



Snapshot of India's Oil & Gas data



Monthly Ready Reckoner February 2023

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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.

Table of contents

Table	Description	Page No.
	Highlights for the month	2-3
	ECONOMIC INDICATORS	
1	Selected indicators of the Indian economy	5
2	Crude oil, LNG and petroleum products at a glance; Graph	6-7
	CRUDE OIL, REFINING & PRODUCTION	
3	Indigenous crude oil production	9
4	Domestic oil & gas production vis-à-vis overseas production	9
5	High Sulphur (HS) & Low Sulphur (LS) Crude Oil processing	9
6	Quantity and value of crude oil imports	10
7	Self-sufficiency in petroleum products	10
8	Refineries: Installed capacity and crude oil processing	11-12
9	Crude oil and product pipeline network	12
	Oil and Gas map of India	13
10	Gross Refining Margins (GRM) of companies; Graph	14-15
	CONSUMPTION	
11	Production and consumption of petroleum products; Graph	17-18
12	Kerosene allocation vs upliftment	19
13	Ethanol blending programme	19
14	Industry marketing infrastructure	19
	LIQUEFIED PETROLEUM GAS (LPG)	
15	LPG consumption	21
16	LPG marketing at a glance; Graph	21-22
17	Region-wise data on LPG marketing; Graph	23
	NATURAL GAS	
18	Natural gas at a glance; Graph	25
19	Coal Bed Methane (CBM) gas development in India	26
20	Major natural gas pipeline network	26
21	Existing LNG terminals	26
22	Status of PNG connections & CNG stations across India	27
23	Domestic natural gas price and gas price ceiling	28
24	CNG/PNG prices in selected cities	28
	TAXES & DUTIES ON PETROLEUM PRODUCTS	
25	Information on prices, taxes and under-recoveries/subsidies	30-31
	MISCELLANEOUS	
26	Capital expenditure of PSU oil companies	33
27	Conversion factors and volume conversion	34

Highlights for the month

- Indigenous crude oil and condensate production during February 2023 was down by 4.9 % than that of February 2022 as compared to a de-growth of 1.1 % during January 2022. OIL registered a growth of 6.8 % and ONGC registered a de - growth of 4.5 % during February 2023 as compared to February 2022. PSC registered de-growth of 11.0 % during February 2023 as compared to February 2022. De-growth of 1.6 % was registered in the total crude oil and condensate production during April - February 2023 over the corresponding period of the previous year.
- Crude oil processed during February 2023 was 20.8 MMT, which was 2.0 % higher than February 2022 as compared to a growth of 5.1 % during January 2022. Growth of 5.9 % was registered in the total crude oil processing during April- February 2023 over the corresponding period of the previous year.
- Crude oil imports increased by 8.5% and 9.5% during February 2023 and April-February 2023 respectively as compared to the corresponding period of the previous year. The net import bill for Oil & Gas was \$9.9 billion in February 2023 compared to \$10.6 billion in February 2022. In this the crude oil imports constitutes \$10.3 billion, LNG imports \$1.5 billion and the exports were \$4.1 billion during February 2023.
- The price of Brent Crude averaged \$82.49/bbl during February 2023 as against \$82.78/bbl during January 2023 and \$98.19/bbl during February 2022. The Indian basket crude price averaged \$82.28/bbl during February 2023 as against \$80.92/bbl during January 2023 and \$94.07 /bbl during February 2022.
- Production of petroleum products saw a growth of 3.3 % during February 2023 over February 2022 as compared to a growth of 4.5 % during January 2022. Growth of 5.2 % was registered in the total POL production during April- February 2023 over the corresponding period of the previous year.
- POL products imports increased by 9.0% and 13.3% during February 2023 and April-February 2023 respectively as compared to the corresponding period of the previous year. Increase in POL product imports during April- February 2023 were mainly due to increase in import of all products except lubes/LOBS, fuel oil (FO) and others etc.

<ul style="list-style-type: none"> Exports of POL products increased by 4.2% and decreased by 1.8% during February 2023 and April- February 2023 respectively as compared to the corresponding period of the previous year. Decrease in POL products exports during April-February 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.
<ul style="list-style-type: none"> The consumption of petroleum products during April-Feb 2023 with a volume of 201.8 MMT reported a growth of 10.8% compared to the volume of 182.18 MMT during the same period of the previous year. This growth was led by 8.9% growth in MS, 7.5% in HSD & 43.2% in ATF consumption besides FO/LSHS and others during the period. The consumption of petroleum products during Feb 2023 recorded a growth of 5.7% with a volume of 18.5 MMT compared to the same period of the previous year.
<ul style="list-style-type: none"> Ethanol blending with Petrol was 12.0% during February 2023 and cumulative ethanol blending during December 2022-February 2023 was 11.4%.
<ul style="list-style-type: none"> Total Natural Gas Consumption (including internal consumption) for the month of February 2023 was 4848 MMSCM which was 6.7% higher than the corresponding month of the previous year. The cumulative consumption of 55544 MMSCM for the current financial year till February 2023 was lower by 5.4 % compared with the corresponding period of the previous year.
<ul style="list-style-type: none"> Gross production of natural gas for the month of February 2023 (P) was 2651 MMSCM which was higher by 1.9% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 31494 MMSCM for the current financial year till February 2023 was higher by 1.1% compared with the corresponding period of the previous year.
<ul style="list-style-type: none"> LNG import for the month of February 2023 (P) was 2253 MMSCM which was 11% higher than the corresponding month of the previous year. The cumulative import of 24769(P) MMSCM for the current financial year till Februaryr 2023 was lower by 12.8% compared with the corresponding period of the previous year.



PART-A

Economic Indicators

GROSS DOMESTIC PRODUCT

GDP

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)	Feb		April-Feb	
					2021-22	2022-23 (P)	2021-22	2022-23 (P)
5	Index of Industrial Production (Base: 2011-12)	Growth %	-8.4	11.4	2.0*	5.2* QE	13.7#	5.4#
6	Imports [^]	\$ Billion	394.4	611.9	55.9	51.3	550.0	653.5
7	Exports [^]	\$ Billion	291.8	419.7	37.2	33.9	377.4	405.9
8	Trade Balance	\$ Billion	-102.6	-192.2	-18.8	-17.4	-172.5	-247.5
9	Foreign Exchange Reserves [@]	\$ Billion	579.3	617.6	631.5	560.9	-	-

Population projection by RGI is taken as on 1st July for the year. IIP is for the month of *Jan and #April-Jan; @2020-21-as on March 26, 2021, 2021-22 - as on March 26, 2022, Feb 2022 as on Feb 25, 2022 and Feb 2023-as on Feb 24, 2023; ^Imports & Exports are for Merchandise for the month of February 23; E: Estimates; PE: Provisional Estimates; AE-Advanced Estimates; RE-Revised Estimates; QE-Quick Estimates.

