

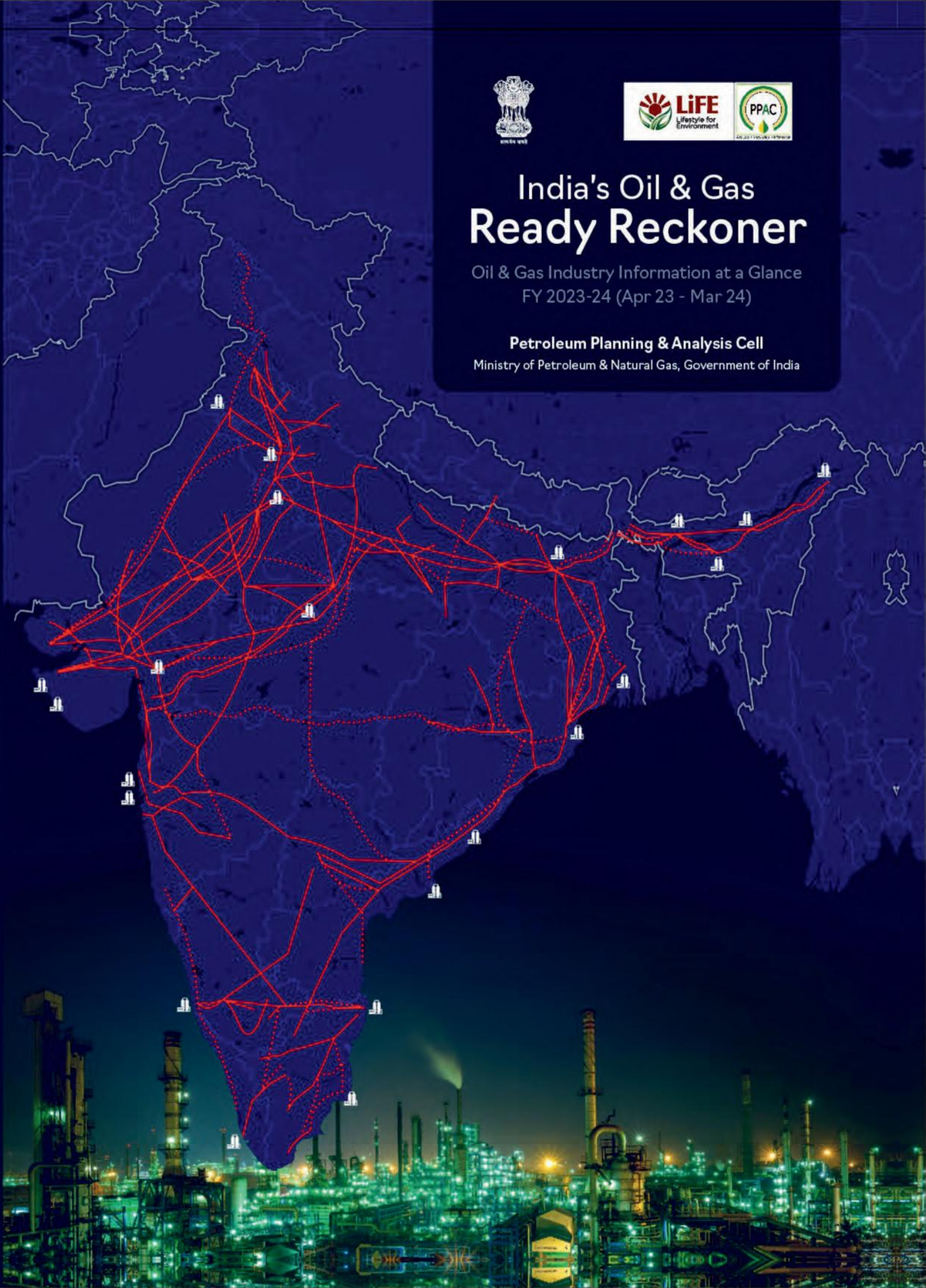


India's Oil & Gas Ready Reckoner

Oil & Gas Industry Information at a Glance
FY 2023-24 (Apr 23 - Mar 24)

Petroleum Planning & Analysis Cell

Ministry of Petroleum & Natural Gas, Government of India



Suggestions & Feedback

Readers are invited to send their suggestions & feedback for improvement of this Ready Reckoner to:

Dr Pankaj Sharma, Additional Director - D&ES
Email: epankaj.sharma@ppac.gov.in

Sh. Deepak Trivedi, Jt Director - D&ES
Email: Deepak.trivedi@ppac.gov.in

Petroleum Planning & Analysis Cell (PPAC)
(Ministry of Petroleum & Natural Gas, Govt. of India)
SCOPE Complex, 2nd Floor, Core 8,
Lodhi Road, New Delhi-110003

Acknowledgments

The cooperation of the following persons from PPAC is acknowledged in preparation of the Reckoner:

Sh. Vijay Kansal and Sh. Deepak Trivedi (D&ES Division), Sh. Ravindra Kumar (Marketing Division), Sh. Rajesh Sharma and Lokesh Mehta (Gas Division), Sh Vivek Pant and Sh. Surya Bhan Mall (Supply Division), Ms Saraswati Joshi and Sh Ankit Agarwal (Finance Division) .

PPAC thanks Sh Kirti Vardhan Rathore (HPCL) for designing the cover page. PPAC also acknowledges the support of all the State Level Coordinators of Oil Companies and officials from the Oil & Gas sector for providing inputs for inclusion in the Reckoner.

Disclaimer :

While every care is taken to check the accuracy of data & information included in this Reckoner, PPAC would not be held responsible for any loss, damage etc. due to action taken by anyone based on information contained in this publication.

Preface

Petroleum Planning & Analysis Cell (PPAC), an attached office of the Ministry of Petroleum & Natural Gas (MoPNG) is playing pivotal role in the transition process with all sorts of energy data analysis and decision making. PPAC, publishes the 'Ready Reckoner' bi-annually, a comprehensive databank for key Oil & Gas industry of the country. Ready Reckoner Annual edition FY2023-24 contains the latest information for the year and historical time series data in nine broad chapters for stakeholders including the Oil & Gas value chain planners, policymakers, academicians, analysts, market researchers and the industry in a single platform.

The year 2023-24 has been momentous in view of many events which have been significant for energy transition. India's G20 presidency this year saw the pinnacle of the movement where the forum discussed wide range of subjects including energy. As a significant outcome of the summit, the Global Biofuel Alliance was launched. It brings together 24 countries and 12 international organizations – including the World Economic Forum, the World Bank and the Asian Development Bank – to expand the use of sustainable biofuels.

COP`28 at Dubai, UAE, called for 'transitioning away from fossils fuels. The theme of the conference was fast tracking the energy transition and slashing emissions before 2030 to limit global warming to 1.5 °C (2.7 °F) above pre-industrial levels. Put nature, people, lives and livelihoods at the heart of climate action, including helping the most vulnerable communities adapt to the change that's already occurring.

It is also important to mention here that the world is in the middle of the timeframe for the 2030 Agenda for Sustainable Development Goal, adopted by all United Nations Member States in 2015. Also to achieve the target to limit global warming to 1.5 °C compared to pre-industrial levels, it is desired that emissions must be halved by 2030. While we have another six years to meet the goals, India is at the forefront of actions for speedy transition and meeting various SDG goals.

Important actions/decisions on the Oil and Gas front in the last 6 months are as follows.

- * The government has set a target to increase the share of gas in energy mix up to 15 per cent by 2030. By the end of 12th CGD bidding round, the entire country (except Islands) has got covered.
- * It will be appropriate to note that the country meanwhile crossed Ethanol Blending in Petrol of 12% during the current ESY Dec'22-Oct'23 achieving 12.1% on cumulative basis. India is also on track to achieve 20% blending by 2025 and E20 petrol is already available at 13,569 PSU outlets out of 81,529 total PSU Retail Outlets as on 30.04.2024. Successful Pilot Study on E27 Fuel and Ethanol Blended Diesel Fuel have also taken place in country.
- * To decarbonizing of the aviation sector, India's first commercial passenger flight using indigenously produced Sustainable Aviation Fuel (SAF) blend was successfully flown in May this year. The flight from Pune to Delhi was powered by SAF blended Aviation Turbine Fuel (ATF) produced using indigenous feedstock. The National Biofuel Coordination Committee (NBCC) declared initial indicative blending percentage of Sustainable Aviation Fuel (SAF/Bio- ATF) target of 1% SAF indicative blending target in 2027 (Initially for International flights) · 2% SAF blending target in 2028 (Initially for International flights)
- * The Central Government declared the timeline to implement 'Compressed Bio-Gas Blending Obligation' (CBO) in CNG (Transport) & PNG (Domestic) segments of CGD Sector with the following three main repository guidelines: - · CBO will be voluntary till FY 2024-2025 and mandatory blending obligation would start from FY 2025-26. CBO shall be kept as 1%, 3% and 4% of total CNG/PNG consumption for FY 2025-

26, 2026- 27 and 2027-28 respectively. From 2028-29 onwards CBO will be 5%. . PPAC has been designated as Central Repository Body (CRB) to monitor and implement the blending mandate based on the prescribed operational guidelines.

- * With Government of India's focus to accelerate E&P activities across the Country, MoP&NG launched Open Acreage Licensing Programme (OALP) Bid Round-VIII, offering 10 blocks, for International Competitive Bidding. The award of OALP Round-VIII Blocks will further add 34,364.53 sq. km. of acreage and take the cumulative exploration acreage under OALP to 242,055 sq. km.
- The PM Ujjwala Yojana was expanded with 75 lakh additional LPG connections to be released in 3 years. As a result, PMUY connections have reached 10.33 cr and total number of active LPG domestic connections reached 32.4 cr. The subsidy on PMUY refills raised from `200 per cylinder to `300 for up to 12 refills per year, making the LPG more affordable.
- * Almost 25% of total outlets now provide alternate fuels (EV Charging, CNG/CBG/LNG and Auto LPG). Of these 17466 outlets offer EV charging facilities to commuters.
- * 1st Green Hydrogen Fuel Cell Bus from Kartavya Path, New Delhi.
- * Reference Fuels were launched in spirit of Atma Nirbhar Bharat
- * The data for Ready Reckoner is obtained from the Public Sector Oil & Gas Companies, Government bodies and Private Companies. The collected metadata is processed and scrutinized at various levels before it is published in Ready Reckoner or some e-platform. The final version of the 'Ready Reckoner' is now with you and has all oil and gas updated data. The Ready Reckoner is published on PPAC's website (<https://www.ppac.gov.in>) and on our mobile app - PPACE which can be downloaded on mobile device through both Google Play Store and Apple Store. The datasets of the reckoner will be uploaded on the website for the benefit of researchers and analysis in due course.
- * The publication of Ready Reckoner is a concerted effort by all Divisions of PPAC and I would like to place on record my sincere appreciation of the diligent efforts of the officers and staff of PPAC who have contributed to bring out this edition in a timely manner. The cooperation of the Oil & Gas industry and various organizations is sincerely acknowledged for their timely inputs.

PPAC welcomes feedback and suggestions for broadening the coverage and contents of the data being disseminated through this publication. The comments and feedback may kindly be sent to epankaj.sharma@ppac.gov.in or dirgen@ppac.gov.in.



P. Manoj Kumar

Director General

Petroleum Planning & Analysis Cell (PPAC)

(Ministry of Petroleum & Natural Gas)

New Delh

Date: 31.05.2024



Vision & Mission

VISION

To be the most authentic official source for data and policy analysis on the hydrocarbon sector in the country.

Mission

1. To monitor and analyze developments in the domestic oil and gas sector.
2. To undertake analysis of domestic and international energy markets.
3. To develop a cooperative framework for exchange of information and conduct of studies with other countries and international organizations in the energy sector.
4. To strengthen the existing data system in PPAC by adopting the latest techniques and best practices.
5. To render effective assistance and advice to the Ministry of Petroleum & Natural Gas in the discharge of

Objectives

1. To monitor and analyze trends in prices of crude oil, petroleum products and natural gas and their impact on the oil companies and consumers and prepare appropriate technical inputs for policy making.
2. To monitor developments in the domestic market and analyze options for policy changes in pricing, transportation and distribution of petroleum products.
3. To collect compile and disseminate data on the domestic oil and gas sector in a continuous manner and maintain the data bank.
4. To ensure quality of data in terms of prescribed parameters such as accuracy, completeness and timeliness.
5. To disseminate periodic reports on various aspects of oil and gas sector.
6. To ensure effective administration of the subsidy schemes notified by the Government.

CONTENTS

CHAPTER NO.	TITLE	PAGE No.
1	GENERAL	
1.1	Selected indicators of the Indian economy	2
1.2	Global energy consumption	4
2	EXPLORATION & CRUDE OIL PRODUCTION	
	Chapter Highlight	6
2.1	World top 30 crude oil proved reserves countries	7
2.2	World top 30 crude oil producing countries	8
2.3	World top 30 crude oil consuming countries	9
2.4	World top 30 crude oil refining capacity countries	10
2.5A	State wise Crude Oil Production (Including Condensate) in TMT	11
2.5B	Indigenous crude oil and condensate production	11
2.6	Self sufficiency in petroleum products	11
2.7 (A)	Status of blocks under NELP	12
2.7 (B)	Status of blocks under OALP round of HELP and DSF Rounds	12
2.8	Domestic oil & gas production vis a vis overseas production	13
2.9	Coal Bed Methane (CBM) Gas development in India	13
2.10	Status of shale gas and oil development in India	13
3	NATURAL GAS	
	Chapter Highlight	16
3.1	World top 30 natural gas reserve countries	17
3.2	World top 30 natural gas producing countries	18
3.3	World top 30 natural gas consuming countries	19
3.4	Natural gas at a glance	20
3.5	Natural gas production	20
3.5(A)	State wise Natural Gas Production in MMSCM	22
3.6	PNG connections in numbers	24
3.7	CNG sales in India	31
3.8	CNG stations in numbers	33
3.9	LNG terminals (Operational)	41
3.10	Import of Liquefied Natural Gas (LNG)	41
3.11	Domestic natural gas price and gas price ceiling	41
Chart	Trend of 'Domestic Gas Price' & Corresponding 'Ceiling price'	42
3.12	Statewise CGD Sale Profile in MMSCM For FY 2023-24	43
3.12(A)	CGD Sale Data (in SCMD)	44
Chart	Segment Trends- CGD Sale Profile vis-à-vis previous six months (in %)	44
3.12(B)	Basket Trends- CGD Sale Profile* (in MMSCM) - Annual	44
Chart	Sectoral Break up of CGD Sales Profiles in FY2023-24 & its YoY comparison	44
Chart	Sectoral Consumption of Natural Gas (in%)	45

CHAPTER NO.	TITLE	PAGE No.
4	REFINING & PRODUCTION	
	Chapter Highlights	48
Map	Map of refineries in India	49
Flow diagram	Simplified block flow diagram of a typical refinery	50
4.1	Refineries: Installed capacity and crude oil processing	51
4.2	High Sulphur (HS) & Low Sulphur (LS) crude oil processing	51
4.3	Imported crude & indigenous crude oil processing	51
4.4	Domestic Production of petroleum products	52
4.5	Production of petroleum products: Refinery & Fractioners	53
4.6	Production vis a vis consumption of petroleum products	54
4.7	Gross Refining Margins (GRM) of refineries	54
4.8	Distillate yield of PSU refineries	55
4.9	Fuel and Loss	56
4.10	Specific energy consumption (MBN number) of PSU refineries	57
4.11	Import / export of crude oil and petroleum products	58
4.12	Exchange rates of Indian rupee (₹)	59
5	MAJOR PIPELINES IN INDIA	
	Chapter Highlight	62
Map	Oil & Gas Infrastructure & Pipeline Network in India	63
5.1	Natural Gas pipeline in the Country	64
Chart	Share of pipeline operators Natural Gas pipelines	66
5.2	Existing major crude oil pipelines in India	67
5.3	Existing major POL pipelines in India	68
6	SALES	
	Chapter Highlights	72
6.1	Consumption of petroleum products	73
Chart	All India consumption of Petroleum Products	73
6.2	Consumption growth of petroleum products	74
Chart	Domestic POL consumption of Petroleum Products wise	75
Chart	Share of various products in overall POL consumption	75
Chart	End-use sectoral analysis of POL domestic consumption	76
Chart	Sector wise consumption petroleum products and YoY Comparison	77
6.3 (A)/(B)	State-wise sales of petroleum products consumption	80
6.4(A)	All products annual industry sales - region & state wise for last 5 years	82
6.4(B)	M/S Petrol annual industry sales - region & state wise for last 5 years	83
6.4(C)	HSD annual industry sales - region & state wise for last 5 years	84
6.5	PDS SKO allocation and sales data	85
6.6	Oil industry Retail Outlets & SKO/LDO agencies	86
Chart	All India number of retail outlets in PSU & private category	87
Chart	Category wise retail outlets	87
6.7	Industry marketing infrastructure As on 01.04.2024	88
6.8	Break-up of POL consumption data (PSU and Pvt.)	89
Chart	POL Consumption Trend productwise	90
6.9	Oil Industry Alternate fuel infrastructure at retail outlets	91
6.10	Ethanol Blending Programme	92

