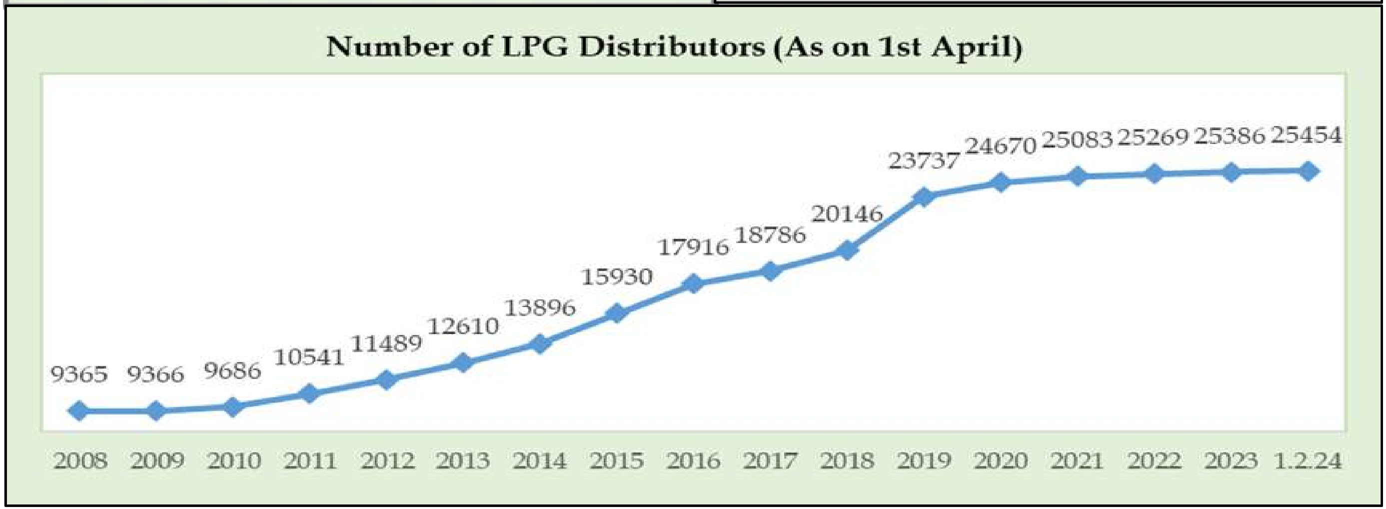
Source: PSU OMCs (IOCL,BPCL and HPCL)

1.Growth rates as on 01.02.2024 are with respect to figs as on 01.02.2023. 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.

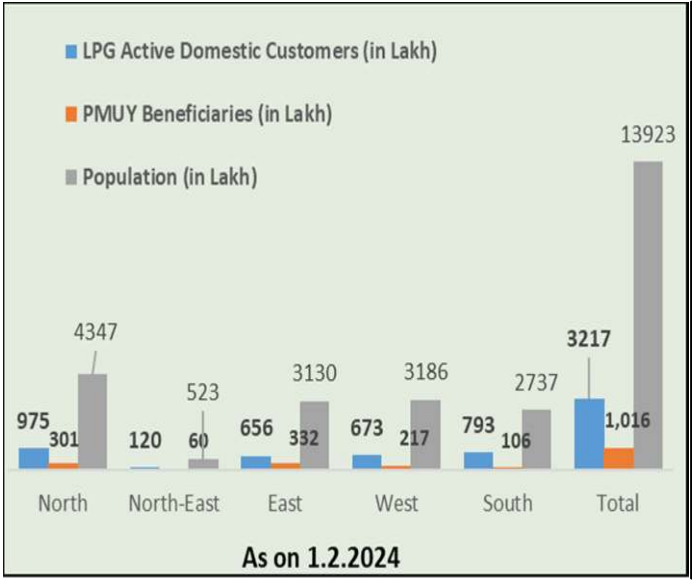

Numbers of Active Domestic LPG Customers (In Crore) as on 1st April
14.9
16.6
19.9
22.4
26.5
27.9
28.9
30.5
31.4
32.2
2015 2016 2017 2018 2019 2020 2021 2022 2023 1.2.24