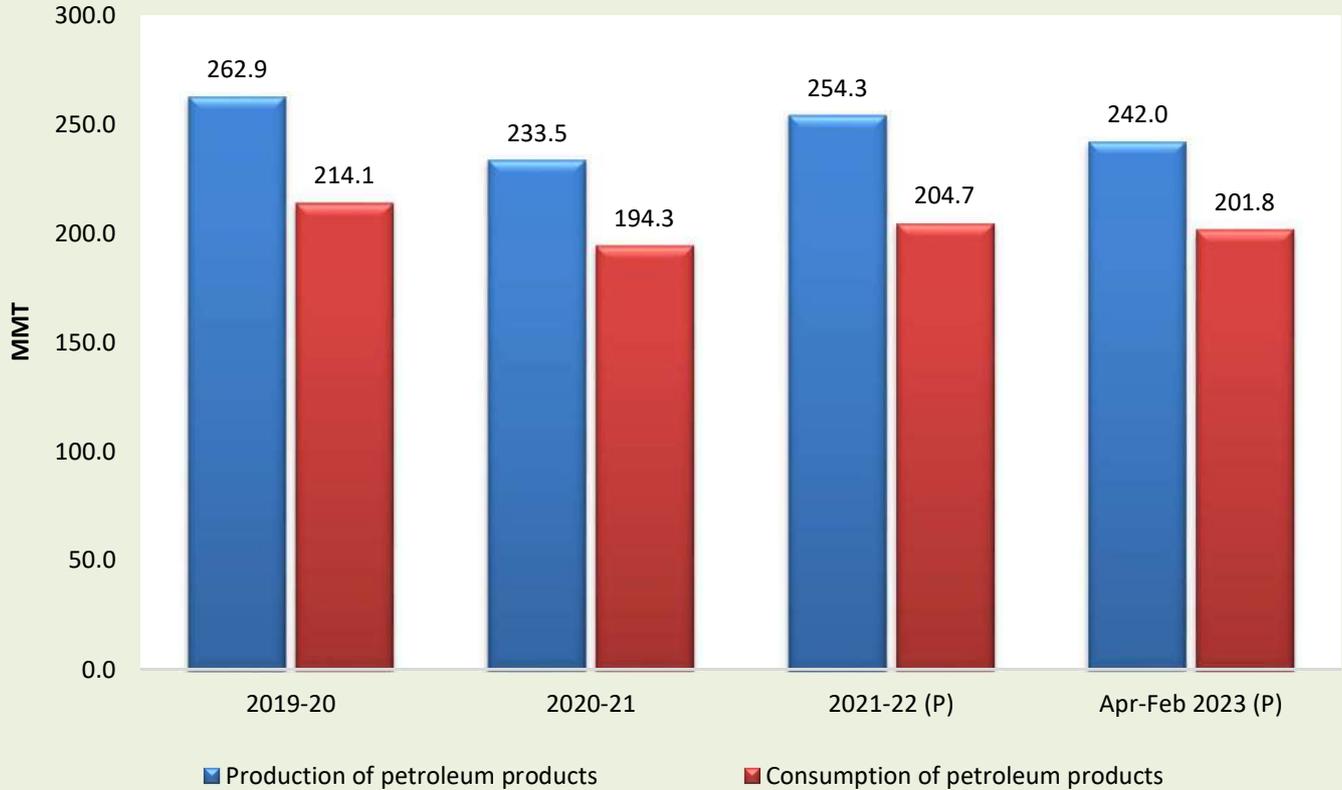
Source: Registrar General India, Ministry of Commerce & Industry, Ministry of Statistics and Programme Implementation, Ministry of Agriculture & Farmer's Welfare, Ministry of Finance, Reserve Bank of India

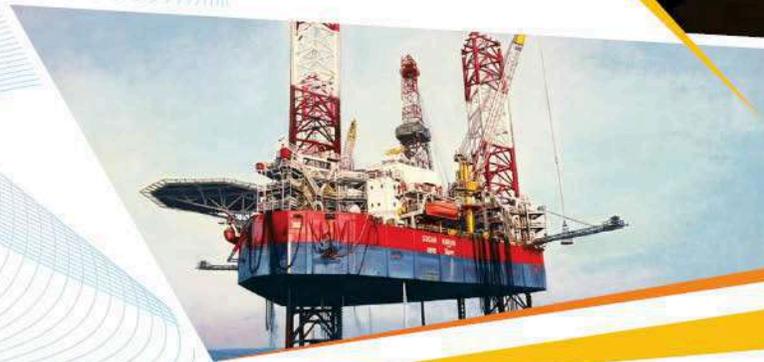
2. Crude oil, LNG and petroleum products at a glance

Details		Unit/ Base	2020-21	2021-22 (P)	Feb		April-Feb	
					2021-22 (P)	2022-23 (P)	2021-22 (P)	2022-23 (P)
1	Crude oil production in India [#]	MMT	30.5	29.7	2.3	2.2	27.2	26.7
2	Consumption of petroleum products*	MMT	194.3	204.7	17.5	18.5	182.2	201.8
3	Production of petroleum products	MMT	233.5	254.3	21.2	21.9	230.2	242.0
4	Gross natural gas production	MMSCM	28,672	34,024	2,602	2,651	31,137	31,494
5	Natural gas consumption	MMSCM	60,982	64,159	4,545	4,848	58,709	55,544
6	Imports & exports:							
	Crude oil imports	MMT	196.5	212.4	17.6	19.1	193.4	211.6
		\$ Billion	62.2	120.7	11.6	10.3	105.8	146.6
	Petroleum products (POL) imports*	MMT	43.2	39.0	3.2	3.5	35.3	40.1
		\$ Billion	14.8	23.7	2.0	2.1	20.9	24.6
	Gross petroleum imports (Crude + POL)	MMT	239.7	251.4	20.8	22.6	228.7	251.7
		\$ Billion	77.0	144.3	13.6	12.5	126.7	171.2
	Petroleum products (POL) export	MMT	56.8	62.8	4.9	5.1	56.0	55.0
		\$ Billion	21.4	44.4	4.1	4.1	37.5	53.0
	LNG imports*	MMSCM	33,198	31,028	2,030	2,253	28,390	24,769
		\$ Billion	7.9	13.5	1.1	1.5	12.0	16.8
	Net oil & gas imports	\$ Billion	63.5	113.4	10.6	9.9	101.2	135.1
7	Petroleum imports as percentage of India's gross imports (in value terms)	%	19.5	23.6	24.3	24.3	23.0	26.2
8	Petroleum exports as percentage of India's gross exports (in value terms)	%	7.3	10.6	11.0	12.0	9.9	13.0
9	Import dependency of crude oil (on POL consumption basis)	%	84.4	85.7	87.4	89.2	85.3	87.2

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

Production & Consumption of Petroleum Products (MMT)





PART-B

Crude Oil, Refining & Production

3. Indigenous crude oil production (Million Metric Tonnes)

Details	2020-21	2021-22	Feb			April-Feb		
			2021-22	2022-23 Target*	2022-23 (P)	2021-22	2022-23 Target*	2022-23 (P)
ONGC	19.1	18.5	1.4	1.6	1.4	16.9	19.3	16.9
Oil India Limited (OIL)	2.9	3.0	0.2	0.3	0.2	2.7	3.1	2.9
Private / Joint Ventures (JVs)	7.1	7.0	0.5	0.6	0.4	6.4	6.6	5.7
Total Crude Oil	29.1	28.4	2.2	2.5	2.1	26.0	28.9	25.5
ONGC condensate	1.1	0.9	0.07	0.0	0.1	0.9	0.0	1.0
PSC condensate	0.3	0.30	0.02	0.0	0.03	0.28	0.0	0.28
Total condensate	1.4	1.2	0.09	0.0	0.1	1.1	0.0	1.2
Total (Crude + Condensate) (MMT)	30.5	29.7	2.3	2.5	2.2	27.2	28.9	26.7
Total (Crude + Condensate) (Million Bbl/Day)	0.61	0.60	0.59	0.65	0.57	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)	Feb		April-Feb	
			2021-22 (P)	2022-23 (P)	2021-22 (P)	2022-23 (P)
Total domestic production (MMTOE)	59.2	63.7	4.9	4.8	58.3	58.2
Overseas production (MMTOE)	21.9	21.8	1.6	1.4	20.0	17.1