CHAPTER NO.	TITLE	PAGE No.
7	LPG	
	Chapter Highlights	95
7.1	LPG marketing at a glance	96
7.2	State-wise active domestic connections	97
7.3	State-wise PMUY connections	98
7.4	LPG domestic customers (14.2 kg/5 kg) enrolment by PSU OMCs	99
7.5	LPG Distributors	100
8	PRICES AND TAXES	
	Chapter highlights	103
8.1	India Basket Crude Oil Price	104
Chart	Chart: Trend in spreads of petroleum products vs Indian basket of crude oil	105
Chart	Chart: Trend in spreads of international benchmark crude oils	105
8.2	Price build-up of PDS kerosene at Mumbai	106
8.3	Price build-up of domestic LPG at Delhi	106
8.4	Price build-up of petrol at Delhi	106
8.5	Price build-up of diesel at Delhi	106
8.6	Break up of current excise duty on petrol & diesel	106
8.6(A)	Excise Duty on export of MS, HSD& ATF and Special Additional Excise Duty (SAED) on domestic Crude Production	107
8.7	Share of taxes in Retail Selling Price (RSP) of PDS kerosene at Mumbai	108
8.8	Share of taxes in Retail Selling Price (RSP) of domestic LPG at Delhi	108
8.9	Weightage of crude oil, natural gas and petroleum products in Wholesale Price Index (WPI)	108
8.10	Dealer's commission on petrol & diesel	109
8.11	Wholesale dealer's commission on PDS kerosene	109
8.12	Distributor's commission on domestic LPG	110
8.13 (A)	Retail Selling Price (RSP) of major products in India & neighbouring countries	111
8.13(B)	Monthly Average End-User Prices For Petroleum Products in India & Developed Countries	111
8.14	Retail Selling Price (RSP) of petroleum products at state capitals/UT capitals	112
8.15	Retail Selling Price (RSP) of PDS kerosene at major cities	112
8.16 (A)	Customs and excise duty (Petroleum products on which GST is not levied)	113
8.16 (B)	Customs duty and GST rates (Petroleum products on which GST is levied)	113
8.17	Actual Rate of Sales Tax/VAT/GST and other taxes levied by State/UT Governments on major petroleum products	114
8.18	Contribution of petroleum sector to exchequer	115
8.19	State/UT wise collection of sales tax/VAT by petroleum sector	116
8.20	State/UT wise collection of SGST/UTGST by petroleum sector	117
8.21	Profit After Tax (PAT) of oil companies	118
8.22	Financial details of oil companies	119
8.23	Total subsidy on petroleum products & natural gas	120
8.24	Quantity and value of Indian crude oil imports	120
9	MISCELLANEOUS	
9.1	Average international calorific values of different fuels	123
9.2	Weight to volume conversion	123
9.3	Volume conversion	123
9.4	Contents of LPG & Natural Gas	123
9.5	Natural Gas conversions	124
9.6	Major end use of petroleum products	124
	List of Abbreviations	125

Chapter-1

General



Table 1.1 : Selected indicators of the Indian economy
General

Sl. no.	Particulars	Source	Unit/ Base	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
1	Projected Total Population as on 1st July of the financial year	"Report of the Technical Group on Population Projections"	('000)	13,38,995	13,53,378	13,67,173	13,79,750	13,92,329
2	GDP	MoC&I	Growth %	4.0 1st RE	-6.6 1st RE	9.1 1st RE	7.2 PE	7.6 2nd AE
3	"Agricultural production (Foodgrains)"	MoA	Million tonne	297.5	310.7	315.7	329.7 Final Estimate	328.9 3rd AE
			Growth %	4.3	4.5	1.6	4.4	-0.2
4	"Index of Industrial Production (Base: 2011-12)"	MoSPI	Growth %	-0.8	-8.4	11.4	5.2#	5.8#
5	Imports^	MoC&I	\$ Billion	474.7	394.4	611.9	714.2	677.2
6	Exports^	MoC&I	\$ Billion	313.4	291.8	419.7	447.5	437.1
7	Trade balance	MoC&I	\$ Billion	-161.3	-102.6	-192.2	-266.8	-240.1
8	"Wholesale Price Index (all commodities) (average)"	MoC&I	2011-12 = 100	121.8	123.4	139.4	152.5	151.8
9	All India Consumer Price Index (average):							
	i) Industrial workers	Labour Bureau, Govt. of India	"2001=100 2016=100 (WEF SEP.2020)&"	322.5	119.0	127.7	121.9	138.9
	ii) Agricultural labourers		1986-87=100	979.6	1033.7	1108.0	1108.0	1259.0
	iii) Rural labourers		1986-87=100	986.0	1039.9	1119.0	1119.0	1270.0
10	FOREIGN EXCHANGE RESERVES- TOTAL@	RBI	\$ Billion	475.6	579.3	606.5	578.4	645.6
11	Outstanding external liabilities (as of end of financial year)	MoF	₹ Crore	2,99,250	3,88,472	4,29,403	4,69,035 2022-23 (BE)	5,37,484 2023-24 (RE)
12	Outstanding 'internal debt and other liabilities' (as of end of financial year)	MoF	₹ Crore	99,47,402	1,17,39,338	1,31,58,490	1,47,77,724.43 2022-23 (RE)	1,63,35,070.06 2023-24 (RE)
13	Centrally Sponsored Schemes & other transfers	MoF	₹ Crore	6,31,969	7,61,408	6,41,686	4,51,901 2022-23 (RE)	4,60,614 2023-24 (RE)
14	Gross fiscal deficit	MoF	%	4.6	9.5	6.7	6.4 2022-23 (RE)	5.9 RE

Note : \$: Population figures have been taken from table no.11 of 'Report of the Technical Group on Population Projections'; #Population projection by RGI is taken as on 1st July for the year. IIP is for the period of #April-March; @2020-21-as on March 26, 2021, 2021-22 - as on March 26, 2022, Mar 2022 as on Mar 25, 2022, Mar 2023-as on Mar 31, 2023 and Mar 2024 as on 29th March 2024^Imports & Exports are for Merchandise for the period of April to March ; E: Estimates; PE: Provisional Estimates; AE-Advanced Estimates; RE-Revised Estimates; QE-Quick Estimates.; average 'Consumer Price Index' is the arithmetic average of monthly CPI for April to March period. (P): Provisional; MoA: Ministry of Agriculture; MoF: Ministry of Finance; MoC&I: Ministry of Commerce & Industry; MoSPI: Ministry of Statistics and Programme Implementation; RBI: Reserve Bank of India; E: Estimates;

AE-Advanced Estimates; RE-Revised Estimates; QE-Quick Estimates.

Petroleum

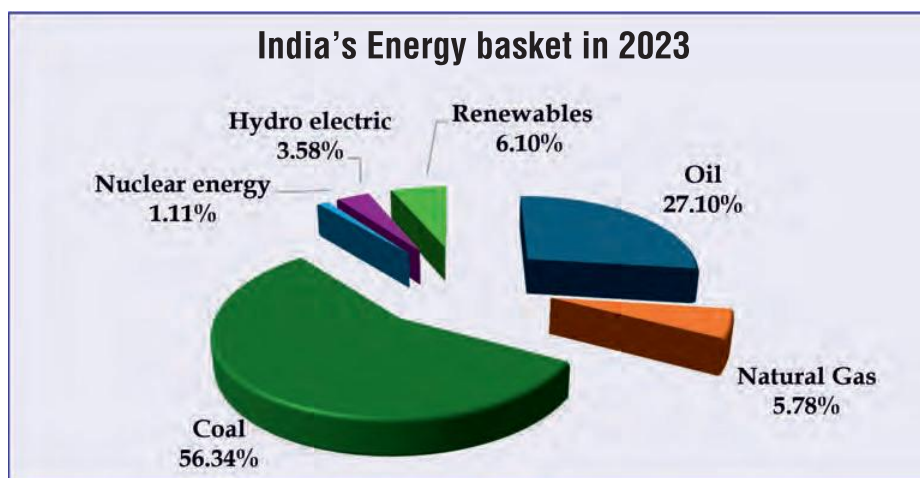
Sl. no.	Particulars	Source	Unit/ Base	2019-20	2020-21	2021-22	2022-23 (P)	2023-24(P)
1	Crude oil production in India	ONGC/OIL/DGH	MMT	32.2	30.5	29.7	29.2	29.4
2	Consumption of petroleum products in India	OMCs/PPAC	MMT	214.1	194.3	201.7	223.0	234.3
3	Petroleum products production in India	Oil Cos	MMT	262.9	233.5	254.3	266.5	276.1
4	Imports & exports							
	Crude oil imports	Oil Cos	\$ Billion	101.4	62.2	120.7	157.5	132.8
	Petroleum products imports	Oil Cos & DGCIS	\$ Billion	17.7	14.8	23.7	26.9	23.0
	"Total petroleum imports (crude oil + petroleum products)"	Oil Cos & DGCIS	\$ Billion	119.1	77.0	144.3	184.4	155.9
	Petroleum products exports	Oil Cos	\$ Billion	35.8	21.4	44.4	57.3	47.7
5	Gross petroleum imports as % of India's gross imports in value terms	MOC&I/PPAC	%	25.1	19.5	23.5	25.8	25.1
6	Gross petroleum exports as % of India's gross exports in value terms	MOC&I/PPAC	%	11.4	7.3	10.6	12.8	12.0
7	Import dependency (based on consumption)	PPAC	%	85.0	84.4	85.5	87.3	87.7

Note : (P): Provisional, OMCs: Oil Marketing Companies, PPAC: Petroleum Planning & Analysis Cell

Natural gas

Sl. no.	Particulars	Source	Unit/ Base	2019-20	2020-21	2021-22	2022-23(P)	2023-24(P)
1	Gross Production	ONGC/OIL/DGH	MMSCM	31,184	28,672	34,024	34,450	36,438
2	Net Production (net of flare and loss)	ONGC/OIL/DGH	MMSCM	30,257	27,784	33,131	33,664	35,717
3	LNG Import	LNG importing Cos, DGCIS	MMSCM	33,887	33,198	31,028	26,304	30,917
4	"Total Consumption including internal use (Net Production+ LNG import) "		MMSCM	64,144	60,982	64,159	59,969	66,634
5	Import dependency (based on consumption) {(sl no.3/sl no.4) *100}	PPAC	%	52.8	54.4	48.4	43.9	46.4

Note : MMSCM : Million Standard Cubic Meter



Source: Energy Institute Statistical Review of World Energy, 2024.

Table 1.2 : Global primary energy consumption, 2023

Sl. no.	Country	Unit	Oil	Natural Gas	Coal	Nuclear Energy	Hydro Electricity	Renewables	Total Energy
1	China	Mtoe	781.64	348.10	2195.92	93.18	273.84	385.37	4078.04
	Percentage share	%	19.17	8.54	53.85	2.28	6.71	9.45	100%
	Per capita consumption	Toe	0.55	0.24	1.54	0.07	0.19	0.27	2.86
2	USA	Mtoe	856.46	762.22	195.78	174.93	52.78	209.69	2251.87
	Percentage share	%	38.03	33.85	8.69	7.77	2.34	9.31	100%
	Per capita consumption	Toe	2.52	2.24	0.58	0.51	0.16	0.62	6.62
3	India	Mtoe	252.53	53.84	525.01	10.33	33.32	56.86	931.89
	Percentage share	%	27.10	5.78	56.34	1.11	3.58	6.10	100%
	Per capita consumption	Toe	0.18	0.04	0.38	0.01	0.02	0.04	0.67
4	Russian Federation	Mtoe	172.24	389.83	91.57	46.59	44.87	2.27	747.38
	Percentage share	%	23.05	52.16	12.25	6.23	6.00	0.30	100%
	Per capita consumption	Toe	1.19	2.70	0.63	0.32	0.31	0.02	5.17
5	Japan	Mtoe	158.95	79.47	108.35	16.60	16.64	35.67	415.68
	Percentage share	%	38.24	19.12	26.07	3.99	4.00	8.58	100%
	Per capita consumption	Toe	1.29	0.64	0.88	0.13	0.13	0.29	3.37
6	Canada	Mtoe	103.94	103.81	8.85	19.08	81.35	16.15	333.18
	Percentage share	%	31.20	31.16	2.66	5.73	24.42	4.85	100%
	Per capita consumption	Toe	2.68	2.68	0.23	0.49	2.10	0.42	8.59
7	Germany	Mtoe	95.83	65.06	43.61	1.55	4.39	62.10	272.53
	Percentage share	%	35.16	23.87	16.00	0.57	1.61	22.78	100%
	Per capita consumption	Toe	1.15	0.78	0.52	0.02	0.05	0.75	3.27
8	Brazil	Mtoe	122.01	25.79	13.68	3.11	95.74	71.03	331.36
	Percentage share	%	36.82	7.78	4.13	0.94	28.89	21.44	100%
	Per capita consumption	Toe	2.36	0.50	0.26	0.06	1.85	1.37	6.40
9	Iran	Mtoe	83.64	211.14	1.88	1.42	5.06	0.48	303.62
	Percentage share	%	27.55	69.54	0.62	0.47	1.67	0.16	100%
	Per capita consumption	Toe	0.39	0.98	0.01	0.01	0.02	0.00	1.40
10	South Korea	Mtoe	128.10	51.65	64.35	38.69	0.83	13.36	296.98
	Percentage share	%	43.14	17.39	21.67	13.03	0.28	4.50	100%
	Per capita consumption	Toe	1.44	0.58	0.72	0.43	0.01	0.15	3.33
11	Saudi Arabia	Mtoe	177.49	98.13	0.11	0.00	0.00	1.29	277.02
	Percentage share	%	64.07	35.42	0.04	-	-	0.47	100%
	Per capita consumption	Toe	4.80	2.66	0.00	-	-	0.03	7.50
12	France	Mtoe	66.03	29.12	4.25	72.49	12.40	22.65	206.93
	Percentage share	%	31.91	14.07	2.05	35.03	5.99	10.95	100%
	Per capita consumption	Toe	1.02	0.45	0.07	1.12	0.19	0.35	3.20
13	Indonesia	Mtoe	73.95	39.08	103.17	0.00	5.49	19.73	241.42
	Percentage share	%	30.63	16.19	42.74	-	2.28	8.17	100%
	Per capita consumption	Toe	1.09	0.58	1.52	-	0.08	0.29	3.56
14	United Kingdom	Mtoe	64.21	54.60	4.39	8.73	1.16	32.90	166.00
	Percentage share	%	38.68	32.89	2.64	5.26	0.70	19.82	100%
	Per capita consumption	Toe	0.96	0.81	0.07	0.13	0.02	0.49	2.47
15	Mexico	Mtoe	91.66	83.90	6.30	2.65	4.56	12.83	201.90
	Percentage share	%	45.40	41.55	3.12	1.31	2.26	6.35	100%
	Per capita consumption	Toe	0.33	0.30	0.02	0.01	0.02	0.05	0.73
	Sub total	Mtoe	3228.70	2395.72	3367.22	489.35	632.42	942.37	11055.79
	Others	Mtoe	1462.96	1052.41	550.66	97.42	314.62	265.72	3743.78
	Total World	Mtoe	4691.66	3448.13	3917.88	586.77	947.04	1208.09	14799.58
	Percentage share	%	31.70	23.30	26.47	3.96	6.40	8.16	1.00
	Per capita consumption	Toe	0.58	0.43	0.49	0.07	0.12	0.15	184%

Source: Energy Institute Statistical Review of World Energy, 2024

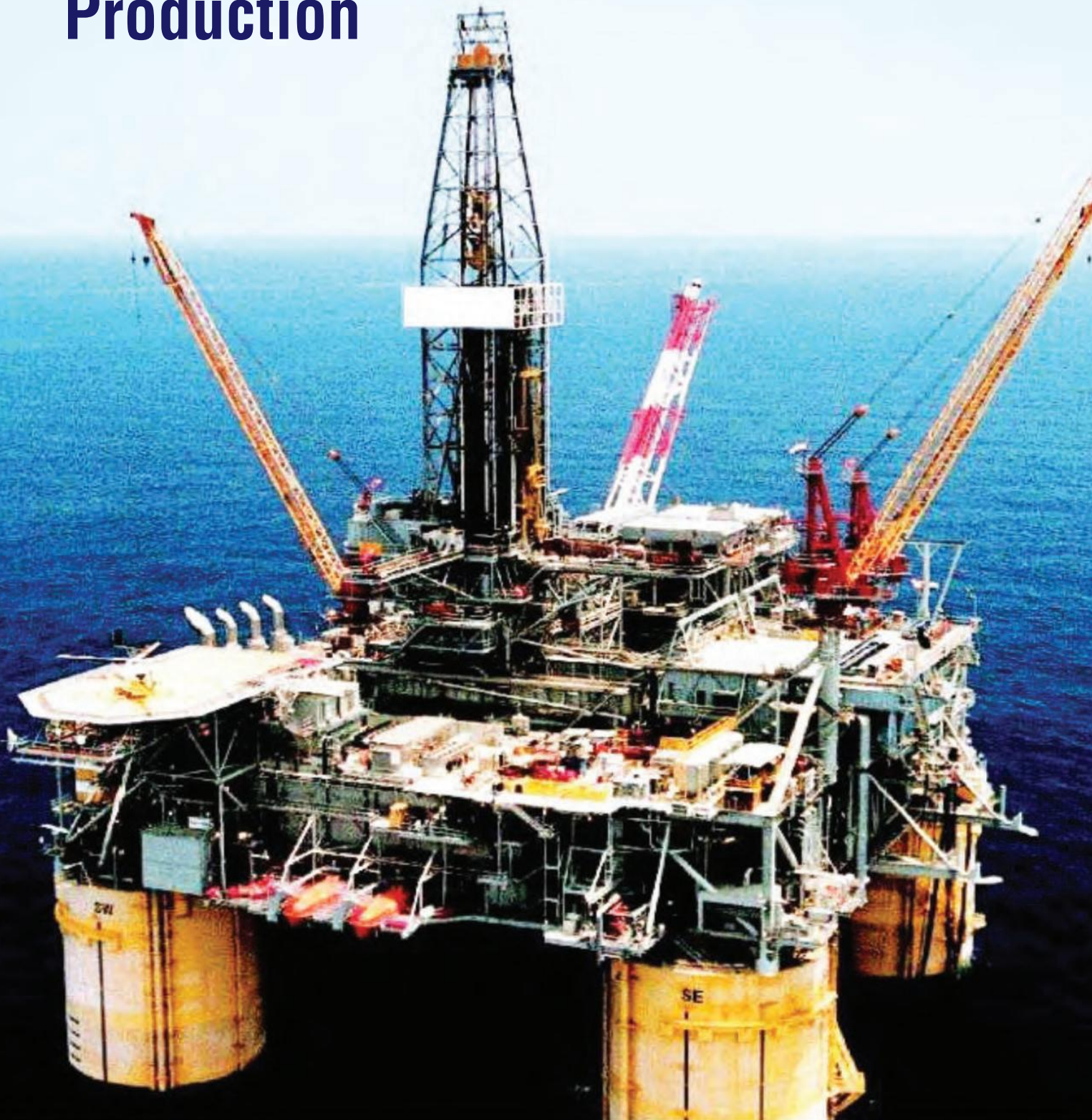
Note: For calculation of per capita consumption, population figure of India have been taken from table no.11 of 'Report of the Technical Group on Population Projections' and for all other countries & the world from World Bank International Data Base for 2023

Conversion factor used for Oil as per product basket of 1 EJ = 23.884589 MTOE (Approximate conversion factors from Energy Institute Statistical Review of World Energy, 2024)

Mtoe: Million tonnes of oil equivalent, Toe: Tonnes of oil equivalent

Chapter-2

Exploration & Crude Oil Production





Chapter - Highlights

Exploration & Crude Oil Production

Exploration & Production industry has come a long way in India from the first oil discovery in 1889 near the town of Digboi in the state of Assam to current 26 sedimentary basins in India, covering a total area of 3.4 million square kilometer. The area is spread across on land, shallow water up to 400-meter water depth and Deepwater further up to Exclusive Economic Zone (EEZ).