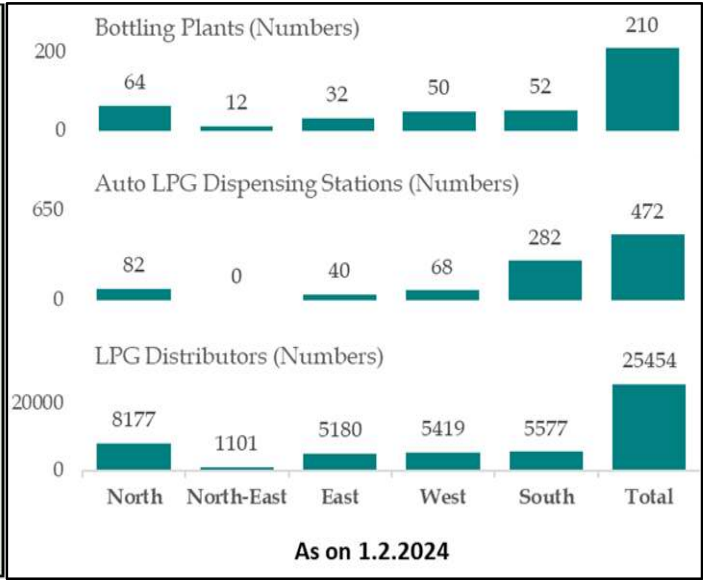

Number of PMUY beneficiaries (in Lakhs) As on 1st April
1200
1000
800
600
400
200
0
200
356
719
802
800
899
959
1016
2017 2018 2019 2020 2021 2022 2023 1.2.24


Number of LPG Distributors (As on 1st April)
9365
9366
9686
10541
11489
12610
13896
15930
17916
18786
20146
23737
24670
25083
25269
25386
25454
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 1.2.24

17-Region-wise data on LPG marketing (As on 01.02.2024)						
Particulars	**North**	**North-East**	**East**	**West**	**South**	**Total**
LPG Active Domestic Customers (in Lakh)	974.8	120.3	655.9	673.3	792.8	3217.1
Population^ (in Lakh)	4347.5	523.0	3130.2	3185.9	2736.7	13923.3
PMUY Beneficiaries (in Lakh)	301.2	59.8	331.8	217.2	105.6	1015.7
LPG Distributors (Numbers)	8177	1101	5180	5419	5577	25454
Auto LPG Dispensing Stations (Numbers)	82	0	40	68	282	472
Bottling Plants* (Numbers)	64	12	32	50	52	210

*Includes Numaligarh BP, Duliajan BP and CPCL BP. ^Population as on 1st July 2023 taken from RGI POPULATION PROJECTIONS 2011 – 2036







PART-E

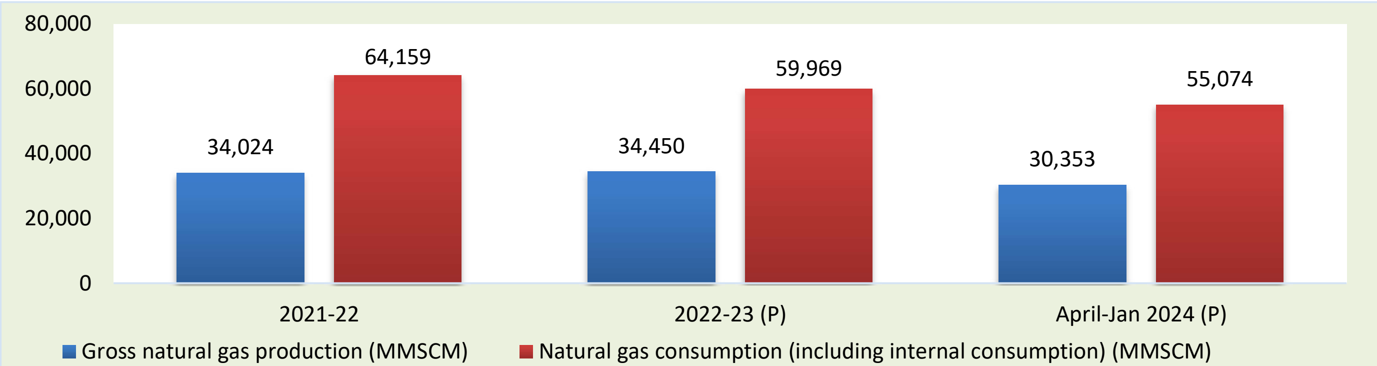
Natural Gas

18. Natural gas at a glance

(MMSCM)