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

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

Details		2020-21	2021-22	Feb		April-Feb	
				2021-22	2022-23 (P)	2021-22	2022-23 (P)
1	High Sulphur crude	161.4	185.0	15.9	16.7	167.7	179.9
2	Low Sulphur crude	60.3	56.7	4.6	4.2	51.6	52.3
Total crude processed (MMT)		221.8	241.7	20.4	20.8	219.4	232.2
Total crude processed (Million Bbl/Day)		4.45	4.85	5.35	5.46	4.81	5.10
Percentage share of HS crude in total crude oil processing		72.8%	76.6%	77.7%	79.9%	76.5%	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-Feb 2022-23(P)	211.6	146,632	11,70,731

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

Particulars		2020-21	2021-22 (P)	Feb		April-Feb	
				2021-22 (P)	2022-23 (P)	2021-22 (P)	2022-23 (P)
1	Indigenous crude oil processing	28.0	27.0	2.1	1.9	24.8	24.3
2	Products from indigenous crude (93.3% of crude oil processed)	26.1	25.2	1.9	1.8	23.1	22.6
3	Products from fractionators (Including LPG and Gas)	4.2	4.1	0.3	0.2	3.7	3.2
4	Total production from indigenous crude & condensate (2 + 3)	30.3	29.3	2.2	2.0	26.8	25.8
5	Total domestic consumption	194.3	204.7	17.5	18.5	182.2	201.8
% Self-sufficiency (4 / 5)		15.6%	14.3%	12.6%	10.8%	14.7%	12.8%

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	Feb			April-Feb		
					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	0.5	0.5	0.5	5.0	5.9	6.2
2	Koyali (1965)	13.7	11.6	13.5	1.2	1.2	1.2	12.1	13.1	14.2
3	Haldia (1975)	8.0	6.8	7.3	0.6	0.5	0.7	6.6	7.4	7.8
4	Mathura (1982)	8.0	8.9	9.1	0.8	0.6	0.7	8.2	8.6	8.7
5	Panipat (1998)	15.0	13.2	14.8	1.1	1.2	1.2	13.6	13.6	12.5
6	Guwahati (1962)	1.0	0.8	0.7	0.08	0.1	0.1	0.64	1.0	1.0
7	Digboi (1901)	0.65	0.6	0.7	0.05	0.05	0.06	0.6	0.6	0.7
8	Bongaigaon(1979)	2.70	2.5	2.6	0.2	0.2	0.2	2.4	2.4	2.5
9	Paradip (2016)	15.0	12.5	13.2	1.2	1.2	1.2	11.8	12.6	12.2
	IOCL-TOTAL	70.1	62.4	67.7	5.8	5.6	5.9	61.0	65.2	65.7
10	Manali (1969)	10.5	8.2	9.0	0.9	0.8	0.9	8.0	9.8	10.3
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	0.9	0.8	0.9	8.0	9.8	10.3
12	Mumbai (1955)	12.0	12.9	14.4	1.2	1.1	1.3	13.2	12.7	13.2
13	Kochi (1966)	15.5	13.3	15.4	1.4	1.3	1.4	13.9	14.1	14.5
14	Bina (2011)	7.8	6.2	7.4	0.6	0.6	0.7	6.7	7.1	7.1
	BPCL-TOTAL	35.3	32.4	37.2	3.2	3.0	3.4	33.8	33.9	34.8
15	Numaligarh (1999)	3.0	2.7	2.6	0.2	0.2	0.2	2.4	2.8	2.9

Sl. no.	Refinery	Installed capacity (1.01.2022) (MMTPA)	Crude oil processing (MMT)							
			2020-21	2021-22	Feb			April-Feb		
					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	0.006	0.069	0.059	0.068
17	MRPL-Mangalore (1996)	15.0	11.5	14.9	1.4	1.3	1.4	13.4	15.5	15.6
	ONGC-TOTAL	15.1	11.6	14.9	1.4	1.3	1.4	13.4	15.6	15.7
18	Mumbai (1954)	9.5	7.4	5.6	0.7	0.7	0.8	4.8	7.7	8.9
19	Visakh (1957)	8.3	9.1	8.4	0.8	0.7	0.7	7.6	8.3	8.4
20	HMEL-Bathinda (2012)	11.3	10.1	13.0	1.0	0.9	1.0	11.9	10.5	11.6
	HPCL- TOTAL	29.1	26.5	27.0	2.5	2.3	2.6	24.4	26.5	29.0
21	RIL-Jamnagar (DTA) (1999)	33.0	34.1	34.8	2.8	2.8	2.6	31.7	31.7	31.6
22	RIL-Jamnagar (SEZ) (2008)	35.2	26.8	28.3	2.0	2.0	2.3	26.2	26.2	25.3
23	NEL-Vadinar (2006)	20.0	17.1	20.2	1.6	1.6	1.6	18.5	18.5	17.0
All India (MMT)		251.2	221.8	241.7	20.4	19.6	20.8	219.4	230.2	232.2
All India (Million Bbl/Day)		5.02	4.45	4.85	5.35	5.12	5.46	4.81	5.05	5.10

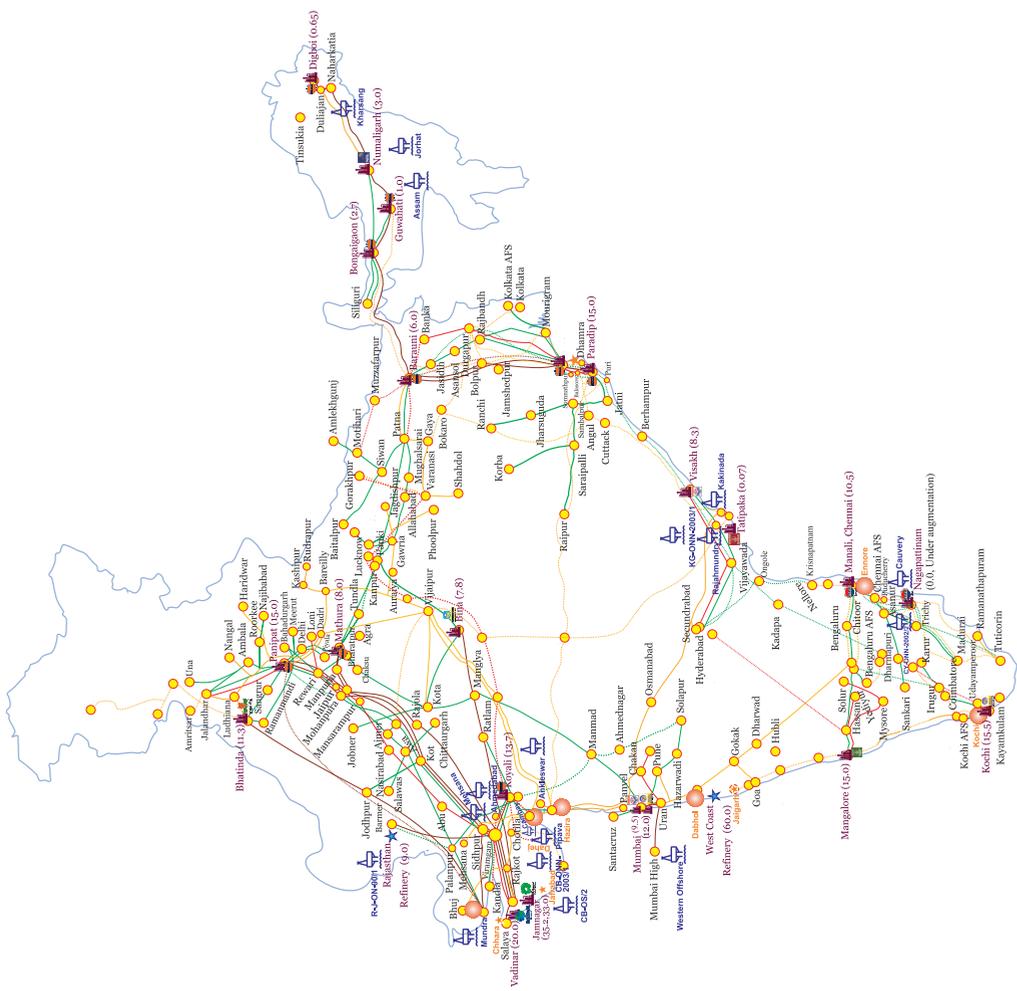
Note: Provisional Targets; Some sub-totals/ totals may not add up due to rounding off at individual levels.