The Government of India has taken several steps to increase the crude oil & gas production in India through various policy initiatives towards Exploration & Production activities by allocating & awarding Blocks to both National & Private E&P companies.

In this regard, starting from Pre-Independence era (1886 – 1946) to Nomination Basis era where Petroleum Exploration License (PEL) was awarded (1947 – 1990), then Pre NELP era where Petroleum Mining Lease (PML) was awarded (1991 – 1996) then NELP (New Exploration Licensing Policy) era and then HELP (Hydrocarbon Exploration Licensing Policy) era India has taken several policy initiatives to boost domestic Crude Oil & Gas production.

Further to the above exploration policies, MoPNG introduced DSF (Discovered Small Fields) policy in 2016 to monetize the unmonetized/relinquished discoveries of Nomination and PSC regimes. MoPNG has introduced OLAP (Open Acreage Licensing Policy) under HELP policy in 2016.

The crude oil & gas production in India is mainly attributed to two National E&P companies vis-à-vis ONGC & Oil India Limited and other private E&P companies monitored by DGH under PSC, RSC & DSF regime. During FY 2023-24, Indigenous Crude Oil production, including condensate, reached 29.4 million metric tons. ONGC accounted for 65.4% of the production share, OIL had a 11.4% share, and PSC contributed 23.2%.

Table 2.1: World top 30 crude oil proved reserves countries

S.no.	Country	at end 2020		
		Thousand million tonnes	Thousand million barrels	Reserves/Production ratio
1	Venezuela	48.0	303.8	*
2	Saudi Arabia	40.9	297.5	73.6
3	Canada	27.1	168.1	89.4
4	Iran	21.7	157.8	139.8
5	Iraq	19.6	145.0	96.3
6	Russian Federation	14.8	107.8	27.6
7	Kuwait	14.0	101.5	103.2
8	United Arab Emirates	13.0	97.8	73.1
9	US	8.2	68.8	11.4
10	Libya	6.3	48.4	339.2
11	Nigeria	5.0	36.9	56.1
12	Kazakhstan	3.9	30.0	45.3
13	China	3.5	26.0	18.2
14	Qatar	2.6	25.2	38.1
16	Brazil	1.7	11.9	10.8
15	Algeria	1.5	12.2	25.0
18	Angola	1.1	7.8	16.1
17	Norway	1.0	7.9	10.8
19	Azerbaijan	1.0	7.0	26.7
20	Mexico	0.9	6.1	8.7
21	Oman	0.7	5.4	15.4
22	India	0.6	4.5	16.1
23	Vietnam	0.6	4.4	58.1
24	Other Africa	0.5	3.8	33.2
26	South Sudan	0.5	3.5	56.4
27	Egypt	0.4	3.1	14.0
25	Republic of Congo	0.4	2.9	25.7
28	Yemen	0.4	3.0	86.7
29	Malaysia	0.4	2.7	12.5
30	Argentina	0.3	2.5	11.3
	Sub total	240.5	1703.3	
	Others	3.9	29.0	
	Total World	244.4	1732.4	53.5
	of which: OECD	38.3	260.0	25.2
	Non-OECD	206.1	1472.4	66.9
	OPEC	171.8	1214.7	108.3
	Non-OPEC	72.6	517.7	24.5
	European Union	0.3	2.4	16.8
	Canadian oil sands: Total	26.2	161.4	
	of which: Under active development	3.1	18.9	
	Venezuela: Orinoco Belt	42.0	261.8	

Source: Energy Institute's Statistical Review of World Energy, 2024 ; * More than 500 years.

Notes: Total proved reserves of oil - Generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and operating conditions. The data series for total proved oil reserves does not necessarily meet the definitions, guidelines and practices used for determining proved reserves at company level, for instance as published by the US Securities and Exchange Commission, nor does it necessarily represent the EI's view of proved reserves by country.

"Reserves-to-production (R/P) ratio - If the reserves remaining at the end of any year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that rate.

Canadian oil sands 'under active development' are an official estimate. Venezuelan Orinoco Belt reserves are based on the OPEC Secretariat and government announcements. Reserves and R/P ratio for Canada includes Canadian oil sands. Reserves and R/P ratio for Venezuela includes the Orinoco Belt. Saudi Arabia's oil reserves include NGLs from 2017. Reserves include gas condensate and natural gas liquids (NGLs) as well as crude oil. Shares of total and R/P ratios are calculated using thousand million barrels figures."

Table 2.2: World top 30 crude oil* producing countries, 2023

S.no.	Country	Production*	
		Million tonnes	Million barrels/day
1	US	827.1	19.4
2	Russian Federation	541.7	11.1
3	Saudi Arabia	531.7	11.4
4	Canada	277.9	5.7
5	Iran	214.3	4.7
6	Iraq	213.0	4.4
7	China	209.0	4.2
8	Brazil	183.7	3.5
9	United Arab Emirates	176.1	3.9
10	Kuwait	139.8	2.9
11	Mexico	102.5	2.0
12	Norway	94.7	2.0
13	Kazakhstan	84.2	1.8
14	Qatar	74.1	1.8
15	Nigeria	73.9	1.5
16	Algeria	60.4	1.4
17	Libya	59.7	1.3
18	Angola	55.8	1.2
19	Argentina	51.2	1.1
20	Oman	50.6	1.0
21	Venezuela	43.7	0.9
22	Colombia	40.9	0.8
23	United Kingdom	33.4	0.7
24	India	32.6	0.7
25	Indonesia	31.2	0.6
26	Azerbaijan	30.2	0.6
27	Egypt	29.8	0.6
28	Malaysia	25.5	0.6
29	Ecuador	25.5	0.5
30	Guyana	19.5	0.4
	Sub total	4333.8	92.5
	Others	174.6	3.8
	Total World	4508.4	96.3
	of which: OECD	1411.2	31.3
	Non-OECD	3097.3	64.9
	OPEC	1597.8	34.0
	Non-OPEC	2910.7	62.2
	European Union #	16.0	0.3

Source: Energy Institute's Statistical Review of World Energy, 2024

*Includes crude oil, shale oil, oil sands, condensates (lease condensate or gas condensates that require further refining) and NGLs (natural gas liquids - ethane, LPG and naphtha separated from the production of natural gas).

Excludes liquid fuels from other sources such as biofuels and synthetic derivatives of coal and natural gas. This also excludes liquid fuel adjustment factors such as refinery processing gain. Excludes oil shales/kerogen extracted in solid form.

Excludes Estonia, Latvia and Lithuania prior to 1985 and Croatia and Slovenia prior to 1990.

Table 2.3: World top 30 crude oil consuming countries, 2023

S.no.	Million tonnes	Consumption*	
		Million tonnes	Million barrels /day
1	US	815.6	19.0
2	China	768.6	16.6
3	India	249.3	5.4
4	Saudi Arabia	172.4	4.1
5	Russian Federation	165.3	3.6
6	Japan	151.4	3.4
7	South Korea	121.4	2.8
8	Brazil	118.4	2.6
9	Canada	99.8	2.4
10	Germany	91.6	2.0
11	Mexico	89.7	2.0
12	Iran	79.8	1.8
13	Singapore	70.7	1.4
14	Indonesia	70.3	1.6
15	France	63.5	1.3
16	United Kingdom	61.7	1.3
17	Spain	59.8	1.2
18	Italy	57.4	1.2
19	Turkey	54.2	1.1
20	Thailand	52.2	1.2
21	United Arab Emirates	50.6	1.1
22	Australia	49.6	1.1
23	Iraq	42.1	0.9
24	Malaysia	40.7	0.9
25	Western Africa	40.1	0.9
26	Netherlands	38.8	0.9
27	Taiwan	37.1	0.8
28	Egypt	34.3	0.7
29	Argentina	32.8	0.7
30	Poland	32.2	0.7
	Sub total	3811.5	84.7
	Others	719.0	15.6
	Total World	4530.5	100.3
	of which: OECD	1993.9	44.7
	Non-OECD	2536.6	55.5
	European Union #	494.0	10.5

Source: Energy Institute's Statistical Review of World Energy, 2024

Inland demand plus international aviation and marine bunkers and refinery fuel and loss. Consumption of biogasoline (such as ethanol) and biodiesel are excluded while derivatives of coal and natural gas are included.

Excludes Estonia, Latvia and Lithuania prior to 1985 and Croatia and Slovenia prior to 1990.

Notes: Differences between these world consumption figures and world production statistics are accounted for by stock changes, consumption of non-petroleum additives and substitute fuels and unavoidable disparities in the definition, measurement or conversion of oil supply and demand data.

Table 2.4: World top 30 crude oil refining capacities* countries

(Thousand barrels daily)

S.no..	Country	2013	2023	ADDITION	% CHANGE
1	China	14503	18484	3981	27.5
2	US	17925	18429	504	2.8
3	Russian Federation	6229	6781	552	8.9
4	India	4319	5085	766	17.7
5	South Korea	2878	3363	485	16.9
6	Saudi Arabia	2507	3289	782	31.2
7	Japan	4123	3069	1090	26.4
8	Iran	2075	2604	529	25.5
9	Brazil	2097	2290	193	9.2
10	Germany	2061	2076	15	0.7
11	Canada	1929	1954	25	1.3
12	Italy	1861	1794	(67)	-3.6
13	Spain	1546	1591	44	2.9
14	Mexico	1606	1558	(47)	-3.0
15	Kuwait	936	1309	373	39.9
16	Venezuela	1303	1303	0	0.0
17	Singapore	1414	1302	(112)	-7.9
18	United Arab Emirates	712	1259	547	76.8
19	Thailand	1237	1244	7	0.6
20	Indonesia	1099	1242	143	13.0
21	Netherlands	1279	1241	(38)	-3.0
22	Iraq	917	1219	302	32.9
23	United Kingdom	1498	1219	(279)	-18.6
24	France	1375	1145	(230)	-16.7
25	Taiwan	1197	1083	(114)	-9.5
26	Malaysia	612	955	343	56.0
27	Turkey	596	822	226	37.9
28	Egypt	810	795	(15)	-1.9
29	Other Africa	724	698	(26)	-3.5
30	Algeria	647	657	10	1.6
	Sub total	82014	89860	6895	8.4
	Others	14667	13638	(1029)	-7.0
	Total World	96681	103498	6817	9.7
	of which: OECD	44881	43654	(1227)	-2.7
	Non-OECD	51800	59844	8044	15.5
	European Union #	12777	12154	(623)	-4.9

Source: Energy Institute's Statistical Review of World Energy, 2024 ;

* Atmospheric distillation capacity at year end on a calendar-day basis.

Excludes Estonia, Latvia and Lithuania prior to 1985 and Croatia and Slovenia prior to 1990.

Table 2.5 (A): State wise Crude Oil Production (Including Condensate) in TMT

(TMT)

State	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
Onshore					
Assam	4093	3902	3991	4166	4361
Arunachal Pradesh	56	53	48	47	52
Andhra Pradesh	243	195	202	236	250
Gujarat	4707	4651	4626	4849	4950
Rajasthan	6653	5891	5885	5074	4421
Tamil Nadu	415	410	367	324	294
West Bengal	0.00	0.13	0.05	0.01	0.00
A. Onshore Total Production	16167	15103	15120	14697	14329
Offshore					
Eastern Offshore	557	744	626	550	1463
Western Offshore	14857	14236	13604	13552	13239
Gujarat Offshore	589	411	338	379	326
B. Offshore Total Production	16003	15391	14569	14482	15027
Total Production (A+B)	32170	30494	29688	29179	29356

Source: ONGC, OIL & DGH (P): Provisional

Table 2.5 (B) : Indigenous Crude Oil and Condensate production

(MMT)

Particulars	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
PSU companies					
ONGC	19.2	19.1	18.5	18.4	18.1
OIL	3.1	2.9	3.0	3.2	3.3
PSU total	22.4	22.0	21.5	21.6	21.5
PSC total	8.2	7.1	7.0	6.2	5.7
Total crude oil	30.5	29.1	28.4	27.8	27.2
Condensate	1.6	1.4	1.2	1.4	2.2
Total (crude oil + condensate)	32.2	30.5	29.7	29.2	29.4
Total (crude oil + condensate) (crore barrels)	23.6	22.4	21.8	21.4	21.5

Source: Oil companies and DGH, (P): Provisional

Table 2.6 : Self sufficiency in petroleum products

(MMT)

Particulars	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
i) Indigenous crude oil processing	29.3	28.0	27.0	26.5	26.9
a) Products from indigeneous crude	27.3	26.1	25.2	24.7	25.1
b) Products from fractionators	4.8	4.2	4.1	3.5	3.5
ii) Total production from indigenous crude and condensate (a+b)	32.1	30.3	29.3	28.2	28.5
iii) Total domestic consumption	214.1	194.3	201.7	223.0	234.3
Percentage of self sufficiency (ii/iii)	15.0%	15.6%	14.5%	12.6%	12.2%

Source: Oil companies (P): Provisional

Note:

1. Production of petroleum products from indigenous crude considered at 93.3% of indigenous crude oil processing.
2. The balance demand of petroleum products is met through import of crude oil and POL products.