Details	2021-22 (P)	2022-23 (P)	January			April-January		
			2022-23 (P)	2023-24 (Target)	2023-24 (P)	2022-23 (P)	2023-24 (Target)	2023-24 (P)
(a) Gross production	34,024	34,450	2,975	3,321	3,139	28,843	31,708	30,353
- ONGC	20,629	19,969	1,704	1,698	1,639	16,761	17,194	16,189
- Oil India Limited (OIL)	2,893	3,041	253	268	256	2,548	2,636	2,567
- Private / Joint Ventures (JVs)	10,502	11,440	1,018	1,355	1,244	9,534	11,878	11,596
(b) Net production (excluding flare gas and loss)	33,131	33,664	2,913		3,084	28,180		29,769
(c) LNG import#	31,028	26,304	1,909		2,410	21,920		25,305
(d) Total consumption including internal consumption (b+c)	64,159	59,969	4,823		5,494	50,100		55,074
(e) Total consumption **(in BCM)**	64.2	60.0	4.8		5.5	50.1		55.1
(f) Import dependency based on consumption (%), {c/d*100}	48.4	43.9	39.6		43.9	43.8		45.948

January 2024 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		12254*	Sq. KM
Area awarded		21,177**	Sq. KM
Blocks awarded*		39	Nos.
Exploration initiated (Area considered if any boreholes were drilled in the awarded block)		10670	Sq. KM
Production of CBM gas	April-Jan 2024 (P)	540.92	MMSCM
Production of CBM gas	Jan 2024 (P)	54.78	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 01.02.2024) (Provisional)

Particulars	Units	IOCL	HPCL	BPCL	GAIL#	IGL	Total
No. of CBG plants commissioned and initiated sale of CBG	No. of plants	25	7	6	10	5	**53**
Start of CBG sale from retail outlet(s)	Nos.	69	36	45	1	3	**154**
Sale of CBG in 2022-23	Tons	5,822	77	6	5322		**11,227**
Sale of CBG in 2023-24 (up to January, 2023)	Tons	5215	192	27	9156		**14590**
Sale of CBG in CGD network	GA Nos.				25		**25**

#Sale of CBG sourced under CBG-CGD synchronization by GAIL through its own marketing channels and other CGDs/OMCs.

20. Common Carrier Natural Gas pipeline network as on 30.09.2023

Nature of pipeline		GAIL	GSPL	PIL	IOCL	AGCL	RGPL	GGL	DFPCL	ONGC	GIGL	GITL	Others*	Total
Operational	Length	11,007	2,716	1,479	143	107	304	73	42	24	0	0	0	**15,895**
	Capacity	167.2	43.0	85.0	20.0	2.4	3.5	5.1	0.7	6.0				-
Partially commissioned#	Length	4,714	0	0	1,040	0	0	0	0	0	1,285	0	365	**7,403**
	Capacity	55.0	0.0	0.0	84.7	0.0	0.0	0.0	0.0	0.0	122.5	0.0	0.0	-
Total operational length		**15,720**	**2,716**	**1,479**	**1,183**	**107**	**304**	**73**	**42**	**24**	**1,285**	**0**	**365**	**23,298**
Under construction	Length	3,955	100	0	456	0	0	0	0	0	916	220	4,361	**10,009**
	Capacity	26.3	3.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	36.0	0.0	-
Total length		**19,676**	**2,816**	**1,479**	**1,639**	**107**	**304**	**73**	**42**	**24**	**2,201**	**220**	**4,726**	**33,307**

Source: PNGRB; Length in KMs ; Authorized Capacity in MMSCMD (Arithmetic sum taken for each entity -capacity may vary from pipeline to pipeline); *Others-APGDC, , IGGL, IMC,GTIL,HPPL Consortium of H-Energy. Total authorized Natural Gas pipelines including Tie-in connectivity, dedicated & STPL is 33,307 Kms (P),however total operational and Under Construction Pipeline length is 35,483Kms (P)