9. Major crude oil and product pipeline network (as on 01.03.2023)

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			11,214	2,596	4,424	2,386	21,274
	Cap (MMTPA)		1.7			59.4	23.0	36.3	9.4	129.8

*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) Dharma, Jirafabad, 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)

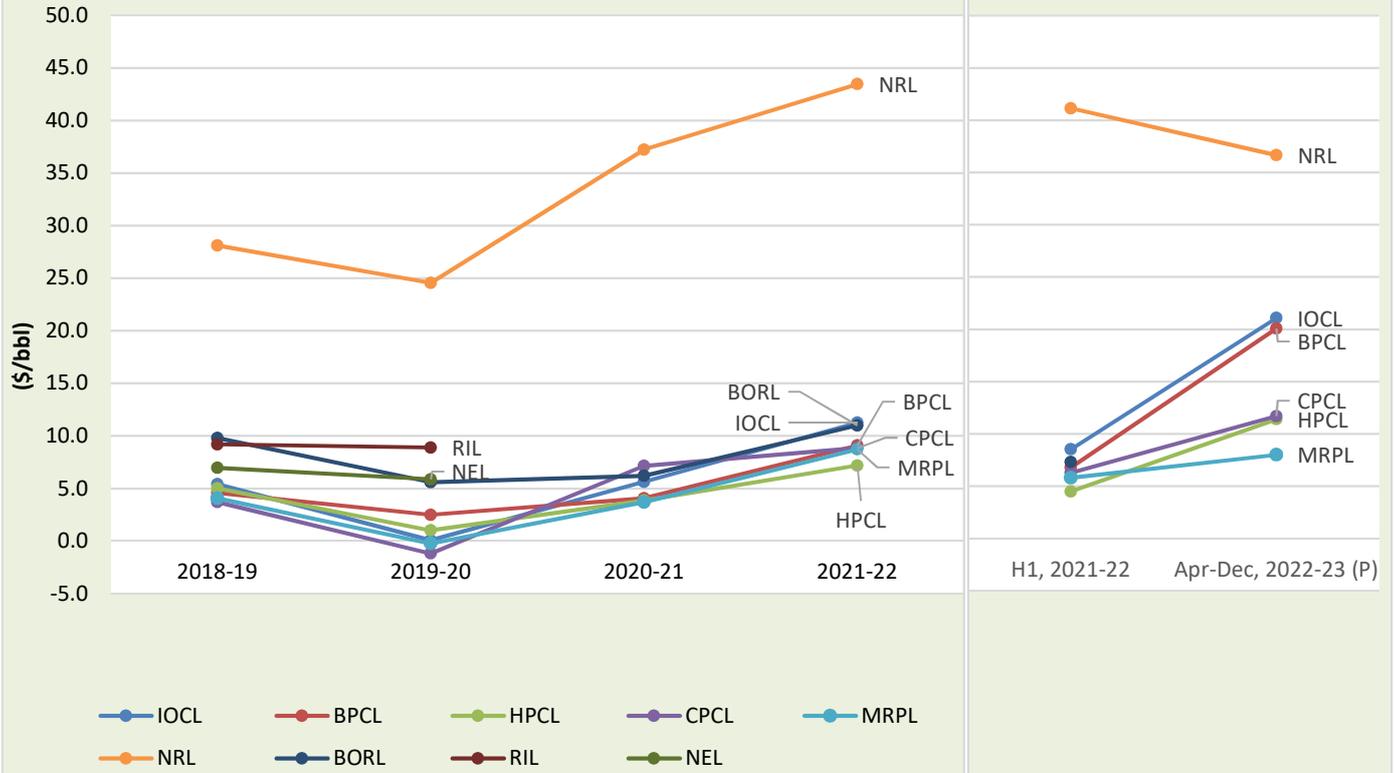
Company	2019-20	2020-21	2021-22	Apr - Dec	
				2021-22	2022-23 (P)
IOCL	0.08	5.64	11.25	8.52	21.08
BPCL	2.50	4.06	9.09	6.78	20.08
HPCL	1.02	3.86	7.19	4.50	11.40
CPCL	-1.18	7.14	8.85	6.28	11.70
MRPL	-0.23	3.71	8.72	5.80	8.00
NRL	24.55	37.23	43.46	41.14	36.65
BORL	5.60	6.20	11.00	7.30	#
RIL	8.90	*	*	*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

Gross Refining Margins (GRM) of refineries (\$/bbl)