Table 2.7 (A) : Status of blocks under NELP (As on 01.04.2024)

ROUND	LAUNCH YEAR	OFFERED	AWARDED				RELINQUISHED/ PROPOSED				OPERATIONAL			
			DEEP WATER	SHALLOW WATER	ONLAND	TOTAL	DEEP WATER	SHALLOW WATER	ONLAND	TOTAL	DEEP WATER	SHALLOW WATER	ONLAND	TOTAL
NELP-I	1999	48	7	16	1	24	5	15	1	21	2	1	0	3
NELP-II	2000	25	8	8	7	23	8	8	6	22	0	0	1	1
NELP-III	2002	27	9	6	8	23	9	5	5	19	0	1	3	4
NELP-IV	2003	24	10	0	10	20	10	0	7	17	0	0	3	3
NELP-V	2005	20	6	2	12	20	6	1	9	16	0	1	3	4
NELP-VI	2006	55	21	6	25	52	21	5	20	46	0	1	5	6
NELP-VII	2007	57	11	7	23	41	11	5	20	36	0	2	3	5
NELP-VIII	2009	70	8	11	13	32	8	11	12	31	0	0	1	1
NELP-IX	2010	34	1	3	15	19	1	3	10	14	0	0	5	5
TOTAL		360	81	59	114	254	79	53	90	222	2	6	24	32

Source: DGH

Table 2.7(B): Status of blocks under OALP round of HELP and DSF Rounds (As on 01.04.2024)

ROUND	LAUNCH YEAR	OFFERED	AWARDED				RELINQUISHED/ PROPOSED FOR RELINQUISHMENT/NOT SIGNED				OPERATIONAL				PEL Awaited			
			DEEP/ ULTRA DEEP WATER	SHALLOW WATER	ONLAND	TOTAL	DEEP/ ULTRA DEEP WATER	SHALLOW WATER	ONLAND	TOTAL	DEEP/ ULTRA DEEP WATER	SHALLOW WATER	ONLAND	TOTAL	DEEP/ ULTRA DEEP WATER	SHALLOW WATER	ONLAND	TOTAL
OALP																		
OALP Round-I	2018	55	1	8	46	55	0	0	6	6	1	8	40	49	0	0	0	0
OALP Round-II	2019	14	1	5	8	14	0	0	1	1	1	5	6	12	0	0	1	1
OALP Round-III	2019	23	1	3	14	18	0	0	3	3	1	3	9	13	0	0	2	2
OALP Round-IV	2019	7	0	0	7	7	0	0	0	0	0	0	7	7	0	0	0	0
OALP Round-V	2020	11	1	2	8	11	0	0	1	1	1	2	8	11	0	0	0	0
OALP Round-VI	2021	21	2	4	15	21	0	0	0	0	2	4	15	21	0	0		0
OALP Round-VII	2021	8	1	2	5	8	0	0	0	0	1	2	4	7	0	0	1	1
OALP Round-VIII	2022	10	4	4	2	10	0	0	0	0	3	3	0	6	1	0	2	3
OALP Total		149	11	28	105	144	0	0	11	11	10	27	89	126	1	0	6	7
DSF																		
DSF Round-I	2016	46	0	7	23	30	0	4	7	11	0	3	12	15	0	0	4	4
DSF Round-II	2018	25	0	9	15	24	0	1	4	5	0	8	8	16	0	0	3	3
DSF Round-III*	2021	32	1	19	11	31	0	1	0	1	1	17	6	24	0	1	5	6
DSF Total		103	1	35	49	85	0	6	11	17	1	28	26	55	0	1	12	13
TOTAL		252	12	63	154	229	0	6	22	28	11	55	115	181	1	1	18	20

Source: DGH

Note: NELP: New Exploration Licensing Policy HELP: Hydrocarbon Exploration Licensing Policy

OALP: Open Acreage Licensing Policy Round

DSP: Discovered Small and Marginal Fields

Table 2.8 : Domestic Oil & Gas Production vis a vis Overseas Production

Year	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
Total domestic production (MMTOE)	63.4	59.2	63.7	63.6	65.8
Overseas production by Indian Companies (MMTOE)	24.5	21.9	21.8	19.5	19.9
Overseas production as percentage of domestic production	38.6%	37.0%	34.3%	30.7%	30.2%

Source: ONGC Videsh Ltd., OIL, GAIL, BPRL, IOCL and HPCL
(P): Provisional

Table 2.9 : Coal Bed Methane (CBM) Gas development in India as on 01.04.2024

Parameter	Value	Unit
Prognosticated CBM resources	91.80	TCF
Established CBM resources	10.40	TCF
Total available coal bearing areas (India)	32760.00	Sq. KM
Total available coal bearing areas with MoPNG/DGH	12254.00	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)	11008.00	Sq. KM
Production of CBM gas	April 2023- March 2024(P)	MMSCM
	650.48	

*MoPNG awarded 03 new CBM Blocks (Area 717 sq. km) under Special CBM Bid Round 2022 in January 2024.
Source: DGH

Table 2.10: Status of Shale Gas and oil development in India (As on 01.04.2024)

Policy Guidelines for Exploration & exploitation of Shale gas and oil	Shale gas and oil exploration policy was announced in October, 2013. ONGC and OIL India Ltd have been allotted 50 and 6 blocks respectively for assessment under Phase-I. ONGC identified 50 blocks in 4 basins and OIL identified 6 blocks in 2 basins in Phase-I.				
	Under Hydrocarbon Exploration and Licensing Policy (HELP), 2016, all types of hydrocarbon resources, both Conventional and Unconventional including CBM, shale gas/oil, tight gas and gas hydrates were allowed to be explored and exploited.				
	In August 2018, the Government of India notified a Policy framework for Exploration and exploitation of Unconventional hydrocarbons in existing acreages under existing Production Sharing Contracts (PSC), Coal Bed Methane (CBM) Contracts and Nomination fields.				
Exploration Activities					
Company	Basin	Phase-I Blocks	MWP* Wells	Blocks Taken up for Drilling	Actual Wells Drilled
Oil and Natural Gas Corporation Limited (ONGC):	Cambay	28	29	16	17
	KG	10	13	6	8
	Cauvery	9	12	1	3
	Assam	3	3	2	2
	Total	50	57	25	30
Oil India Limited (OIL):	Jaisalmer	1	2	1	1
	Assam	5	6	0	3
	Total	6	8	1	4
Grand Total		56	65	26	34

*MWP : Minimum Work Programme



Chapter-3

Natural Gas





Chapter - Highlights

Natural Gas

1. Domestic Natural Gas production:

- a. The domestic Gross Production of natural gas for the from October 2023- March 2024 period has shown an increase of 6.97% when compared from October 2022- March 2023 i.e.an increase of 1293 MMSCM from 17266 MMSCM in October 2022- March 2023 to 18559 MMSCM in October 2023- March 2024. Overall, in the FY 2023-24 the gross production was 36438 MMSCM which is an increase of 5.45% in from the previous FY 2022-23.
- b. The six-month rise is mainly due to an increase in production of natural gas from PSC/JV's fields (26.7%) and OIL from nomination fields (3.9%). Whereas natural gas production from ONGC nomination fields have shown declining trend (-3.3%). Annually, the production from PSC/JVs fields shows an increase of 22.65% and production from OIL nomination fields shows an increase of 1.62%.

2. LNG import*:

- a. The LNG Imports in volume terms increase by 29.3% i.e. from 12625 MMSCM in the period October 2022- March 2023 to 16379 MMSCM in the period October 2023- March 2024. In value terms, the LNG Imports in US \$ terms have shown a decline of 9.92% i.e. from US \$ 7680 Million in the period October 2022-March 2023 to US \$ 6918 Million in the period October 2023- March 2024.
- b. On annual terms, the LNG Imports in volume terms increased by 20.9% i.e. from 26304 MMSCM in the FY 2022-23 to 31795 MMSCM in the FY 2023-24. In value terms, the LNG Imports in US \$ terms shows a decline of 22% i.e. from ~US \$ 17114 Million in FY 2022-23 to US \$ 13405 Million in the FY 2023-24.

(*Data may vary from DGCIS data)

3. LNG terminals capacity utilization:

- a. Utilization of LNG terminal capacity of 42.7 MMTPA in the period FY 2023-24 ranged from 14.6% (Mundra LNG Terminal) Million to 95.47% (Dahej LNG terminal).

4. CGD Networks:

- a. In terms of infrastructure, in CNG there are 6861 CNG stations in 294 GAs reported by about 55 CGD entities and in PNG there are 12982632 PNG connections (DPNG-12922516 Nos., Commercial- 41360 Nos, Industrial- 18756) in 207 GAs reported by about 47 CGD entities. (Source: PNGRB)
- b. In terms of aggregated 6 monthly sales (October 2023- March 2024), there was an increase of 9% in CNG sector, 20% in DPNG and 24% in Commercial sector and 75 in Industrial sector sales from the immediate previous six-month period (April -September-2023). Total Six-Monthly sales under CGD sector also increased by 9% when compared to last 6 months CGD sales. Annually, the natural gas sales per day in CGD sector has shown an increase of 8.5% i.e. from 34 MMSCMD in the FY 2022-23 to 37 MMSCMD in FY 2023-24.

5. Consumption:

- a. From availability perspective: Total Consumption (including for internal use i.e Net Production + LNG import) showed an increase of 17.19% to 34593 MMSCM (October 2023- March 2024) from 29518 MMSCM (October 2022 – March 2023). Annually, consumption has shown an increase from 59969 MMSCM in FY 2022-23 to 67512 MMSCM i.e. 12.58% increase.
- b. Sectoral Consumption: Major Sectors for NG consumption during April 2022- March 2023 were Fertilizer (33 %) , CGD (20%) , Power (14%) , Refinery (7%) and Petrochem (3 %).

Table 3.1 : World top 30 natural gas reserve countries

BCM

Sr.No.	Country	2020
1	Russian Federation	37392
2	Iran	32101
3	Qatar	24665
4	Turkmenistan	13601
5	US	12619
6	China	8399
7	Venezuela	6260
8	Saudi Arabia	6019
9	United Arab Emirates	5939
10	Nigeria	5473
11	Iraq	3529
12	Azerbaijan	2504
13	Australia	2390
14	Canada	2354
15	Algeria	2279
16	Kazakhstan	2257
17	Egypt	2138
18	Kuwait	1695
19	Other Africa	1569
20	Libya	1430
21	Norway	1429
22	India	1320
23	Indonesia	1252
24	Ukraine	1091
25	Malaysia	908
26	Uzbekistan	845
27	Oman	666
27	Vietnam	646
29	Israel	589
30	Myanmar	432
	Others	4283
	Total World	188074
	of which: OECD	20280
	Non-OECD	167795
	European Union	442

Source: Energy Institute's Statistical Review of World Energy, 2024. Latest data available for this table is for 2020.
 Figures are for Calendar year

Table 3.2 : World top 30 Natural Gas Producing countries

BCM

Sr No.	Country	2023
1	US	1035
2	Russian Federation	586
3	Iran	252
4	China	234
5	Canada	190
6	Qatar	181
7	Australia	152
8	Norway	117
9	Saudi Arabia	114
10	Algeria	102
11	Malaysia	81
12	Turkmenistan	76
13	Indonesia	64
14	Egypt	57
15	United Arab Emirates	56
16	Uzbekistan	44
17	Nigeria	44
18	Oman	43
19	Argentina	42
20	Mexico	36
21	Azerbaijan	36
22	Other Africa	35
23	United Kingdom	34
24	India	32
25	Kazakhstan	31
26	Venezuela	30
27	Pakistan	28
28	Thailand	26
29	Trinidad & Tobago	25
30	Israel	24
	Sub total	3804
	Others	255
	Total World	4059
	of which: OECD	1632
	Non-OECD	2427
	# European Union	34

Source: Energy Institute's Statistical Review of World Energy, 2024

Note: As per Energy Institute's Statistics Review, India is at 24th position with Natural Gas Production at 31.6 BCM in calendar year 2023 while as per MoPNG/PPAC Net Natural Gas Production of India (after excluding flare & loss) during calendar year 2023 has been 35.1 BCM

Figures are for Calendar year

Table 3.3 : World top 30 Natural Gas consuming countries

BCM

Sl. no.	Country	2023
1	US	886
2	Russian Federation	453
3	China	405
4	Iran	246
5	Canada	121
6	Saudi Arabia	114
7	Mexico	98
8	Japan	92
9	Germany	76
10	United Arab Emirates	67
11	United Kingdom	64
12	India	63
13	South Korea	60
14	Egypt	60
15	Italy	59
16	Turkey	48
17	Thailand	47
18	Uzbekistan	47
19	Algeria	46
20	Malaysia	46
21	Indonesia	45
22	Argentina	45
23	Qatar	44
24	Australia	40
25	Pakistan	38
26	Turkmenistan	37
27	France	34
28	Western Africa	32
29	Brazil	30
30	Venezuela	30
	Sub total	3472
	Others	538
	Total World	4010
	of which: OECD	1757
	Non-OECD	2253
	European Union	319

Source: Energy Institute's Statistical Review of World Energy, 2024. Totals may not tally due to rounding off.
Figures are for Calendar year



Table 3.4 : Natural Gas at a glance

(MMSCM)

	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
Gross production	31184	28672	34024	34450	36438
Net Production (net of flare and loss)	30257	27784	33131	33664	35717
LNG import*	32352	33198	31028	26304	31795
"Total Consumption including internal use (Net Production+ LNG import) "	62609	60981	64159	59968	67512
Total consumption (in BCM)	62.6	61.0	64.2	60.0	67.5

Table 3.5 : Natural Gas production

(MMSCM)

	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
ONGC					
A) Gross Production	23746	21872	20629	19969	19316
B) Flared	520	458	515	389	280
C) Internal Use	4697	4432	4239	4073	4089
D) Loss	0	0	0	0	0
D) =A-B-C Net Production for Sale	18529	16982	15875	15507	14946
Oil India Limited					
A) Gross Production	2668	2480	2893	3041	3090
B) Flared	155	164	200	231	216
C) Internal Use	377	371	471	473	466
D) Loss	13	14	32	48	40
D) =A-B-C Net Production for Sale	2123	1930	2189	2289	2368
PSC/JVs fields					
A) Gross Production	4770	4321	10502	11440	14032
B) Flared	185	199	98	76	152
C) Internal Use	978	925	1047	957	1026
D) Loss	54	53	47	43	32
E) =A-B-C-D Net Production for Sale	3552	3143	9310	10365	12822
Grand Total					
A) Gross Production	31184	28672	34024	34450	36438
B) Flared	860	822	813	695	649
C) Internal Use	6052	5729	5758	5504	5581
D) Loss	67	67	80	91	72
E) =A-B-C-D Net Production for Sale	24205	22055	27374	28160	30135

Source: Domestic Gas Producers / DGH / LNG Importing companies/DGCIS (in some cases DGCIS data is prorated)

Note: LNG import data in Million Metric Tonne (MMT), converted to MMSCM; 1MMT=1325 MMSCM

BCM: Billion Cubic Meter; MMSCMD: Million Standard Cubic Meter per Day

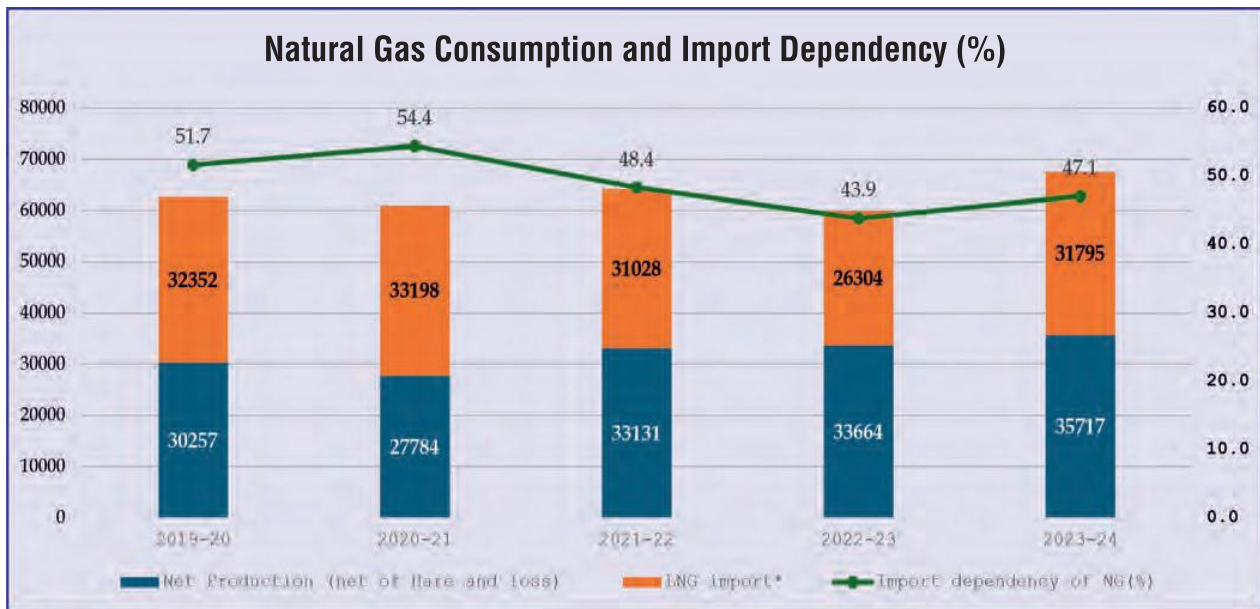
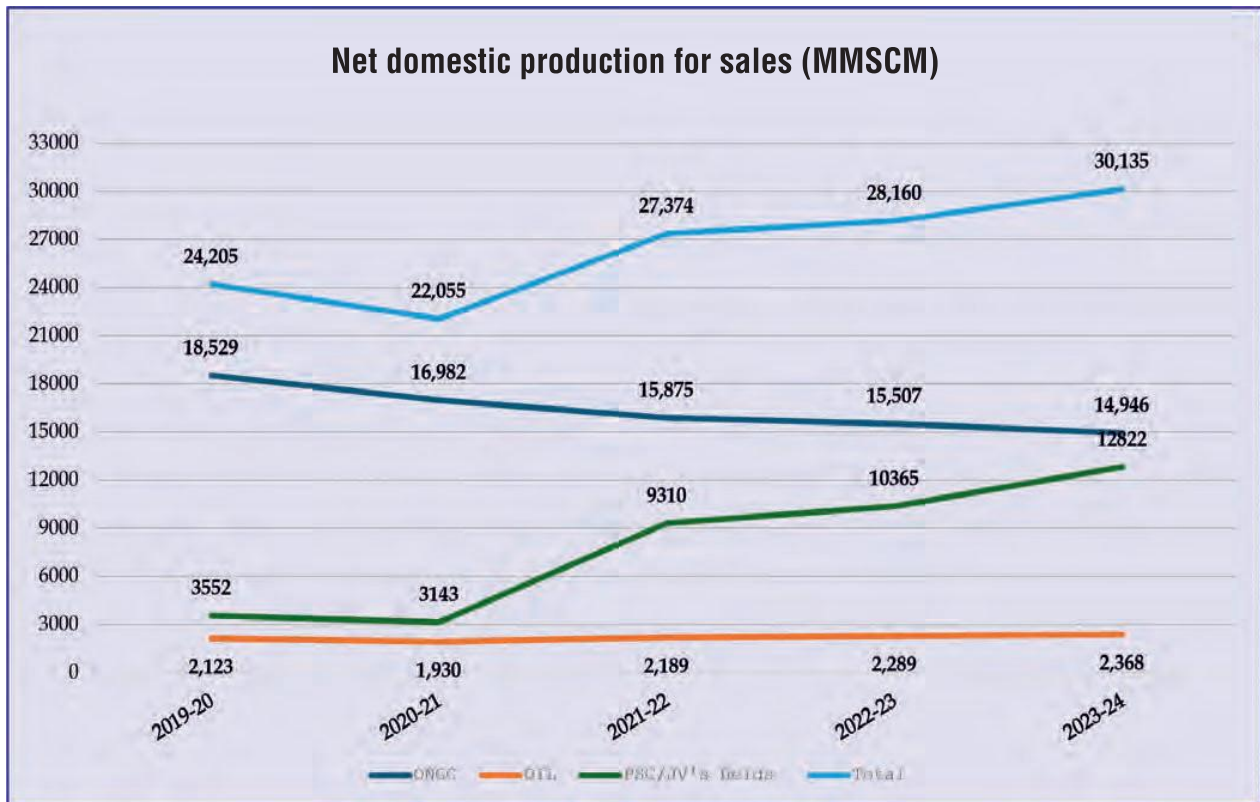