21. Existing LNG terminals

Location	Promoters	Capacity as on 01.02.2024	% Capacity utilisation (April-Dec 2023)
Dahej	Petronet LNG Ltd (PLL)	17.5 MMTPA	95.1
Hazira	Shell Energy India Pvt. Ltd.	5.2 MMTPA	32.8
Dabhol	Konkan LNG Limited	*5 MMTPA	36.4
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	20.3
Ennore	Indian Oil LNG Pvt Ltd	5 MMTPA	17.0
Mundra	GSPC LNG Limited	5 MMTPA	11.1
Dhamra	Adani Total Private Limited	5 MMTPA	25.1
Total Capacity		**47.7 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 31.12.2023(P)				
State/UT (State/UTs are clubbed based on the GAs authorised by PNGRB)	CNG Stations	PNG connections		
		Domestic	Commercial	Industrial
Andhra Pradesh	172	2,66,179	463	37
Andhra Pradesh, Karnataka & Tamil Nadu	42	7,735	1	6
Assam	12	53,886	1,385	453
Bihar	119	1,20,418	110	7
Bihar & Jharkhand	6	7,723	4	0
Bihar & Uttar Pradesh	14	0	0	0
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	27	26,502	158	42
Chhattisgarh	13	0	0	0
Dadra & Nagar Haveli (UT)	6	11,942	57	61
Daman & Diu (UT)	5	5,169	62	46
Daman and Diu & Gujarat	15	4,303	20	0
Goa	12	13,067	28	38
Gujarat	1,009	31,96,501	23,212	5,795
Haryana	374	3,45,548	1,003	2,196
Haryana & Himachal Pradesh	10	24	0	0
Haryana & Punjab	27	905	0	0
Himachal Pradesh	11	7,007	20	0
Jharkhand	90	1,21,835	21	3
Karnataka	344	4,16,816	562	348
Kerala	123	59,439	31	18
Kerala & Puducherry	11	782	0	0
Madhya Pradesh	266	2,23,823	439	498
Madhya Pradesh and Chhattisgrah	7	0	0	0
Madhya Pradesh and Rajasthan	34	661	0	0
Madhya Pradesh and Uttar Pradesh	16	0	0	3
Maharashtra	823	32,38,517	4,775	960
Maharashtra & Gujarat	61	1,87,645	8	29
Maharashtra and Madhya Pradesh	15	0	0	0
National Capital Territory of Delhi (UT)	481	15,20,311	3,854	1,882

State/UT (State/UTs are clubbed based on the GAs authorised by PNGRB)	CNG Stations	PNG connections		
		Domestic	Commercial	Industrial
Odisha	82	99,434	8	0
Puducherry	2	0	0	0
Puducherry & Tamil Nadu	8	277	0	0
Punjab	214	79,583	572	279
Punjab & Rajasthan	12	0	0	0
Rajasthan	275	2,46,458	162	1,654
Tamil Nadu	260	16,039	5	13
Telangana	170	1,97,812	101	110
Telangana and Karnataka	4	0	0	0
Tripura	18	61,168	506	62
UT of Jammu and Kashmir	0	0	0	0
Uttar Pradesh	886	15,07,903	2,526	3,091
Uttar Pradesh & Rajasthan	42	19,866	48	348
Uttar Pradesh and Uttrakhand	26	14,197	0	0
Uttarakhand	34	71,722	86	92
West Bengal	80	4,502	3	1
Total	**6,258**	**1,21,55,699**	**40,230**	**18,072**

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
January 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
1 May 2023 - 31May 2023	8.27	6.50		
1 June 2023 - 30 June 2023	7.58	6.50		
1 July 2023 - 31 July 2023	7.48	6.50		
1 Aug 2023 - 31 Aug 2023	7.85	6.50		
1 Sept 2023 - 30 Sept 2023	7.85	6.50		
1 Oct 2023 - 31 Oct 2023	9.20	6.50	October'2023 - March 2024	9.96
1 Nov 2023 - 30 Nov2023	9.12	6.50		
1 Dec 2023 - 31 Dec 2023	8.47	6.50		
1 Jan 2024 - 31 Jan 2024	7.82	6.50		
1 Feb 2024- 29 Feb 2024	7.85	6.50		

Natural Gas prices are on GCV basis

24. CNG/PNG prices

City	CNG (Rs/Kg)	PNG (Rs/SCM)	Source
Delhi	76.59	48.59	IGL website (12.02.2024)
Mumbai	76.00	47.00	MGL website (12.02.2024)

Indian Natural Gas Spot Price for Physical Delivery

IGX Price Index Month	Avg. Price		Volume (MMSCM)	Source
	INR/MMBtu	$/MMBtu		
`Jan 2024	1001	12.00	48.30	As per IGX website: www.igxindia.com

*Prices are weighted average prices|$1=INR 83.12| 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	2021-22	2022-23	Jan 2024
Crude oil (Indian Basket)	79.18	93.15	79.22
Petrol	89.66	107.00	91.20
Diesel	88.45	128.08	97.55
Kerosene	85.31	120.55	96.53
LPG ($/MT)	692.67	711.50	626.00
FO ($/MT)	445.25	452.66	411.62
Naphtha ($/MT)	698.25	666.53	597.90
Exchange (Rs./$)	74.51	80.39	83.12

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.3200/ MT SAED ^^^	**

Social welfare surcharge @ 10% is levied on aggregate duties of Customs excluding CVD in lieu of IGST;
*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;
*** Basic Customs duty is Nil for import of domestic LPG sold to household consumers (including NDEC) by PSU OMCs. Basic Customs duty rate is 5% for other importers of domestic LPG;
^^^ Effective 03.02.2024 SAED on crude oil.