GRM of North Eastern refineries are including excise duty benefit



PART-C

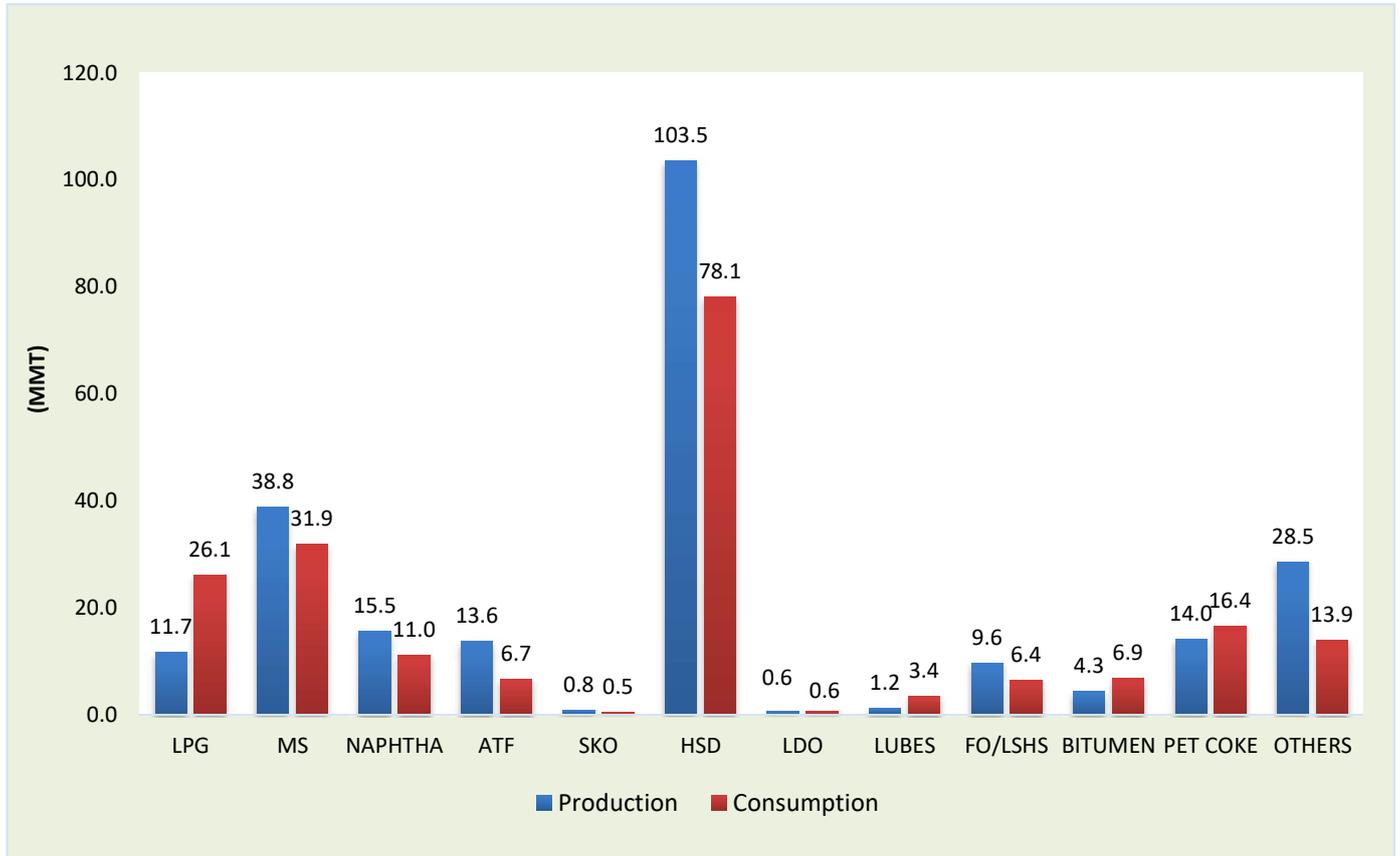
Consumption

11. Production and consumption of petroleum products (Million Metric Tonnes)

Products	2020-21		2021-22 (P)		Feb 2022		Feb 2023 (P)		Apr-Feb 2022		Apr-Feb 2023 (P)	
	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons
LPG	12.1	27.6	12.2	28.3	1.0	2.4	1.0	2.4	11.1	25.8	11.7	26.1
MS	35.8	28.0	40.2	30.8	3.3	2.5	3.5	2.8	36.4	27.9	38.8	31.9
NAPHTHA	19.4	14.1	20.0	14.3	1.7	1.1	1.4	1.1	18.2	12.1	15.5	11.0
ATF	7.1	3.7	10.3	5.0	0.9	0.4	1.3	0.6	9.3	4.5	13.6	6.7
SKO	2.4	1.8	1.9	1.5	0.2	0.1	0.1	0.0	1.8	1.4	0.8	0.5
HSD	100.4	72.7	107.2	76.7	8.8	6.5	9.3	7.0	96.7	69.0	103.5	78.1
LDO	0.7	0.9	0.8	1.0	0.08	0.08	0.05	0.06	0.7	0.9	0.6	0.6
LUBES	1.1	4.1	1.2	4.6	0.1	0.4	0.1	0.3	1.1	4.0	1.2	3.4
FO/LSHS	7.4	5.6	8.9	6.3	0.7	0.5	0.8	0.6	8.1	5.7	9.6	6.4
BITUMEN	4.9	7.5	5.1	7.9	0.6	0.9	0.4	0.8	4.5	6.9	4.3	6.9
PET COKE	12.0	15.6	15.5	15.8	1.3	1.5	1.2	1.5	14.0	12.9	14.0	16.4
OTHERS	30.2	12.8	30.9	12.5	2.5	1.0	2.5	1.3	28.3	11.2	28.5	13.9
ALL INDIA	233.5	194.3	254.3	204.7	21.2	17.5	21.9	18.5	230.2	182.2	242.0	201.8
Growth (%)	-11.0%	-8.9%	8.9%	5.4%	3.7%	5.0%	3.3%	5.7%	9.3%	3.7%	5.2%	10.8%

Note: Prod - Production; Cons - Consumption

Petroleum Products: April-Feb 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	3,74,225

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

13. Ethanol blending programme					
Particulars	Ethanol Supply Year *				
	2019-20	2020-21	2021-22	2022-23 (P)	
				Feb-23	Dec'22-Feb'23
Ethanol received by PSU OMCs under EBP Program (in Cr. Litrs)	173.0	296.1	408.1	47.9	132.2
Ethanol blended under EBP Program (in Cr. Litrs)	170.5	302.3	433.6	42.8	124.8
Average Percentage of Blending Sales (EBP%)	5.0%	8.1%	10.0%	12.0%	11.4%

*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 01.03.2023) (Provisional)								
Particulars	IOCL	BPCL	HPCL	RIL/RBML/RSIL	NEL	SHELL	Others	Total
POL Terminal/ Depots (Nos.) ^S	120	82	82	18	3		6	311
Aviation Fuel Stations (Nos.) [@]	131	63	52	30			2	278
Retail Outlets (total) (Nos.) [^] , out of which Rural ROs	35,946	20,897	20,979	1,536	6,454	353	51	86,216
	11,602	5,211	5,181	130	2,118	87	16	24,345
SKO/LDO agencies (Nos.)	3,871	927	1,638					6,436
LPG Distributors (total) (Nos.) (PSUs only)	12,852	6,239	6,272					25,363
LPG Bottling plants (Nos.) (PSUs only) [#]	96	54	53				3	206
LPG Bottling capacity (TMTPA) (PSUs only) ^{&}	10,658	4,890	6,170				203	21,921
LPG active domestic consumers (Nos. crore) (PSUs only)	14.6	8.1	8.6					31.4

^S(Others=4 MRPL & 2 NRL); [@](Others=ShellIMRPL); [^](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 01.03.2023) (Provisional)			
Alternate fuel	PSU	Private	Total
CNG_LNG	4487	49	4536
EV Charging	6510	159	6669
Auto LPG	526	113	639
Compressed Bio-Gas outlets	83	0	83
Total Retail outlets with at least one Alternate fuel	10534	314	10848