Table 3.5(A): State wise Natural Gas Production in MMSCM

State	Onshore/ CBM/ Offshore	FY	Gross Production	Net Production
Andhra Pradesh	A. Onshore	2019-20	912	874
		2020-21	827	783
		2021-22	809	767
		2022-23	710	680
		2023-24 (P)	722	688
Assam & Arunachal Pradesh	A. Onshore	2019-20	3187	2942
		2020-21	3051	2815
		2021-22	3429	3136
		2022-23	3611	3274
		2023-24 (P)	3529	3209
Gujarat	A. Onshore	2019-20	1883	1772
		2020-21	2040	1938
		2021-22	2619	2541
		2022-23	2340	2289
		2023-24 (P)	2199	2154
Rajasthan	A. Onshore	2019-20	1097	1051
		2020-21	911	857
		2021-22	1067	1043
		2022-23	1109	1078
		2023-24 (P)	1016	981
Tamil Nadu	A. Onshore	2019-20	1473	1472
		2020-21	1634	1634
		2021-22	1531	1530
		2022-23	1675	1675
		2023-24 (P)	1525	1525
Tripura	A. Onshore	2019-20	5	5
		2020-21	2	2
		2021-22	4	4
		2022-23	10	9
		2023-24 (P)	5	5
Jharkhand (CBM)	B. CBM	2019-20	5	5
		2020-21	2	2
		2021-22	4	4
		2022-23	10	9
		2023-24 (P)	5	5
Madhya Pradesh (CBM)	B. CBM	2019-20	345	344
		2020-21	334	333
		2021-22	389	365
		2022-23	264	263
		2023-24 (P)	234	234
West Bengal (CBM)	B. CBM	2019-20	306	277
		2020-21	307	250
		2021-22	290	290
		2022-23	399	387
		2023-24 (P)	411	400

Table 3.5A Continued

State	Onshore/ CBM/ Offshore	FY	Gross Production	Net Production
Onshore Total	A+B	2019-20	10549	10025
		2020-21	10243	9670
		2021-22	11155	10646
		2022-23	11042	10536
		2023-24 (P)	10567	10092
Mumbai High + Eastern Offshore		2019-20	18576	18226
		2020-21	17086	16810
		2021-22	15943	15581
		2022-23	15325	15065
		2023-24 (P)	14979	14800
Private / JVCs	C	2019-20	2059	2006
		2020-21	1343	1303
		2021-22	6926	6904
		2022-23	8084	8063
		2023-24 (P)	10892	10825
Offshore Total	C	2019-20	20635	20232
		2020-21	18429	18113
		2021-22	22869	22485
		2022-23	23409	23128
		2023-24 (P)	25871	25625
Grand Total	A+B+C	2019-20	31184	30257
		2020-21	28672	27784
		2021-22	34024	33131
		2022-23	34450	33664
		2023-24 (P)	36438	35717

Source: ONGC, OIL and DGH (Pvt./JVs)





Table No. 3.6 : PNG data as on 01.04.2024(P)

State/Union Territory	Geographical Area/ CGD Networks	Authorized CGD Entity	Domestic	Commercial	Industrial
Andhra Pradesh	Anantapur and YSR (Kadapa) Districts	AGP City Gas Private Limited	11081	7	0
	East Godavari District (EAAA)	Godavari Gas Private Limited	49800	9	0
	Kakinada	Bhagyanagar Gas Limited	65676	177	4
	Krishna District (EAAA)	Megha City Gas Distribution Private Limited	27764	171	28
	Sri Potti Sriramulu Nellore District	AGP City Gas Private Limited	3086	1	3
	Srikakulam, Visakhapatnam & Vizianagaram Districts	Indian Oil Corporation Limited	5463	0	0
	Vijaywada	Bhagyanagar Gas Limited	57608	101	1
	West Godavari District	Godavari Gas Private Limited	51107	4	3
	Andhra Pradesh Total		271585	470	39
Andhra Pradesh, Karnataka & Tamil Nadu	Chittoor, Kolar and Vellore Districts	AGP City Gas Private Limited	9648	6	6
	Andhra Pradesh, Karnataka & Tamil Nadu Total		9648	6	6
Assam	Cachar, Hailakandi & Karimganj Districts	Purba Bharati Gas Private Limited	1934	0	0
	Kamrup & Kamrup Metropolitan Districts	Purba Bharati Gas Private Limited	1010	0	0
	Upper Assam	Assam Gas Company Limited	55530	1393	456
	Assam Total		58474	1393	456
Bihar	Araria, Purnia, Katihar and Kishanganj Districts	Indian Oil Corporation Limited	8024	0	0
	Arwal, Jehanabad, Bhojpur and Buxar Districts	Indian Oil Corporation Limited	10250	22	1
	Aurangabad, Kaimur & Rohtas Districts	Indian Oil Corporation Limited	3641	13	0
	Begusarai District	Think Gas Begusarai Private Limited	7233	14	2
	Darbhanga, Madhubani, Supaul, Sitamarhi and Sheohar districts	Bharat Petroleum Corporation Limited	11937	0	0
	Gaya & Nalanda Districts	Indian-Oil Adani Gas Private Limited	1197	0	0
	Khagaria, Saharsa and Madhepura Districts	Indian Oil Corporation Limited	1268	0	0
	Lakhisarai, Munger and Bhagalpur Districts	Indian Oil Corporation Limited	9069	4	0
	Muzaffarpur, Vaishali, Saran and Samastipur Districts	Indian Oil Corporation Limited	32571	8	1
	Patna District	GAIL (India) Limited	70636	66	6
	Bihar Total		155826	127	10
Bihar & Jharkhand	Nawada and Koderma Districts	Indian Oil Corporation Limited	1528	0	0
	Sheikhpura, Jamui and Deoghar Districts	Indian Oil Corporation Limited	6999	4	0
	Bihar & Jharkhand Total		8527	4	0
Bihar & Uttar Pradesh	Gopalganj, Siwan, West Champaran, East Champaran and Deoria districts	Bharat Petroleum Corporation Limited	4400	0	0
	Bihar & Uttar Pradesh Total		4400	0	0
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	Chandigarh	Indian-Oil Adani Gas Private Limited	26845	165	46
	Chandigarh (UT), Haryana, Punjab & Himachal Pradesh Total		26845	165	46
Chhattisgarh	Koriya, Surajpur, Balrampur and Surguja districts	Bharat Petroleum Corporation Limited	3499	0	0
	Chhattisgarh Total		3499	0	0
Dadra & Nagar Haveli (UT)	UT of Dadra & Nagar Haveli	Gujarat Gas Limited	12154	57	62
	Dadra & Nagar Haveli (UT) Total		12154	57	62

Table 3.6 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	Domestic	Commercial	Industrial	
Daman & Diu (UT)	UT of Daman	Indian-Oil Adani Gas Private Limited	5240	73	51	
	Daman & Diu (UT) Total		5240	73	51	
Daman and Diu & Gujarat	Diu & Gir Somnath Districts	IRM Energy Private Limited	6407	23	0	
	Daman and Diu & Gujarat Total		6407	23	0	
Goa	North Goa District	Goa Natural Gas Private Limited	10930	29	29	
	South Goa District	Indian-Oil Adani Gas Private Limited	2668	1	14	
	Goa Total		13598	30	43	
Gujarat	Ahmedabad City and Daskroi Area	Adani Total Gas Limited	619395	3617	854	
	Ahmedabad District (EAAA)	Gujarat Gas Limited	14010	4	12	
	Amreli District	Gujarat Gas Limited	14803	51	5	
	Anand area including Kanjari & Vadtal Villages (in Kheda District)	Charotar Gas Sahakari Mandali Limited	48716	747	166	
	Anand District (EAAA)	Gujarat Gas Limited	43859	469	30	
	Banaskantha District	IRM Energy Private Limited	53768	242	14	
	Barwala & Ranpur Talukas	Adani Total Gas Limited	6	1	0	
	Bhavnagar	Gujarat Gas Limited	71381	449	98	
	Dahej Vagra Taluka	Gujarat Gas Limited	1559	17	58	
	Dahod District	Gujarat Gas Limited	11052	33	29	
	Gandhinagar Mehsana Sabarkantha	Sabarmati Gas Limited	275285	1173	439	
	Gandhinagar###	Gujarat Gas Limited	164046	617	23	
	Hazira	Gujarat Gas Limited	41125	145	22	
	Jamnagar	Gujarat Gas Limited	52152	243	140	
	Junagadh District	Torrent Gas Private Limited	9248	38	1	
	Kheda District (EAAA) & Mahisagar District	Adani Total Gas Limited	1059	4	0	
	Kutch (West)	Gujarat Gas Limited	10730	67	7	
	Nadiad	Gujarat Gas Limited	75862	602	30	
	Narmada (Rajpipla) District	Gujarat Gas Limited	3003	4	0	
	Navsari	Gujarat Gas Limited	120049	272	48	
	Navsari District (EAAA), Surat District (EAAA), Tapi District (EAAA) & the Dangs District	Adani Total Gas Limited	614	1	0	
	Panchmahal District	Gujarat Gas Limited	25202	159	87	
	Patan District	Sabarmati Gas Limited	21497	71	9	
	Rajkot	Gujarat Gas Limited	367378	1251	1482	
	Surat, Bharuch, Ankleshwar	Gujarat Gas Limited	824192	9552	1045	
	Surendranagar	Gujarat Gas Limited	31625	344	366	
	Surendranagar District (EAAA) & Morbi District (EAAA)	Adani Total Gas Limited	223	0	1	
	Vadodara	Vadodara Gas Limited	245688	2907	36	
	Vadodara**	Adani Total Gas Limited	616	1	79	
	Valsad	Gujarat Gas Limited	134114	453	731	
		Gujarat Total		3282257	23534	5812
	Haryana	Ambala & Kurukshetra Districts	HPOIL Gas Private Limited	15465	31	6
		Bhiwani, Charkhi Dadri & Mahendragarh Districts	Adani Total Gas Limited	548	0	0
Faridabad-2		Adani Total Gas Limited	116091	497	791	
Gurugram-2		Haryana City Gas Distribution Limited	47095	206	642	
Hisar District		HCG (KCE) Private Limited	0	0	4	
Jhajjar District		Haryana City Gas (KCE) Private Limited	30	0	166	
Kaithal District		Indraprastha Gas Limited	34901	0	1	
Karnal District		Indraprastha Gas Limited	26118	20	60	
Nuh and Palwal Distircts		Adani Total Gas Limited	22468	25	99	
Panipat District		Indian-Oil Adani Gas Private Limited	17457	19	61	
Rewari District		Indraprastha Gas Limited	24280	79	204	
Rohtak District		Bharat Petroleum Corporation Limited	11623	16	17	

Table 3.6 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	Domestic	Commercial	Industrial
Haryana	Sonipat	GAIL Gas Limited	33161	41	258
	Sonipat District (EAAA) & Jind District	Hindustan Petroleum Corporation Limited	7908	4	18
	Yamunanagar District	Bharat Petroleum Corporation Limited	11772	17	4
	Gurugram(IGL)***	Indraprastha Gas Limited	26706	137	62
Haryana Total			395623	1092	2393
Haryana & Himachal Pradesh	Panchkula District (EAAA), Sirmaur, Shimla & Solan (EAAA) Districts	Indian-Oil Adani Gas Private Limited	48	0	0
	Haryana & Himachal Pradesh Total			48	0
Haryana & Punjab	Sirsa, Fatehabad and Mansa (Punjab) Districts	Gujarat Gas Limited	1181	0	0
Haryana & Punjab Total			1181	0	0
Himachal Pradesh	Bilaspur, Hamirpur & Una Districts	Bharat Petroleum Corporation Limited	7715	22	0
Himachal Pradesh Total			7715	22	0
Jharkhand	Bokaro, Hazaribagh & Ramgarh Districts	Indian Oil Corporation Limited	9327	12	0
	Chatra and Palamu Districts	Bharat Petroleum Corporation Limited	2659	0	0
	East Singhbhum District	GAIL (India) Limited	42952	12	0
	Giridih & Dhanbad Districts	GAIL Gas Limited	12144	0	1
	Ranchi District	GAIL (India) Limited	57567	3	1
	Seraikela-Kharsawan District	GAIL Gas Limited	13058	1	2
	West Singhbhum District	GAIL Gas Limited	125	0	0
Jharkhand Total			137832	28	4
Karnataka	Bagalkot, Koppal and Raichur Districts	AGP City Gas Private Limited	4047	3	0
	Ballari & Gadag Districts	Bharat Petroleum Corporation Limited	14376	0	0
	Belgaum District	Megha City Gas Distribution Private Limited	32138	140	39
	Bengaluru Rural and Urban Districts	GAIL Gas Limited	259287	232	186
	Bidar District	Bharat Petroleum Corporation Limited	6196	0	0
	Chikkamagaluru, Hassan and Kodagu Districts	AGP City Gas Private Limited	150	0	0
	Chitradurga & Davanagere Districts	Unison Enviro Private Limited	3797	1	0
	Dakshina Kannada District*	GAIL Gas Limited	35343	15	15
	Dharwad District	Indian-Oil Adani Gas Private Limited	20189	20	10
	Kalaburagi and Vijayapura Districts	AGP City Gas Private Limited	270	0	0
	Mysuru, Mandya and Chamarajanagar Districts	AGP City Gas Private Limited	1008	3	27
	Ramanagara District	Maharashtra Natural Gas Limited	31445	4	23
	Tumkur District	Megha City Gas Distribution Private Limited	31883	163	62
Uttara Kannada, Haveri and Shivamogga Districts	AGP City Gas Private Limited	608	0	0	
Karnataka Total			440737	581	362
Kerala	Alapuzza, Kollam and Thiruvananthapuram Districts	AGP City Gas Private Limited	20943	7	5
	Ernakulam District	Indian-Oil Adani Gas Private Limited	42005	41	14
	Kozhikode & Wayanad Districts	Indian-Oil Adani Gas Private Limited	3829	5	0
	Malappuram District	Indian-Oil Adani Gas Private Limited	1198	1	0
	Palakkad & Thrissur Districts	Indian-Oil Adani Gas Private Limited	5986	3	3
Kerala Total			73961	57	22
Kerala & Puducherry	Kannur, Kasaragod & Mahe Districts	Indian-Oil Adani Gas Private Limited	2933	0	0
Kerala & Puducherry Total			2933	0	0
Madhya Pradesh	Ashoknagar District	Indian Oil Corporation Limited	1292	1	0
	Betul, Chhindwara, Seoni and Balaghat districts	Megha City Gas Distribution Private Limited	128	0	0
	Bhopal & Rajgarh Districts	Think Gas Bhopal Private Limited	35691	63	19
	Dewas	GAIL Gas Limited	21567	32	29
	Dhar District	Naveriya Gas Private Limited	1467	21	6
Guna District	Indian Oil Corporation Limited	1060	0	0	

Table 3.6 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	Domestic	Commercial	Industrial
Madhya Pradesh	Gwalior	Aavantika Gas Limited	53005	68	17
	Indore (including Ujjain City)	Aavantika Gas Limited	100451	273	441
	Morena District	Indian Oil Corporation Limited	2750	0	0
	Raisen, Shajapur and Sehore Districts	GAIL Gas Limited	4587	8	6
	Rewa District	Indian Oil Corporation Limited	2225	4	0
	Satna & Shandol Districts	Bharat Petroleum Corporation Limited	6575	0	0
	Shivpuri District	Think Gas Bhopal Private Limited	3126	2	0
	Sidhi and Singrauli Districts	Bharat Petroleum Corporation Limited	3538	0	0
	Ujjain (EAAA) District, Dewas (EAAA) District and Indore (EAAA) District	Gujarat Gas Limited	1143	0	1
Madhya Pradesh Total			238605	472	519
Madhya Pradesh and Rajasthan	Jhabua, Banswara, Ratlam and Dungarpur Districts	Gujarat Gas Limited	863	0	0
Madhya Pradesh and Rajasthan Total			863	0	0
Maharashtra	Ahmednagar & Aurangabad Districts	Bharat Petroleum Corporation Limited	97408	5	6
	Kolhapur District	HPOIL Gas Private Limited	25231	11	25
	Latur & Osmanabad Districts	Unison Enviro Private Limited	2432	2	0
	Mumbai & Greater Mumbai	Mahanagar Gas Limited	1257250	3268	116
	Palghar District & Thane Rural	Gujarat Gas Limited	50376	28	101
	Pune City including Pimpri - Chichwad & adjoining contiguous areas Hinjewadi, Chakan, Talegaon	Maharashtra Natural Gas Limited	632681	479	305
	Pune District (EAAA)	Torrent Gas Pune Limited	15742	18	49
	Raigarh District (EAAA)	Mahanagar Gas Limited	80041	7	12
	Ratnagiri District	Unison Enviro Private Limited	12590	8	46
	Sangli & Satara Districts	Bharat Petroleum Corporation Limited	69864	2	2
	Sindhudurg District	Maharashtra Natural Gas Limited	6890	2	0
	Solapur District	IMC Limited	26965	1	4
	Thane urban and adjoining Municipalities	Mahanagar Gas Limited	1152456	1033	333
Maharashtra Total			3429926	4864	999
Maharashtra & Gujarat	Valsad (EAAA), Dhule & Nashik Districts	Maharashtra Natural Gas Limited	187645	10	33
Maharashtra & Gujarat Total			187645	10	33
National Capital Territory of Delhi (UT)	National Capital Territory of Delhi	Indraprastha Gas Limited	1564294	4046	1916
National Capital Territory of Delhi (UT) Total			1564294	4046	1916
Odisha	Angul & Dhekanal Districts	Bharat Petroleum Corporation Limited	3806	0	0
	Bargarh, Debagarh & Sambalpur Districts	Bharat Petroleum Corporation Limited	5542	0	0
	Cuttack District	GAIL (India) Limited	28360	3	0
	Ganjam, Nayagarh & Puri Districts	GAIL Gas Limited	5913	0	0
	Jagatsinghpur & Kendrapara Districts	Bharat Petroleum Corporation Limited	4787	0	0
	Jajpur & Kendujhar Districts	Bharat Petroleum Corporation Limited	3715	0	0
	Khordha District	GAIL (India) Limited	60684	6	0
	Sundargarh & Jharsuguda Districts	GAIL Gas Limited	8639	1	0
Odisha Total			121446	10	0
Puducherry & Tamil Nadu	Karaikal & Nagapattinam Districts	Torrent Gas Private Limited	329	0	0
Puducherry & Tamil Nadu Total			329	0	0
Punjab	Amritsar District	Gujarat Gas Limited	27278	378	10
	Bhatinda District	Gujarat Gas Limited	5271	14	1