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

Particulars	Petrol	Diesel
Price charged to dealers (excluding Excise Duty and VAT)	57.28	58.09
Excise Duty	19.90	15.80
Dealers' Commission (Average)	3.83	2.62
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	59.27	786.90
Dealers'/distributors' commission	2.66	73.08
GST (incl GST on dealers'/distributors' commission)	3.10	43.02
Retail Selling Price	**65.03**	**903.00**

*Petrol and Diesel at Delhi as per IOCL are as on 1st Feb 2024. PDS SKO at Mumbai as on 1st Feb 2024 and Subsidised Domestic LPG at Delhi as on 1st Feb 2024.

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

DBTL/ PMUY Subsidy

Domestic LPG under DBTL (Direct benefit transfer for LPG)

Product	2020-21	2021-22	2022-23 (P)
	Rs./Crore		
DBTL subsidy	3,559	-	823
PME &IEC^	99	242	32
Total	**3,658**	**242**	**855**

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

Note: During FY 2022-23 Government of India has approved a one-time grant of Rs. 22,000 crores to PSU OMCs towards under-recoveries in Domestic LPG.

PMUY

Particulars	2020-21	2021-22	2022-23 (P)
	Rs./Crore		
PMUY	-34	1,569	6,110
PME &IEC^	110	-	-
Pradhan Mantri Gareeb Kalyan Yojana	8,162	-	-
Total	**8,238**	**1,569**	**6,110**

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

Sales & profit of petroleum sector (Rs. Crores)

Particulars	2022-23		H1-2023-24 (P)	
	TurDecer	PAT	TurDecer	PAT
Upstream/midstream Companies (PSU)	3,21,099	50,941	1,42,816	25,987
Downstream Companies (PSU)	19,16,438	1,138	8,86,575	57,092
Standalone Refineries (PSU)	2,45,272	9,875	95,405	4,469
Private-RIL	5,78,088	44,190	2,79,567	20,835

Borrowings of OMCs (Rs. Crores), As on

Company	Mar'22	Mar'23	Sept'24
IOCL	1,10,799	1,32,495	99,407
BPCL	24,123	35,855	22,568
HPCL	43,193	64,517	51,758

Petroleum sector contribution to Central/State Govt.

Particulars	2020-21	2021-22	2022-23
Central Government	4,55,069	4,92,303	4,28,067
% of total revenue receipts	28%	23%	18%
State Governments	2,17,650	2,82,122	3,20,651
% of total revenue receipts	8%	8%	8%
Total (Rs. Crores)	**6,72,719**	**7,74,425**	**7,48,718**

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

Particulars	2020-21	2021-22	2022-23 (P)
Petroleum subsidy	0.06	0.01	0.03

Note: GDP figure for 2020-21 & 2021-22 are Revised Estimates (RE) and 2022-23 are Second Advance Estimates (SAE).

**Totals may not tally due to roundoff.

PART-G

Miscellaneous

26. Capital expenditure of PSU oil companies

(Rs in crores)

Company	2020-21	2021-22	2022-23 (P)	2023-24 (P)	
				Target (Annual)	Apr-Jan'24 (P)
ONGC Ltd	26,441	26,621	29,209	30,125	27,167
ONGC Videsh Ltd (OVL)	5,351	4,836	2,723	3,229	2,730
Oil India Ltd (OIL)	12,802	4,239	5,057	4,896	4,495
GAIL (India) Ltd	5,560	6,970	8,313	7,750	8,439
Indian Oil Corp. Ltd. (IOCL)	27,195	29,604	35,205	30,395	32,305
Bharat Petroleum Corp. Ltd (BPCL)	10,697	11,449	11,527	10,000	8,556
Hindustan Petroleum Corp. Ltd (HPCL)	14,036	16,205	13,847	10,210	10,533
Mangalore Refinery & Petrochem Ltd (MRPL)	2,218	604	641	820	1,384
Chennai Petroleum Corp. Ltd (CPCL)	592	575	609	548	514
Numaligarh Refinery Ltd (NRL)	981	3,403	6,615	8,290	6,699
Balmer Lawrie Co. Ltd (BL)	42	23	46	40	35
Engineers India Ltd (EIL)	730	67	60	98	104
Total	**1,06,642**	**1,04,596**	**1,13,853**	**1,06,401**	**1,02,963**

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)	20130.81
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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