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PART-D

LPG

15. LPG consumption (Thousand Metric Tonne)								
LPG category	2020-21	2021-22	Feb			April-Feb		
			2021-22	2022-23 (P)	Growth (%)	2021-22	2022-23 (P)	Growth (%)
1. PSU Sales :								
LPG-Packed Domestic	25,128.1	25,501.6	2,134.8	2,083.9	-2.4%	23,286.4	23,200.3	-0.4%
LPG-Packed Non-Domestic	1,886.0	2,238.8	213.6	253.0	18.4%	2,032.2	2,413.5	18.8%
LPG-Bulk	361.9	390.9	34.5	46.1	33.7%	351.4	384.1	9.3%
Auto LPG	118.4	122.0	10.5	8.1	-22.5%	111.1	98.9	-11.0%
Sub-Total (PSU Sales)	27,494.3	28,253.3	2,393.4	2,391.2	-0.1%	25,781.1	26,096.8	1.2%
2. Direct Private Imports*	64.2	0.1	0.00	0.0	995.6%	0.1	0.1	-7.8%
Total (1+2)	27,558.4	28,253.4	2,393.4	2,391.2	-0.1%	25,781.1	26,096.8	1.2%

*Jan'23 -Feb'23 DGCIIS data is prorated

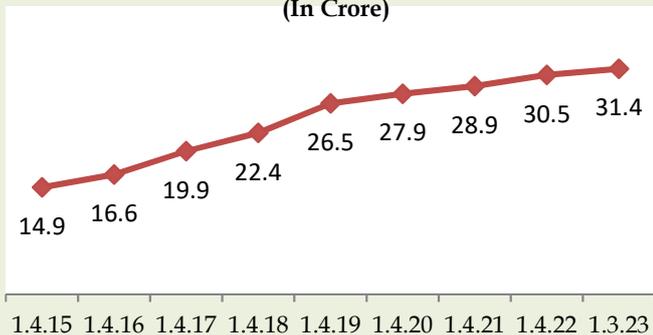
16. LPG marketing at a glance														
Particulars (As on 1st of April)	Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	1.03.23 (P)
LPG Active Domestic Customers	(Lakh)					1486	1663	1988	2243	2654	2787	2895	3053	3136
	Growth						11.9%	19.6%	12.8%	18.3%	5.0%	3.9%	5.5%	2.9%
LPG 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	958.7
	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	25363
	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%	0.6%
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%	-12.3%
Bottling Plants	(No.)	183	184	185	187	187	188	189	190	192	196	200	202	206
	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%	3.5%

Source: PSU OMCs (IOCL, BPCL and HPCL)

1. Growth rates as on 01.03.2023 are with respect to figs as on 01.03.2022. 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.

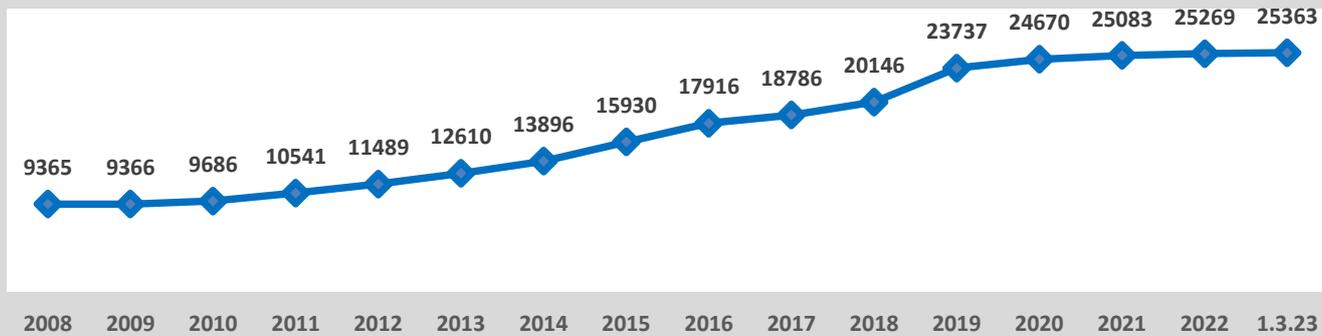
**Numbers of active LPG domestic customers
(In Crore)**



LPG coverage



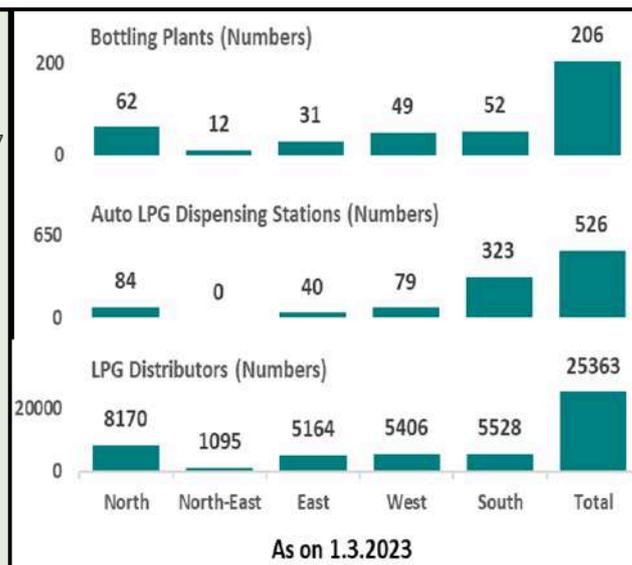
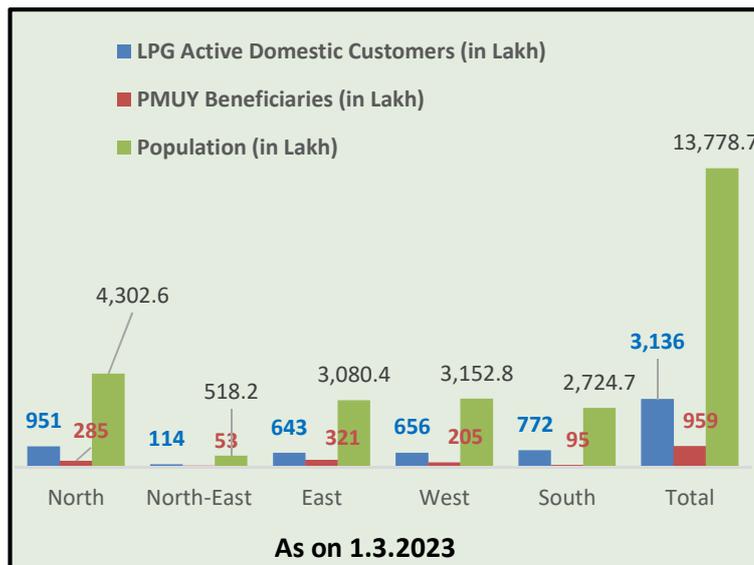
**Number of LPG distributors
(As on 1st April)**



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)	951.3	113.7	643.1	656.4	771.9	3136.5
Population^ (in Lakh)	4302.6	518.2	3080.4	3152.8	2724.7	13778.7
PMUY Beneficiaries (in Lakh)	285.3	52.9	320.9	204.7	94.9	958.7
LPG Distributors (Numbers)	8170	1095	5164	5406	5528	25363
Auto LPG Dispensing Stations (Numbers)	84	0	40	79	323	526
Bottling Plants* (Numbers)	62	12	31	49	52	206