Table 3.6 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	Domestic	Commercial	Industrial
Punjab	Fatehgarh Sahib District	IRM Energy Private Limited	6051	75	181
	Ferozepur, Faridkot and Sri Muktsar Sahib Districts	Gujarat Gas Limited	944	1	0
	Hoshiarpur and Gurdaspur Districts	Gujarat Gas Limited	2916	2	1
	Jalandhar District (EAAA), Kapurthala & SBS Nagar Districts	Think Gas Ludhiana Private Limited	14190	40	23
	Ludhiana District (EAAA), Barnala & Moga Districts	Think Gas Ludhiana Private Limited	14455	60	59
	Rupnagar District	Bharat Petroleum Corporation Limited	8738	10	0
	SAS Nagar District (EAAA), Patiala & Sangrur Districts	Torrent Gas Private Limited	5729	42	18
	Punjab Total		85572	622	293
Punjab & Rajasthan	Fazilka (except area already authorized), Ganganagar and Hanumangarh districts	Bharat Petroleum Corporation Limited	4842	0	0
	Punjab & Rajasthan Total		4842	0	0
Rajasthan	Ajmer, Pali and Rajsamand Districts	Indraprastha Gas Limited	200116	5	1
	Alwar (Other than Bhiwadi) & Jaipur Districts	Torrent Gas Jaipur Private Limited	3757	15	31
	Barmer, Jaisalmer & Jodhpur Districts	AGP CGD India Private Limited	50881	81	81
	Bhilwara & Bundi Districts	Adani Total Gas Limited	1018	5	4
	Bhiwadi (in Alwar District)	Haryana City Gas Distribution (Bhiwadi) Limited	5419	9	297
	Chittorgarh (Other than Rawatbhata Taluka) & Udaipur Districts	Adani Total Gas Limited	2149	0	0
	Dausa, Karauli, Sawai Madhopur and Tonk districts	Hindustan Petroleum Corporation Limited	53	0	0
	Dholpur District	Dholpur CGD Private Limited	609	1	0
	Jalore and Sirohi Districts	Gujarat Gas Limited	7237	15	1
	Jhunjhunu, Sikar and Nagaur districts	Indian Oil Corporation Limited	864	0	0
	Kota	Rajasthan State Gas Limited	34370	65	1286
Kota District (EAAA), Baran & Chittorgarh (Only Rawatbhata Taluka) Districts	Torrent Gas Private Limited	2500	11	1	
	Rajasthan Total		308973	207	1702
Tamil Nadu	Chennai & Tiruvallur Districts	Torrent Gas Chennai Private Limited	323	1	2
	Coimbatore District	Indian Oil Corporation Limited	14772	0	0
	Dharmapuri and Krishnagiri districts	Indian Oil Corporation Limited	220	0	0
	Kanchipuram District	AGP CGD India Private Limited	3217	4	13
	Madurai, Theni and Virudhnagar districts	Indian Oil Corporation Limited	206	0	0
	Namakkal and Tiruchirapalli districts	IRM Energy Private Limited	1	0	0
	Ramanathapuram District	AGP CGD India Private Limited	3452	2	0
	Salem District	Indian Oil Corporation Limited	1730	2	0
	The Nilgiris and Erode districts	Bharat Petroleum Corporation Limited	1221	0	0
	Tiruppur District	Adani Total Gas Limited	33	0	0
	Tamil Nadu Total		25175	9	15
Telangana	Bhadradi Kothagudem & Khamman Districts	Megha City Gas Distribution Private Limited	1633	0	0
	Hyderabad	Bhagyanagar Gas Limited	192762	89	83
	Jagtial, Peddapalli, Karimnagar & Rajanna Sircilla Districts	Indian Oil Corporation Limited	813	0	0
	Jangaon, Jayashankar Bhupalpally, Mahabubabad, Warangal Urban & Warangal Rural Districts	Megha City Gas Distribution Private Limited	3596	3	0
	Medak, Siddipet & Sangareddy Districts	Torrent Gas Private Limited	2382	2	24
	Medchal-Malkajgiri, Ranga Reddy & Vikarabad Districts	Megha City Gas Distribution Private Limited	5401	4	6
	Nalgonda Suryapet & Yadadri Bhuvanagiri Districts	Megha City Gas Distribution Private Limited	5233	13	4

Table 3.6 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	Domestic	Commercial	Industrial
	Telangana Total		211820	111	117
Telangana and Karnataka	Jogulamba Gadwal, Nagarkurnool, Mahabubnagar, Narayanpet, Wanaparthy and Yadgir districts	Megha City Gas Distribution Private Limited	120	0	1
	Telangana and Karnataka Total		120	0	1
Tripura	Agartala	Tripura Natural Gas Company Limited	46664	500	62
	Gomati District	Tripura Natural Gas Company Limited	616	0	0
	West Tripura (EAAA) District	Tripura Natural Gas Company Limited	14856	8	0
	Tripura Total		62136	508	62
Uttar Pradesh	Agra	Green Gas Limited	117643	61	17
	Allahabad	Indian-Oil Adani Gas Private Limited	17642	73	12
	Allahabad District (EAAA), Bhadohi & Kaushambi Districts	Indian-Oil Adani Gas Private Limited	3587	5	1
	Amethi, Pratapgarh & Raebareli Districts	Bharat Petroleum Corporation Limited	5720	9	0
	Auraiya, Kanpur Dehat & Etawah Districts	Torrent Gas Private Limited	7339	18	9
	Azamgarh, Mau and Ballia Districts	Torrent Gas Private Limited	6132	6	2
	Bagpat District	Bagpat Green Energy Private Limited	5294	11	25
	Banda, Chitrakoot and Mahoba	Indraprastha Gas Limited	15408	0	0
	Bareilly	Central UP Gas Limited	54508	170	28
	Bareilly (EAAA) District, Pilibhit and Rampur Districts	Hindustan Petroleum Corporation Limited	12662	0	0
	Basti and Ambedkarnagar Districts	Torrent Gas Private Limited	3355	4	1
	Bulandshahr (part) District	Indian-Oil Adani Gas Private Limited	4666	2	38
	Bulandshahr District (EAAA), Aligarh & Hathras Districts	Indian-Oil Adani Gas Private Limited	889	1	0
	Faizabad & Sultanpur Districts	Green Gas Limited	1999	0	0
	Farrukhabad, Etah and Hardoi Districts	Hindustan Petroleum Corporation Limited	12954	0	0
	Ghaziabad & Hapur Districts	Indraprastha Gas Limited	351139	503	685
	Gonda and Barabanki Districts	Torrent Gas Private Limited	4258	8	7
	Jaunpur and Ghazipur Districts	Indian-Oil Adani Gas Private Limited	2103	3	0
	Jhansi	Central UP Gas Limited	23730	3	0
	Kanpur	Central UP Gas Limited	120665	359	107
	Kanpur (EAAA) District, Fatehpur and Hamirpur Districts	Indraprastha Gas Limited	42124	2	0
	Khurja	Adani Total Gas Limited	14542	29	250
	Lucknow	Green Gas Limited	126915	57	11
Mainpuri and Kannauj Districts	Hindustan Petroleum Corporation Limited	9400	0	0	
Mathura	Torrent Gas Private Limited	10858	31	101	
Meerut	GAIL Gas Limited	55025	65	83	
Meerut District (EAAA), Muzaffarnagar & Shamli Districts	Indraprastha Gas Limited	46004	47	10	
Mirzapur, Chandauli and Sonbhadra Districts	GAIL Gas Limited	7656	0	1	
Moradabad	Torrent Gas Private Limited	29323	54	175	
Moradabad (EAAA) District	Torrent Gas Private Limited	12568	5	10	
Noida (including Greater Noida)	Indraprastha Gas Limited	366448	1069	1734	
Saharanpur District	Bharat Petroleum Corporation Limited	29884	14	1	
Shahjahanpur and Budaun Districts	Hindustan Petroleum Corporation Limited	14053	0	0	
Unnao (EAAA) District	Green Gas Limited	616	0	0	
Varanasi District	GAIL (India) Limited	82749	66	17	
	Uttar Pradesh Total		1619858	2675	3325

State/Union Territory	Geographical Area/ CGD Networks	Authorized CGD Entity	Domestic	Commercial	Industrial
Uttar Pradesh	Gorakhpur, Sant Kabir Nagar & Kushinagar Districts	Torrent Gas Private Limited	6640	13	7
	Uttar Pradesh Total		6640	13	7
Uttar Pradesh & Rajasthan	Firozabad (Taj Trapezium Zone)	GAIL Gas Limited	22700	51	348
	Uttar Pradesh & Rajasthan Total		22700	51	348
Uttar Pradesh and Uttrakhand	Bijnor and Nainital Districts	Hindustan Petroleum Corporation Limited	15141	0	0
	Uttar Pradesh and Uttrakhand Total		15141	0	0
Uttarakhand	Dehradun District	GAIL Gas Limited	30807	0	0
	Haridwar District	Haridwar Natural Gas Limited	24992	38	23
	Pauri Garhwal, Uttarkashi, Rudraprayag and Tehri Garhwal districts	Gasonet Services (UK) Limited	1	0	0
	Udham Singh Nagar District	Indian-Oil Adani Gas Private Limited	17497	59	86
Uttarakhand Total			73297	97	109
West Bengal	Burdwan District	Indian-Oil Adani Gas Private Limited	885	3	1
	Alipurduar and Koch Bihar	Bharat Petroleum Corporation Limited	5151	0	0
	Burdwan District	Indian-Oil Adani Gas Private Limited	2821	3	1
	Darjeeling, Jalpaiguri and Uttar Dinajpur Districts	Hindustan Petroleum Corporation Limited	705	0	0
	Howrah (EAAA) District and Hoogly (EAAA) District	Hindustan Petroleum Corporation Limited	965	0	0
	Kolkata Municipal Corporation and Parts of Adjoining Districts	Bengal Gas Company Limited	5124	0	0
	Nadia (EAAA) District and North 24 Parganas (EAAA) District	Hindustan Petroleum Corporation Limited	3790	0	0
	Purulia and Bankura districts	Bharat Petroleum Corporation Limited	6022	0	0
South 24 Parganas (EAAA) District	Hindustan Petroleum Corporation Limited	66	0	0	
West Bengal Total			24644	3	1
Grand Total			12922516	41360	18756

Note : EAAA stands for Excluding/Except Area Already Authorized ; * stands for the data not provided by the CGD Entity ; # stands for authorization was cancelled by PNGRB, however, authorization has been reinstated based on court order ; ## stands for NOC issued ; ** stands for Sub-judice ; ***authorisation yet to be accepted by the entity,###-Under Dispute

Disclaimer: While every care has been taken to provide the accurate data as per submissions by the authorized entities, PNGRB shall not be held responsible for any loss, damage etc. due to action taken by any one based on information collated by PNGRB



Table 3.7: CNG Sales in India

(Sales in TMT) #

State (s) / Union Territory	Company name	No. of companies (as on 01.04.2024)	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
Andhra Pradesh*	AGP City Gas Private Limited, Megha City Gas Distribution Private Limited, Godavari Gas Private Limited, Bhagyanagar Gas Limited, Indian Oil Corporation Limited	5	21	13	33	48	40
Andhra Pradesh, Karnataka and Tamil Nadu	AGP City Gas Private Limited	1	0	0	0.1	2.5	6
Assam	Assam Gas Company Limited, Purba Bharati Gas Private Limited, Adani Total Gas Limited	3	0.02	0.05	0.06	0.5	1
Bihar	GAIL (India) Limited, Think Gas Begusarai Private Limited, Indian Oil Corporation Limited, Bharat Petroleum Corporation Limited, Indian-Oil Adani Gas Private Limited	5	2	5	15	38	61
Bihar & Jharkhand	Indian Oil Corporation Limited	1	0	0	0	0.04	1
Chandigarh, Haryana, Punjab & Himachal Pradesh	Indian-Oil Adani Gas Private Limited	1	21	14	25	35	39
Dadra & Nagar Haveli**	Gujarat Gas Limited	1	3	2	3	3.2	3
Daman and Diu	Indian-Oil Adani Gas Private Limited	1	2	1.37	3	2.2	2
Delhi NCT***	Indraprastha Gas Limited	1	1033	785	1015	1210	1192
Goa	Goa Natural Gas Private Limited, Indian-Oil Adani Gas Private Limited	2	0.03	0.15	1.05	2.9	5
Gujarat **	Sabarmati Gas Limited, Vadodara Gas Limited, Charotar Gas Sahakari Mandali Limited, Adani Total Gas Limited, Torrent Gas Private Limited, Gujarat Gas Limited, IRM Energy Private Limited, Hindustan Petroleum Corporation Limited	8	745	649	945	1084	1166
Gujarat & UT of Daman and Diu	IRM Energy Private Limited	1	0.07	1.36	3.82	5.7	7
Haryana	HPOIL Gas Private Limited, GAIL Gas Limited, Indraprastha Gas Limited, Bharat Petroleum Corporation Limited, Hindustan Petroleum Corporation Limited, Adani Total Gas Limited, Haryana City Gas (KCE) Private Limited, HCG (KCE) Private Limited, Indian-Oil Adani Gas Private Limited, Haryana City Gas Distribution Limited	10	197	173	303	428	478
Haryana & Himachal Pradesh	Indian-Oil Adani Gas Private Limited	1	0	0.08	0.7	1.2	1
Haryana & Punjab	Gujarat Gas Limited	1	0	1.4	5	6.7	8
Himachal Pradesh	Gasonet Services (HP) Limited, Bharat Petroleum Corporation Limited	2	0	0	0.2	0.4	1
Jharkhand	GAIL Gas Limited, GAIL (India) Limited, Adani Total Gas Limited, Indian Oil Corporation Limited, Bharat Petroleum Corporation Limited	5	0.34	1.2	4	10	14
Karnataka	AGP City Gas Private Limited, Unison Enviro Private Limited, Megha City Gas Distribution Private Limited, Bharat Petroleum Corporation Limited, GAIL Gas Limited, Maharashtra Natural Gas Limited, Adani Total Gas Limited, Indian-Oil Adani Gas Private Limited	8	1	3	15	56	112
Kerala	AGP City Gas Private Limited, Indian-Oil Adani Gas Private Limited, Sholagasco Private Limited	3	6	4	12	28	43
Kerala & Puducherry	Indian-Oil Adani Gas Private Limited	1	0	0	0.2	1.5	4
Madhya Pradesh	Aavantika Gas Limited, Bharat Petroleum Corporation Limited, GAIL Gas Limited, Rajasthan State Gas Limited, Naveriya Gas Private Limited, Adani Total Gas Limited, Think Gas Bhopal Private Limited, Indian Oil Corporation Limited, Gujarat Gas Limited, Megha City Gas Distribution Private Limited	10	34	24	45	76	95
Madhya Pradesh & Rajasthan	Gujarat Gas Limited, Megha City Gas Distribution Private Limited	2	0	0.26	3	5.5	8
Madhya Pradesh and Chhattisgrah	Adani Total Gas Limited	1	0	0	0	0.01	0



Table 3.7 Continued

State (s) / Union Territory	Company name	No. of companies (as on 01.04.2024)	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
Maharashtra	Mahanagar Gas Limited, Unison Enviro Private Limited, Gujarat Gas Limited, Adani Total Gas Limited, Indian Oil Corporation Limited, Torrent Gas Private Limited, Maharashtra Natural Gas Limited, Bharat Petroleum Corporation Limited, HCG Nagpur Private Limited, Megha City Gas Distribution Private Limited, HPOIL Gas Private Limited, IMC Limited	12	738	504	812	1022	1130
Maharashtra & Gujarat	Maharashtra Natural Gas Limited	1	0	1.4	5.6	19	23
Odisha	Adani Total Gas Limited, GAIL (India) Limited, Bharat Petroleum Corporation Limited, GAIL Gas Limited, Megha City Gas Distribution Private Limited	5	3	2	4	6.9	12
Puducherry (UT) & Tamil Nadu	East Coast Natural Gas Private Limited	1	0	0.001	0.04	0.18	0
Puducherry (UT)	Torrent Gas Private Limited	1	0	0.000	0.00	0.01	0
Punjab	IRM Energy Private Limited, Gujarat Gas Limited, Torrent Gas Private Limited, Think Gas Ludhiana Private Limited, Bharat Petroleum Corporation Limited, Indian Oil Corporation Limited, Megha City Gas Distribution Private Limited	7	7	14	43	61	66
Rajasthan	Indraprastha Gas Limited, Indian Oil Corporation Limited, AGP CGD India Private Limited, Torrent Gas Private Limited, Torrent Gas Jaipur Private Limited, Adani Total Gas Limited, Dholpur CGD Private Limited, Gujarat Gas Limited, Rajasthan State Gas Limited, Gasonet Services (RJ) Limited, Haryana City Gas Distribution (Bhiwadi) Limited	11	9	15	47	94	134
Tamil Nadu	Adani Total Gas Limited, AGP CGD India Private Limited, Torrent Gas Chennai Private Limited, Indian Oil Corporation Limited, IRM Energy Private Limited, Megha City Gas Distribution Private Limited, Bharat Petroleum Corporation Limited	7	0	0.004	2	23	60
Telangana*	Megha City Gas Distribution Private Limited, Maharashtra Natural Gas Limited, Bhagyanagar Gas Limited, Torrent Gas Private Limited, Indian Oil Corporation Limited	5	13	9	33	68	64
Telangana & Karnataka	Megha City Gas Distribution Private Limited	1	0	0	0	0.16	1
Tripura	Tripura Natural Gas Company Limited	1	16	18	20	24	26
Uttar Pradesh	Green Gas Limited, GAIL Gas Limited, Indraprastha Gas Limited, Bharat Petroleum Corporation Limited, Hindustan Petroleum Corporation Limited, Torrent Gas Private Limited, Adani Total Gas Limited, GAIL (India) Limited, Bagpat Green Energy Private Limited, Central UP Gas Limited, Megha City Gas Distribution Private Limited, Indian-Oil Adani Gas Private Limited	12	392	339	545	670	769
Uttar Pradesh & Uttarakhand	Hindustan Petroleum Corporation Limited	1	0	0.359	2	3.5	6
Uttar Pradesh & Madhya Pradesh	Adani Total Gas Limited	1	0.001	0.402	8	4.9	8
Uttar Pradesh & Rajasthan	GAIL Gas Limited	1	0	0	0	36	40
Uttarakhand	Haridwar Natural Gas Private Limited, Indian-Oil Adani Gas Private Limited, GAIL Gas Limited, Gasonet Services (UK) Limited	4	1	5	12	18	20
West Bengal	Indian Oil Corporation Limited	1	2	2	4	6.5	5
Uttarakhand	GAIL Gas Limited, Haridwar Natural Gas Private Limited, Indian Oil-Adani Gas Private Limited,	3	1	5	12	18	10
West Bengal	Indian-Oil Adani Gas Private Limited, Bengal Gas Company Limited, BPCL, HPCL, Indian Oil Corporation Ltd.	5	2	2	4	6.5	3
Total			3247	2589	3968	5103	2517

Source : CGD companies (# Data subject to change based on inputs provided by CGD entities)

*Notes:From the FY 2019-20 entries for

** Andhra Pradesh & Telangana are reported separately. Prior to this AP & Telangana were taken together.

*** Dadra & Nagar Haveli are reported separately from Gujarat State

**** Delhi contains information for Delhi NCT only. Remaining entries of the NCR GAs are added into respective State."

Table No. 3.8 : CNG stations as on 01.04.2024 (P)

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	CNG Stations
Andhra Pradesh	Anantapur and YSR (Kadapa) Districts	AGP City Gas Private Limited	23
	East Godavari District (EAAA)	Godavari Gas Private Limited	16
	Kakinada	Bhagyanagar Gas Limited	13
	Krishna District (EAAA)	Megha City Gas Distribution Private Limited	33
	Kurnool, Guntur, and Prakasam districts	Indian Oil Corporation Limited	21
	Sri Potti Sriramulu Nellore District	AGP City Gas Private Limited	17
	Srikakulam, Visakhapatnam & Vizianagaram Districts	Indian Oil Corporation Limited	16
	Vijaywada	Bhagyanagar Gas Limited	34
	West Godavari District	Godavari Gas Private Limited	16
Andhra Pradesh Total			189
Andhra Pradesh, Karnataka & Tamil Nadu	Chittoor, Kolar and Vellore Districts	AGP City Gas Private Limited	43
Andhra Pradesh, Karnataka & Tamil Nadu Total			41
Assam	Baksa, Barpeta, Bongaigaon, Chirang, Nalbari and Bajali districts	Adani Total Gas Limited	6
	Cachar, Hailakandi & Karimganj Districts	Purba Bharati Gas Private Limited	0
	Kamrup & Kamrup Metropolitan Districts	Purba Bharati Gas Private Limited	3
	Kokrajhar, Dhubri, South Salmara-Mankachar and Goalpara districts	Adani Total Gas Limited	3
	Nagaon, Morigaon, Hojai, Karbi Anglong, West Karbi Anglong and Dima Hasao districts	Adani Total Gas Limited	3
	Upper Assam	Assam Gas Company Limited	7
Assam Total			22
Bihar	Araria, Purnia, Katihar and Kishanganj Districts	Indian Oil Corporation Limited	2
	Arwal, Jehanabad, Bhojpur and Buxar Districts	Indian Oil Corporation Limited	10
	Aurangabad, Kaimur & Rohtas Districts	Indian Oil Corporation Limited	12
	Begusarai District	Think Gas Begusarai Private Limited	9
	Darbhanga, Madhubani, Supaul, Sitamarhi and Sheohar districts	Bharat Petroleum Corporation Limited	9
	Gaya & Nalanda Districts	Indian-Oil Adani Gas Private Limited	11
	Khagaria, Saharsa and Madhepura Districts	Indian Oil Corporation Limited	2
	Lakhisarai, Munger and Bhagalpur Districts	Indian Oil Corporation Limited	8
	Muzaffarpur, Vaishali, Saran and Samastipur Districts	Indian Oil Corporation Limited	36
Patna District	GAIL (India) Limited	30	
Bihar Total			129
Bihar & Jharkhand	Banka (Bihar), Dumka, Godda, Jamtara, Pakur & Sahibganj districts	Hindustan Petroleum Corporation Limited	8
	Nawada and Koderma Districts	Indian Oil Corporation Limited	2
	Sheikhpura, Jamui and Deoghar Districts	Indian Oil Corporation Limited	5
Bihar & Jharkhand Total			15
Bihar & Uttar Pradesh	Gopalganj, Siwan, West Champaran, East Champaran and Deoria districts	Bharat Petroleum Corporation Limited	27
Bihar & Uttar Pradesh Total			27
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	Chandigarh	Indian-Oil Adani Gas Private Limited	27
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh Total			27
Chhattisgarh	Jashpur, Raigarh, Janjgir-Champa and Mahasamund districts	Adani Total Gas Limited	4



Table 3.8 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	CNG Stations	
Chhattisgarh	Kabirdham, Raj Nandgaon and Kanker districts	Adani Total Gas Limited	3	
	Koriya, Surajpur, Balrampur and Surguja districts	Bharat Petroleum Corporation Limited	7	
	Mungeli, Bemetara, Durg, Balod and Dhamtari districts	Adani Total Gas Limited	4	
Chhattisgarh Total			18	
Dadra & Nagar Haveli (UT)	UT of Dadra & Nagar Haveli	Gujarat Gas Limited	6	
Dadra & Nagar Haveli (UT) Total			6	
Daman & Diu (UT)	UT of Daman	Indian-Oil Adani Gas Private Limited	5	
Daman & Diu (UT) Total			5	
Daman and Diu & Gujarat	Diu & Gir Somnath Districts	IRM Energy Private Limited	15	
Daman and Diu & Gujarat Total			15	
Goa	North Goa District	Goa Natural Gas Private Limited	7	
	South Goa District	Indian-Oil Adani Gas Private Limited	5	
Goa Total			12	
Gujarat	Ahmedabad City (Only for CNG)##	Hindustan Petroleum Corporation Limited	22	
	Ahmedabad City and Daskroi Area	Adani Total Gas Limited	82	
	Ahmedabad District (EAAA)	Gujarat Gas Limited	22	
	Amreli District	Gujarat Gas Limited	15	
	Anand area including Kanjari & Vadtal Villages (in Kheda District)	Charotar Gas Sahakari Mandali Limited	13	
	Anand District (EAAA)	Gujarat Gas Limited	28	
	Banaskantha District	IRM Energy Private Limited	42	
	Barwala & Ranpur Talukas	Adani Total Gas Limited	5	
	Bhavnagar	Gujarat Gas Limited	39	
	Dahej Vagra Taluka	Gujarat Gas Limited	5	
	Dahod District	Gujarat Gas Limited	19	
	Gandhinagar Mehsana Sabarkantha	Sabarmati Gas Limited	136	
	Gandhinagar###	Gujarat Gas Limited	16	
	Hazira	Gujarat Gas Limited	1	
	Jamnagar	Gujarat Gas Limited	30	
	Junagadh District	Torrent Gas Private Limited	17	
	Kheda District (EAAA) & Mahisagar District	Adani Total Gas Limited	24	
	Kutch (West)	Gujarat Gas Limited	19	
	Nadiad	Gujarat Gas Limited	32	
	Narmada (Rajpipla) District	Gujarat Gas Limited	9	
	Navsari	Gujarat Gas Limited	26	
	Navsari District (EAAA), Surat District (EAAA), Tapi District (EAAA) & the Dangs District	Adani Total Gas Limited	12	
	Panchmahal District	Gujarat Gas Limited	31	
	Patan District	Sabarmati Gas Limited	25	
	Porbandar District	Adani Total Gas Limited	10	
	Rajkot	Gujarat Gas Limited	89	
	Surat, Bharuch, Ankleshwar	Gujarat Gas Limited	118	
	Surendranagar	Gujarat Gas Limited	26	
	Surendranagar District (EAAA) & Morbi District (EAAA)	Adani Total Gas Limited	14	
	Gujarat	Vadodara	Vadodara Gas Limited	42
		Vadodara**	Adani Total Gas Limited	6
		Valsad	Gujarat Gas Limited	27
Gujarat Total			1002	

Table 3.8 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	CNG Stations
Haryana	Ambala & Kurukshetra Districts	HPOIL Gas Private Limited	25
	Bhiwani, Charkhi Dadri & Mahendragarh Districts	Adani Total Gas Limited	44
	Faridabad-2	Adani Total Gas Limited	32
	Gurugram-2	Haryana City Gas Distribution Limited	40
	Hisar District	HCG (KCE) Private Limited	18
	Jhajjar District	Haryana City Gas (KCE) Private Limited	19
	Kaithal District	Indraprastha Gas Limited	14
	Karnal District	Indraprastha Gas Limited	28
	Nuh and Palwal Distircts	Adani Total Gas Limited	36
	Panipat District	Indian-Oil Adani Gas Private Limited	15
	Rewari District	Indraprastha Gas Limited	41
	Rohtak District	Bharat Petroleum Corporation Limited	16
	Sonipat	GAIL Gas Limited	27
	Sonipat District (EAAA) & Jind District	Hindustan Petroleum Corporation Limited	40
	Yamunanagar District	Bharat Petroleum Corporation Limited	14
	Gurugram(IGL)***	Indraprastha Gas Limited	25
Haryana Total			434
Haryana & Himachal Pradesh	Panchkula District (EAAA), Sirmaur, Shimla & Solan (EAAA) Districts	Indian-Oil Adani Gas Private Limited	10
Haryana & Himachal Pradesh Total			10
Haryana & Punjab	Sirsa, Fatehabad and Mansa (Punjab) Districts	Gujarat Gas Limited	27
Haryana & Punjab Total			27
Himachal Pradesh	Bilaspur, Hamirpur & Una Districts	Bharat Petroleum Corporation Limited	11
	Mandi, Kullu, Kinnaur and Lahaul & Spiti districts	Gasonet Services (HP) Limited	2
Himachal Pradesh Total			13
Jharkhand	Bokaro, Hazaribagh & Ramgarh Districts	Indian Oil Corporation Limited	24
	Chatra and Palamu Districts	Bharat Petroleum Corporation Limited	8
	East Singhbhum District	GAIL (India) Limited	14
	Giridih & Dhanbad Districts	GAIL Gas Limited	12
	Gumla, Latehar, Lohardaga, Simdega, Garhwa and Khunti districts	Adani Total Gas Limited	9
	Ranchi District	GAIL (India) Limited	18
	Seraikela-Kharsawan District	GAIL Gas Limited	13
West Singhbhum District	GAIL Gas Limited	2	
Jharkhand Total			100
Karnataka	Bagalkot, Koppal and Raichur Districts	AGP City Gas Private Limited	26
	Ballari & Gadag Districts	Bharat Petroleum Corporation Limited	26
	Belgaum District	Megha City Gas Distribution Private Limited	11
	Bengaluru Rural and Urban Districts	GAIL Gas Limited	109
	Bidar District	Bharat Petroleum Corporation Limited	15
	Chikkaballapur district	Megha City Gas Distribution Private Limited	3
	Chikkamagaluru, Hassan and Kodagu Districts	AGP City Gas Private Limited	18
	Chitradurga & Davanagere Districts	Unison Enviro Private Limited	16
	Dakshina Kannada District*	GAIL Gas Limited	34
	Dharwad District	Indian-Oil Adani Gas Private Limited	11
	Kalaburagi and Vijayapura Districts	AGP City Gas Private Limited	18
	Mysuru, Mandya and Chamarajanagar Districts	AGP City Gas Private Limited	27
	Ramanagara District	Maharashtra Natural Gas Limited	13

Table 3.8 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	CNG Stations
Karnataka	Tumkur District	Megha City Gas Distribution Private Limited	9
	Udupi District	Adani Total Gas Limited	9
	Uttara Kannada, Haveri and Shivamogga Districts	AGP City Gas Private Limited	25
Karnataka Total			370
Kerala	Alapuzha, Kollam and Thiruvananthapuram Districts	AGP City Gas Private Limited	39
	Ernakulam District	Indian-Oil Adani Gas Private Limited	16
	Idukki, Kottayam and Pattanamtitta districts	Sholagasco Private Limited	2
	Kozhikode & Wayanad Districts	Indian-Oil Adani Gas Private Limited	21
	Malappuram District	Indian-Oil Adani Gas Private Limited	18
	Palakkad & Thrissur Districts	Indian-Oil Adani Gas Private Limited	37
Kerala Total			133
Kerala & Puducherry	Kannur, Kasaragod & Mahe Districts	Indian-Oil Adani Gas Private Limited	13
Kerala & Puducherry Total			13
Madhya Pradesh	Ashoknagar District	Indian Oil Corporation Limited	3
	Betul, Chhindwara, Seoni and Balaghat districts	Megha City Gas Distribution Private Limited	6
	Bhopal & Rajgarh Districts	Think Gas Bhopal Private Limited	37
	Burhanpur, Khandwa, Khargone and Harda districts	Adani Total Gas Limited	13
	Damoh, Jabalpur, Katni, Mandla, Umaria and Dindori districts	Megha City Gas Distribution Private Limited	3
	Dewas	GAIL Gas Limited	6
	Dhar District	Naveriya Gas Private Limited	4
	Guna District	Indian Oil Corporation Limited	5
	Gwalior	Aavantika Gas Limited	31
	Gwalior (EAAA) District and Sheopur District	Rajasthan State Gas Limited	3
	Hoshangabad, Narsinghpur, Sagar and Vidisha districts	Megha City Gas Distribution Private Limited	4
	Indore (including Ujjain City)	Aavantika Gas Limited	81
	Morena District	Indian Oil Corporation Limited	6
	Raisen, Shajapur and Sehore Districts	GAIL Gas Limited	24
	Rewa District	Indian Oil Corporation Limited	6
	Satna & Shandol Districts	Bharat Petroleum Corporation Limited	19
	Shivpuri District	Think Gas Bhopal Private Limited	6
	Sidhi and Singrauli Districts	Bharat Petroleum Corporation Limited	8
	Tikamgarh, Niwari, Chattarpur and Panna districts	Adani Total Gas Limited	7
	Ujjain (EAAA) District, Dewas (EAAA) District and Indore (EAAA) District	Gujarat Gas Limited	24
Madhya Pradesh Total			296
Madhya Pradesh and Chhattisgrah	Anuppur, Bilaspur and Korba Districts	Adani Total Gas Limited	9
Madhya Pradesh and Chhattisgrah Total			9
Madhya Pradesh and Rajasthan	Agar Malwa, Neemuch, Mandsaur and Jhalawar districts	Megha City Gas Distribution Private Limited	4
	Jhabua, Banswara, Ratlam and Dungarpur Districts	Gujarat Gas Limited	31
Madhya Pradesh and Rajasthan Total			35
Madhya Pradesh and Uttar Pradesh	Jhansi (EAAA) District, Bhind, Jalaun, Lalitpur and Datia Districts	Adani Total Gas Limited	20
Madhya Pradesh and Uttar Pradesh Total			20
Maharashtra	Ahmednagar & Aurangabad Districts	Bharat Petroleum Corporation Limited	100
	Akola, Hingoli and Washim districts	Adani Total Gas Limited	13
	Amravati and Yavatmal districts	Adani Total Gas Limited	16
	Beed, Jalgaon and Jalna districts	Indian Oil Corporation Limited	4