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





PART-E

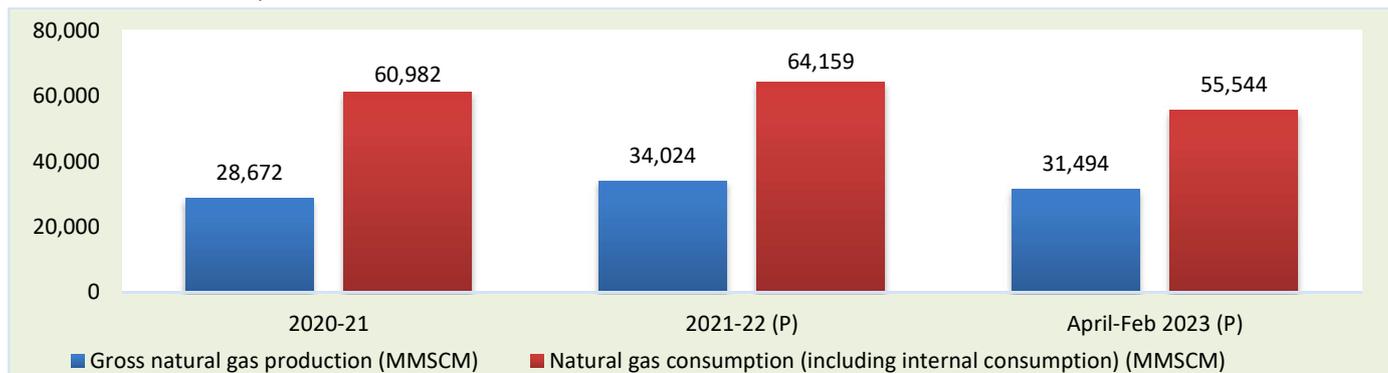
Natural Gas

18. Natural gas at a glance

(MMSCM)

Details	2020-21 (P)	2021-22 (P)	Feb			April-Feb		
			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	2,602	2,989	2,651	31,137	33,409	31,494
- ONGC	21,872	20,629	1,582	1,696	1,512	18,873	19,691	18,273
- Oil India Limited (OIL)	2,480	2,893	219	253	233	2,642	2,961	2,780
- Private / Joint Ventures (JVs)	4,321	10,502	801	1,040	907	9,622	10,756	10,441
(b) Net production (excluding flare gas and loss)	27,784	33,131	2,515		2,595	30,319		30,775
(c) LNG import [#]	33,198	31,028	2,030		2,253	28,390		24,769
(d) Total consumption including internal consumption (b+c)	60,982	64,159	4,545		4,848	58,709		55,544
(e) Total consumption (in BCM)	61.0	64.2	4.5		4.8	58.7		55.5
(f) Import dependency based on consumption (%), {c/d*100}	54.4	48.4	44.7		46.5	48.4		44.6

Jan - Feb 2023 DGCIIS 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-Feb 2023 (P)	617.68
Production of CBM gas	Feb 2023 (P)	50.27
		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 01.03.2023) (Provisional)

Particulars	Units	IOCL	HPCL	BPCL	GAIL	IGL	Total
LOIs issued	No. of plants	3084	474	318	289	50	4215
Expected CBG production against LOI issued	Tons per day	22396	2576	1412	1645	201	28230
No. of CBG plants commissioned/ Sale initiated	No. of plants	20	4	5	9	3	38
Start of CBG sale from retail outlet(s)	Nos.	40	23*	41**	1		105
Injection/Supply of CBG in CGD network	GA Nos.	-	-	-	13#	2	15
Total Sale of CBG (since Sep'2019)	Tons	10498	1657*	2322**			14,477
Total Sale of CBG by GAIL under synchronization scheme	Tons				4446##		4,446

Total no. of GA where supply of CBG initiated is 13. ## 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. 21 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	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	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 01.03.2023	% Capacity utilisation (April-Jan 2023)
Dahei	Petronet LNG Ltd (PLL)	17.5 MMTPA	78.2
Hazira	Shell Energy India Pvt. Ltd.	5.2 MMTPA	37.5
Dabhol	Konkan LNG Limited	*5 MMTPA	34.3
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	18.3
Ennore	Indian Oil LNG Pvt Ltd	5 MMTPA	13.1
Mundra	GSPL LNG Limited	5 MMTPA	17.1
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 31.01.2023(P)

State/UT (State/UTs are clubbed based on the GAs authorised by PNGRB)	CNG Stations	PNG connections		
		Domestic	Commercial	Industrial
Andhra Pradesh	157	243,851	416	32
Andhra Pradesh, Karnataka & Tamil Nadu	34	170	0	4
Assam	2	48,652	1,328	439
Bihar	74	87,342	64	3
Bihar & Jharkhand	1	6,239	0	0
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	25	25,006	114	22
Dadra & Nagar Haveli (UT)	7	10,628	56	54
Daman & Diu (UT)	4	5,134	47	43
Daman and Diu & Gujarat	14	1,722	3	0
Goa	12	10,557	15	29
Gujarat	970	2,917,845	22,111	5,735
Haryana	309	299,119	793	1,551
Haryana & Himachal Pradesh	9	0	0	0
Haryana & Punjab	18	0	0	0
Himachal Pradesh	7	4,614	4	0
Jharkhand	68	99,613	4	0
Karnataka	254	378,228	497	283
Kerala	100	35,932	19	14
Kerala & Puducherry	9	232	0	0
Madhya Pradesh	199	195,988	321	412
Madhya Pradesh and Chhattisgarh	5	0	0	0
Madhya Pradesh and Rajasthan	25	223	0	0
Madhya Pradesh and Uttar Pradesh	16	0	0	2
Maharashtra	650	2,724,602	4,593	835
Maharashtra & Gujarat	58	131,181	4	13
National Capital Territory of Delhi (UT)	471	1,362,054	3,438	1,786
Odisha	46	77,965	5	0
Puducherry	1	0	0	0
Puducherry & Tamil Nadu	8	161	0	0
Punjab	185	62,844	309	230
Rajasthan	211	183,845	72	231
Tamil Nadu	164	49	0	6
Telangana	142	187,658	75	92
Telangana and Karnataka	1	0	0	0
Tripura	18	58,628	506	62
Uttar Pradesh	715	1,312,753	2,144	2,555
Uttar Pradesh & Rajasthan	40	18,958	37	340
Uttar Pradesh and Utrtrahand	16	6,263	0	0
Utrtrahand	28	64,508	56	81
West Bengal	45	0	0	0
Total	5,118	10,562,564	37,031	14,854

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 US\$/MMBTU	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	2.50	5.30
April 2017 - September 2017	2.48	5.56
October 2017 - March 2018	2.89	6.30
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	2.90	6.13
April 2022 - September 2022	6.10	9.92
October 2022 - March 2023	8.57	12.46

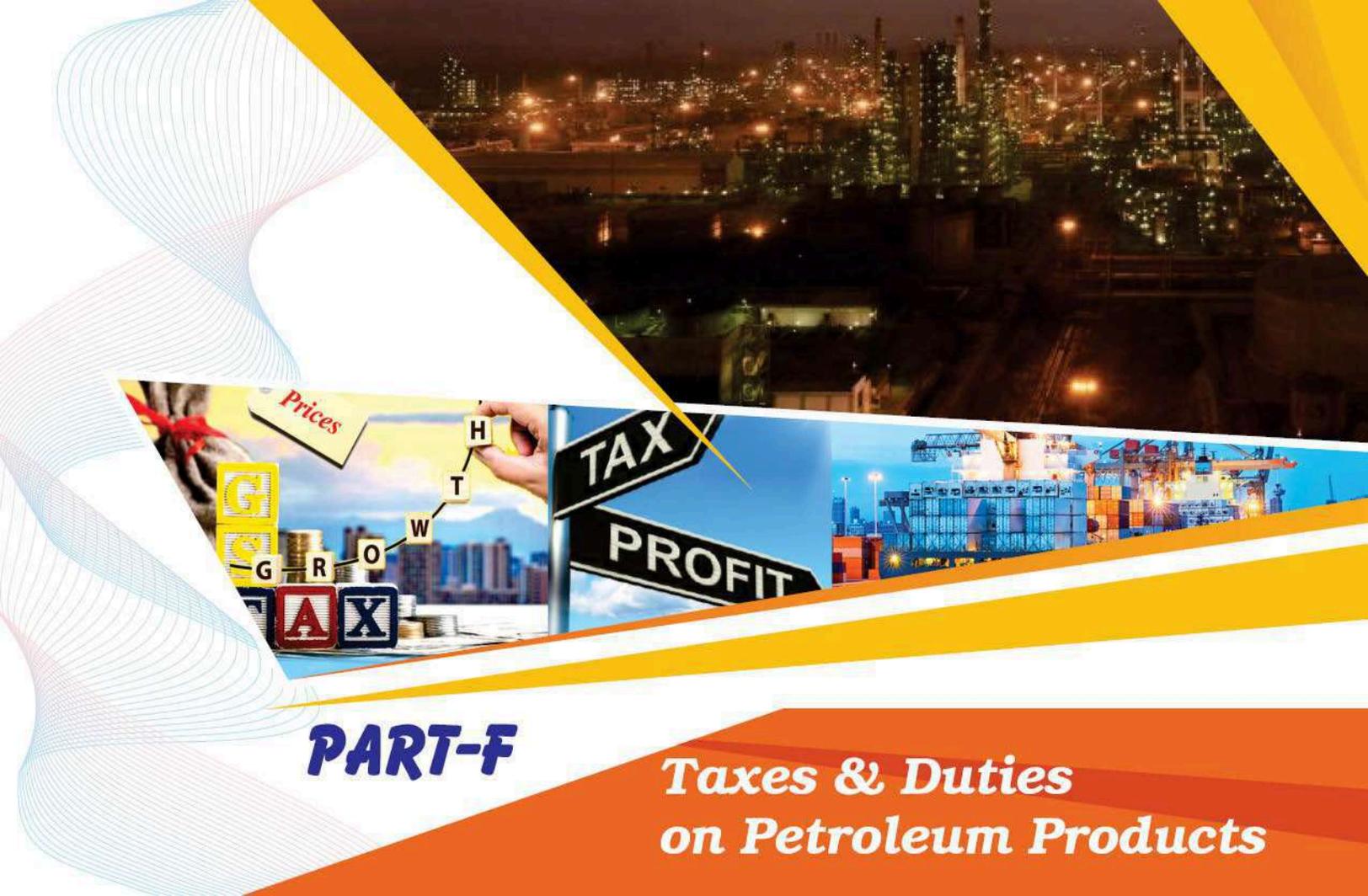
24. CNG/PNG prices

City	CNG (Rs/Kg)	PNG (Rs/SCM)	Source
Delhi	79.56	53.59	IGL website (17.03.2023)
Mumbai	87.00	54.00	MGL website (17.03.2023)

Indian Natural Gas Spot Price for Physical Delivery

IGX Price Index Month	Avg. Price		Volume (MMSCM)	Source
	INR/MMBtu	\$/MMBtu		
Feb 2022	1419	17.18	30.07	As per IGX website: www.igxindia.com

*Prices are weighted average prices | \$1=INR 82.60| 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)				Price buildup of petroleum products (Rs./litre/Cylinder) *		
Particulars	2020-21	2021-22	Feb 2023	Particulars	Petrol	Diesel
Crude oil (Indian Basket)	44.82	79.18	82.28	Price charged to dealers (excluding Excise Duty and VAT)	57.36	58.17
Petrol	47.68	89.66	95.97	Excise Duty	19.90	15.80
Diesel	47.86	88.45	103.63	Dealers' Commission (Average)	3.75	2.54
Kerosene	43.60	85.31	102.78	VAT (incl VAT on dealers' commission)	15.71	13.11
LPG (\$/MT)	415.17	692.67	790.00	Retail Selling Price	96.72	89.62
FO (\$/MT)	259.30	445.25	371.88			
Naphtha (\$/MT)	378.93	698.25	661.59			
Exchange (Rs./\$)	74.20	74.51	82.61			
Customs, excise duty & GST rates						
Product	Basic customs duty #	Excise duty	GST rates	Particulars	PDS SKO	Subsidised Domestic LPG
Petrol	2.50%	Rs 19.90/Ltr	**	Price before taxes and dealers'/distributors' commission	65.99	985.63
Diesel	2.50%	Rs 15.80/Ltr	**	Dealers'/distributors' commission	2.67	64.84
PDS SKO	5.00%	Not Applicable	5.00%	GST (incl GST on dealers'/distributors' commission)	3.43	52.53
Non-PDS SKO	5.00%		18.00%	Retail Selling Price	72.09	1103.00
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. 4400/ 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 04.03.2023 SAED on crude

*Petrol and Diesel at Delhi as per IOCL are as on 01st March 2023. PDS SKO at Mumbai as on 1st March 2023 and Subsidised Domestic LPG at Delhi as on 1st March 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 mechanism 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 -Feb 23
ONGC Ltd	30,115	26,441	26,621	29,950	24,673
ONGC Videsh Ltd (OVL)	5,363	5,351	4,836	8,180	2,545
Oil India Ltd (OIL)	3,724	12,802	4,239	4,302	3,996
GAIL (India) Ltd	4,381	5,560	6,970	7,500	7,178
Indian Oil Corp. Ltd. (IOCL)	28,316	27,195	29,604	28,549	31,804
Hindustan Petroleum Corp. Ltd (HPCL)	13,773	14,036	16,205	14,500	11,115
Bharat Petroleum Corp. Ltd (BPCL)	10,255	10,697	11,449	10,000	10,278
Mangalore Refinery & Petrochem Ltd (MRPL)	1,318	2,218	604	815	399
Chennai Petroleum Corp. Ltd (CPCL)	969	592	575	584	571
Numaligarh Refinery Ltd (NRL)	536	981	3,403	6,774	5,127
Balmer Lawrie Co. Ltd (BL)	40	42	23	40	39
Engineers India Ltd (EIL)	164.43	730	67	160	49
Total	98,955	106,642	104,596	111,354	97,773

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				Volume conversion	
Product	Weight (MT)	Volume (KL)	Barrel (bbl)	From	To
LPG	1	1.844	11.60	1 US Barrel (bbl)	159 litres
Petrol (MS)	1	1.411	8.88	1 US Barrel (bbl)	42 US Gallons
Diesel (HSD)	1	1.210	7.61	1 US Gallon	3.78 litres
Kerosene (SKO)	1	1.285	8.08	1 Kilo litre (KL)	6.29 bbl
Aviation Turbine Fuel (ATF)	1	1.288	8.10	1 Million barrels per day	49.8 MMTPA
Light Diesel Oil (LDO)	1	1.172	7.37	Energy conversion	
Furnace Oil (FO)	1	1.0424	6.74	1 Kilocalorie (kcal)	4.187 kJ
Crude Oil	1	1.170	7.33	1 Kilocalorie (kcal)	3.968 Btu
Exclusive Economic Zone				1 Kilowatt-hour (kWh)	860 kcal
200 Nautical Miles	370.4 Kilometers			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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