Table 3.8 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	CNG Stations
Maharashtra	Bhandara, Gondiya and Garchiroli districts	Adani Total Gas Limited	12
	Buldana, Nanded and Parbhani districts	Maharashtra Natural Gas Limited	21
	Chandrapur and Wardha districts	Megha City Gas Distribution Private Limited	3
	Kolhapur District	HPOIL Gas Private Limited	23
	Latur & Osmanabad Districts	Unison Enviro Private Limited	19
	Mumbai & Greater Mumbai	Mahanagar Gas Limited	155
	Nagpur district	HCG Nagpur Private Limited	6
	Palghar District & Thane Rural	Gujarat Gas Limited	34
	Pune City including Pimpri - Chichwad & adjoining contiguous areas Hinjewadi, Chakan, Talegaon	Maharashtra Natural Gas Limited	120
	Pune District (EAAA)	Torrent Gas Pune Limited	60
	Raigarh District (EAAA)	Mahanagar Gas Limited	48
	Ratnagiri District	Unison Enviro Private Limited	21
	Sangli & Satara Districts	Bharat Petroleum Corporation Limited	57
	Sindhudurg District	Maharashtra Natural Gas Limited	9
	Solapur District	IMC Limited	16
Thane urban and adjoining Municipalities	Mahanagar Gas Limited	153	
Maharashtra Total			890
Maharashtra & Gujarat	Valsad (EAAA), Dhule & Nashik Districts	Maharashtra Natural Gas Limited	71
Maharashtra & Gujarat Total			71
Maharashtra and Madhya Pradesh	Alirajpur, Nandurbar and Barwani districts	Adani Total Gas Limited	16
Maharashtra and Madhya Pradesh Total			16
National Capital Territory of Delhi (UT)	National Capital Territory of Delhi	Indraprastha Gas Limited	491
National Capital Territory of Delhi (UT) Total			491
Odisha	Angul & Dhekanal Districts	Bharat Petroleum Corporation Limited	10
	Balasure, Bhadrak & Mayurbhanj Districts	Adani Total Gas Limited	9
	Bargarh, Debagarh & Sambalpur Districts	Bharat Petroleum Corporation Limited	22
	Cuttack District	GAIL (India) Limited	12
	Ganjam, Nayagarh & Puri Districts	GAIL Gas Limited	7
	Jagatsinghpur & Kendrapara Districts	Bharat Petroleum Corporation Limited	4
	Jajpur & Kendujhar Districts	Bharat Petroleum Corporation Limited	14
	Khordha District	GAIL (India) Limited	15
	Koraput, Malkangiri, and Nabarangpur districts	Adani Total Gas Limited	3
	Rayagada, Kalahandi, Bolangir and Nuapada districts	Megha City Gas Distribution Private Limited	2
Sundargarh & Jharsuguda Districts	GAIL Gas Limited	7	
Odisha Total			105
Puducherry	Puducherry District	East Coast Natural Gas Private Limited	2
Puducherry Total			2
Puducherry & Tamil Nadu	Karaikal & Nagapattinam Districts	Torrent Gas Private Limited	8
Puducherry & Tamil Nadu Total			8
Punjab	Amritsar District	Gujarat Gas Limited	17
	Bhatinda District	Gujarat Gas Limited	19
	Fatehgarh Sahib District	IRM Energy Private Limited	10
	Ferozepur, Faridkot and Sri Muktsar Sahib Districts	Gujarat Gas Limited	28
	Hoshiarpur and Gurdaspur Districts	Gujarat Gas Limited	40
	Jalandhar District (EAAA), Kapurthala & SBS Nagar Districts	Think Gas Ludhiana Private Limited	19

Table 3.8 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	CNG Stations
Punjab	Jalandhar*	Ishar Gas Jalandhar Private Limited	3
	Ludhiana District (EAAA), Barnala & Moga Districts	Think Gas Ludhiana Private Limited	25
	Ludhiana*	Jay Madhok Energy Private Limited led Consortium	3
	Pathankot district	Indian Oil Corporation Limited	3
	Rupnagar District	Bharat Petroleum Corporation Limited	19
	SAS Nagar District (EAAA), Patiala & Sangrur Districts	Torrent Gas Private Limited	27
	Tarn Taran district	Megha City Gas Distribution Private Limited	3
Punjab Total			216
Punjab & Rajasthan	Fazilka (except area already authorized), Ganganagar and Hanumangarh districts	Bharat Petroleum Corporation Limited	20
Punjab & Rajasthan Total			20
Rajasthan	Ajmer, Pali and Rajsamand Districts	Indraprastha Gas Limited	68
	Alwar (Other than Bhiwadi) & Jaipur Districts	Torrent Gas Jaipur Private Limited	55
	Barmer, Jaisalmer & Jodhpur Districts	AGP CGD India Private Limited	39
	Bhilwara & Bundi Districts	Adani Total Gas Limited	17
	Bhiwadi (in Alwar District)	Haryana City Gas Distribution (Bhiwadi) Limited	4
	Bikaner and Churu districts	Gasonet Services (RJ) Limited	6
	Chittorgarh (Other than Rawatbhata Taluka) & Udaipur Districts	Adani Total Gas Limited	38
	Dausa, Karauli, Sawai Madhopur and Tonk districts	Hindustan Petroleum Corporation Limited	14
	Dholpur District	Dholpur CGD Private Limited	8
	Jalore and Sirohi Districts	Gujarat Gas Limited	30
	Jhunjhunu, Sikar and Nagaur districts	Indian Oil Corporation Limited	12
	Kota	Rajasthan State Gas Limited	10
	Kota District (EAAA), Baran & Chittorgarh (Only Rawatbhata Taluka) Districts	Torrent Gas Private Limited	16
Rajasthan Total			317
Tamil Nadu	Ariyalur and Perambalur districts	Megha City Gas Distribution Private Limited	2
	Chennai & Tiruvallur Districts	Torrent Gas Chennai Private Limited	67
	Coimbatore District	Indian Oil Corporation Limited	31
	Cuddalore, Nagapattinam & Tiruvarur Districts	Adani Total Gas Limited	23
	Dharmapuri and Krishnagiri districts	Indian Oil Corporation Limited	10
	Dindigul and Karur districts	Megha City Gas Distribution Private Limited	2
	Kanchipuram District	AGP CGD India Private Limited	41
	Kanyakumari, Thoothukudi, Tirunelveli Kattabo and Tenkasi districts	Indian Oil Corporation Limited	11
	Madurai, Theni and Virudhnagar districts	Indian Oil Corporation Limited	11
Tamil Nadu	Namakkal and Tiruchirapalli districts	IRM Energy Private Limited	15
	Pudukottai, Sivaganga and Thanjavur districts	Megha City Gas Distribution Private Limited	3
	Ramanathapuram District	AGP CGD India Private Limited	7
	Salem District	Indian Oil Corporation Limited	18
	The Nilgiris and Erode districts	Bharat Petroleum Corporation Limited	35
	Tiruppur District	Adani Total Gas Limited	34
	Tiruvannamalai, Villupuram and Kallakurichi districts	Megha City Gas Distribution Private Limited	3
Tamil Nadu Total			313

Table 3.8 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	CNG Stations
Telangana	Bhadradi Kothagudem & Khamman Districts	Megha City Gas Distribution Private Limited	9
	Hyderabad	Bhagyanagar Gas Limited	90
	Jagtial, Peddapalli, Karimnagar & Rajanna Sircilla Districts	Indian Oil Corporation Limited	5
	Jangaon, Jayashankar Bhupalpally, Mahabubabad, Warangal Urban & Warangal Rural Districts	Megha City Gas Distribution Private Limited	7
	Medak, Siddipet & Sangareddy Districts	Torrent Gas Private Limited	17
	Medchal-Malkajgiri, Ranga Reddy & Vikarabad Districts	Megha City Gas Distribution Private Limited	23
	Nalgonda Suryapet & Yadadri Bhuvanagiri Districts	Megha City Gas Distribution Private Limited	18
	Nizamabad, Adilabad, Nirmal, Mancheril Kumuram Bheem Asifabad and Kamareddy districts	Maharashtra Natural Gas Limited	12
Telangana Total			181
Telangana and Karnataka	Jogulamba Gadwal, Nagarkurnool, Mahabubnagar, Narayanpet, Wanaparthy and Yadgir districts	Megha City Gas Distribution Private Limited	5
Telangana and Karnataka Total			5
Tripura	Agartala	Tripura Natural Gas Company Limited	6
	Gomati District	Tripura Natural Gas Company Limited	6
	West Tripura (EAAA) District	Tripura Natural Gas Company Limited	6
Tripura Total			18
UT of Jammu and Kashmir	Jammu, Udhampur, Reasi, Samba and Kathua districts	Indian Oil Corporation Limited	1
UT of Jammu and Kashmir Total			1
Uttar Pradesh	Agra	Green Gas Limited	30
	Allahabad	Indian-Oil Adani Gas Private Limited	8
	Allahabad District (EAAA), Bhadohi & Kaushambi Districts	Indian-Oil Adani Gas Private Limited	16
	Amethi, Pratapgarh & Raebareli Districts	Bharat Petroleum Corporation Limited	29
	Amroha (except area already authorized) & Sambhal (except area already authorized) districts	Megha City Gas Distribution Private Limited	6
	Auraiya, Kanpur Dehat & Etawah Districts	Torrent Gas Private Limited	33
	Azamgarh, Mau and Ballia Districts	Torrent Gas Private Limited	26
	Bagpat District	Bagpat Green Energy Private Limited	13
	Banda, Chitrakoot and Mahoba	Indraprastha Gas Limited	15
	Bareilly	Central UP Gas Limited	21
	Bareilly (EAAA) District, Pilibhit and Rampur Districts	Hindustan Petroleum Corporation Limited	54
	Basti and Ambedkarnagar Districts	Torrent Gas Private Limited	14
	Bulandshahr (part) District	Indian-Oil Adani Gas Private Limited	16
	Bulandshahr District (EAAA), Aligarh & Hathras Districts	Indian-Oil Adani Gas Private Limited	23
	Faizabad & Sultanpur Districts	Green Gas Limited	9
	Farrukhabad, Etah and Hardoi Districts	Hindustan Petroleum Corporation Limited	48
	Ghaziabad & Hapur Districts	Indraprastha Gas Limited	75
	Gonda and Barabanki Districts	Torrent Gas Private Limited	24
	Jaunpur and Ghazipur Districts	Indian-Oil Adani Gas Private Limited	15
	Jhansi	Central UP Gas Limited	9
	Kanpur	Central UP Gas Limited	57
	Kanpur (EAAA) District, Fatehpur and Hamirpur Districts	Indraprastha Gas Limited	25
	Kasganj district	Megha City Gas Distribution Private Limited	4
	Khurja	Adani Total Gas Limited	10
	Lakhimpur Kheri, Sitapur, Bahraich, Shrawasti, Balrampur, Siddharth Nagar & Maharajganj districts	Bharat Petroleum Corporation Limited	51
	Lucknow	Green Gas Limited	45
Mainpuri and Kannauj Districts	Hindustan Petroleum Corporation Limited	30	



Table 3.8 Continued

State/Union Territory	Geographical Area/CGD Networks	Authorized CGD Entity	CNG Stations
Uttar Pradesh	Mathura	Torrent Gas Private Limited	13
	Meerut	GAIL Gas Limited	20
	Meerut District (EAAA), Muzaffarnagar & Shamli Districts	Indraprastha Gas Limited	35
	Mirzapur, Chandauli and Sonbhadra Districts	GAIL Gas Limited	20
	Moradabad	Torrent Gas Private Limited	8
	Moradabad (EAAA) District	Torrent Gas Private Limited	18
	Noida (including Greater Noida)	Indraprastha Gas Limited	68
	Saharanpur District	Bharat Petroleum Corporation Limited	14
	Shahjahanpur and Budaun Districts	Hindustan Petroleum Corporation Limited	43
	Unnao (EAAA) District	Green Gas Limited	2
Varanasi District	GAIL (India) Limited	26	
Uttar Pradesh Total			973
Uttar Pradesh	Gorakhpur, Sant Kabir Nagar & Kushinagar Districts	Torrent Gas Private Limited	28
Uttar Pradesh Total			28
Uttar Pradesh & Rajasthan	Firozabad (Taj Trapezium Zone)	GAIL Gas Limited	45
Uttar Pradesh & Rajasthan Total			45
Uttar Pradesh and Uttrakhand	Bijnor and Nainital Districts	Hindustan Petroleum Corporation Limited	29
Uttar Pradesh and Uttrakhand Total			29
Uttarakhand	Dehradun District	GAIL Gas Limited	14
	Haridwar District	Haridwar Natural Gas Limited	9
	Pauri Garhwal, Uttarkashi, Rudrapur and Tehri Garhwal districts	Gasonet Services (UK) Limited	1
	Pithoragarh, Champawat, Almora, Chamoli and Bageshwar districts	Gasonet Services (UK) Limited	1
	Udham Singh Nagar District	Indian-Oil Adani Gas Private Limited	10
Uttarakhand Total			35
West Bengal	Alipurduar and Koch Bihar	Bharat Petroleum Corporation Limited	2
	Birbhum, Murshidabad, Maldah & Dakshin Dinajpur districts	Hindustan Petroleum Corporation Limited	1
	Burdwan District	Indian-Oil Adani Gas Private Limited	22
	Darjeeling, Jalpaiguri and Uttar Dinajpur Districts	Hindustan Petroleum Corporation Limited	11
	East Medinipur, West Medinipur and Jhargram districts	Indian Oil Corporation Limited	2
	Howrah (EAAA) District and Hoogly (EAAA) District	Hindustan Petroleum Corporation Limited	19
West Bengal	Kolkata Municipal Corporation and Parts of Adjoining Districts	Bengal Gas Company Limited	17
	Nadia (EAAA) District and North 24 Parganas (EAAA) District	Hindustan Petroleum Corporation Limited	21
	Purulia and Bankura districts	Bharat Petroleum Corporation Limited	21
	South 24 Parganas (EAAA) District	Hindustan Petroleum Corporation Limited	11
West Bengal Total			127
Grand Total			6861

Note : EAAA stands for Excluding/Except Area Already Authorized ;

* stands for the data not provided by the CGD Entity ;

stands for authorization was cancelled by PNGRB, however, authorization has been reinstated based on court order ;

stands for NOC issued ;

** stands for Sub-judice ;

***authorisation yet to be accepted by the entity,

###-Under Dispute

Disclaimer: While every care has been taken to provide the accurate data as per submissions by the authorized entities, PNGRB shall not be held responsible for any loss, damage etc. due to action taken by any one based on information collated by PNGRB

Table 3.9 : LNG Terminals (Operational)

Location	Promoters	Capacity as on 01.04.2024 (In MMTPA)	% Capacity utilisation (FY2023-24(P))
Dahej	Petronet LNG Ltd (PLL)	17.5	95.47
Hazira	Shell Energy India Pvt. Ltd.	5.2	30.3
Dabhol*	Konkan LNG Limited	5	42.7
Kochi	Petronet LNG Ltd (PLL)	5	20.83
Ennore	Indian Oil LNG Pvt Ltd	5	18.3
Mundra	GSPC LNG Limited	5	14.6
Dhamra	Adani Total Private Limited	5	24.8
Total Capacity		47.7	

* Only HP stream of capacity of 2.9 MMTPA is commissioned.
Source :- LNG terminal operating entities

Table 3.10 : Import of Liquefied Natural Gas (LNG)

Financial Year	LNG import quantity/value				
	MMT	MMSCM	MMBtu	Value (Mn. USD)	USD / MMBtu
2017-18	20.7	27,439	1,08,88,47,280	8,051	7.4
2018-19	21.7	28,740	1,14,04,94,327	10,253	9.0
2019-20	25.6	33,886	1,34,46,84,149	9,489	7.1
2020-21	25.1	33,198	1,31,73,69,257	7,881	6.0
2021-22	23.4	31,028	1,23,12,52,501	13,472	10.9
2022-23	19.9	26,304	1,04,38,25,872	17,114	16.4
2023-24 (P)	24.0	31,795	1,24,65,77,334	13,405	10.8

Source: P: provisional; LNG importing companies & DGCIS. Import data may have some variations with DGCIS data on LNG imports.
 Conversion of MMSCM to MMBtu is based on approximation of 1 Million BTU (MMBTU) = 25.2 SCM. (@10000 Kcal/SCM; 1 MMBtu = 252000 Kcal)

Table 3.11 : Domestic Natural Gas price and gas price ceiling

Period	Domestic natural gas price in US\$/MMBTU (GCV basis)*	Gas price ceiling (HPHT)in US\$/MMBTU (GCV basis)**
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	6.5	April 2023 - September 2023	12.12
1 May 2023 - 31 May 2023	8.27			
1 June 2023 - 30 June 2023	7.58			
1 July 2023 - 31 July 2023	7.48			
1 August 2023 -31 August 2023	7.85			
1 September 2023 - 30 September 2023	8.60			
1 October 2023 -31 October 2023	9.20		October 2023 - March 2024	9.96
1 Nov 2023 - 30 Nov2023	9.12			
1 Dec 2023 - 31 Dec 2023	8.47			
1 Jan 2024 - 31 Jan 2024	7.82			
1 Feb 2024- 29 Feb 2024	7.85			
1 Mar 2024- 31 Mar 2024	8.17			
1 April 2024 - 30 April 2024	8.38		April 2024 - September 2024	9.87
1 May 2024 - 31 May 2024	8.90			
1 June 2024-30 June 2024	8.44			

Note:

* As per the "New Domestic Natural Gas Pricing Guidelines, 2014" issued by Ministry of Petroleum & Natural Gas dated October 25, 2014.

** As per the notification issued by Ministry of Petroleum and Natural Gas dated 21.03.2016 on marketing including pricing freedom for the gas to be produced from discoveries in Deepwater, Ultra Deepwater and High Pressure-High Temperature areas. #As per the guidelines issued by Ministry of Petroleum & Natural Gas dated 7th April 2023.

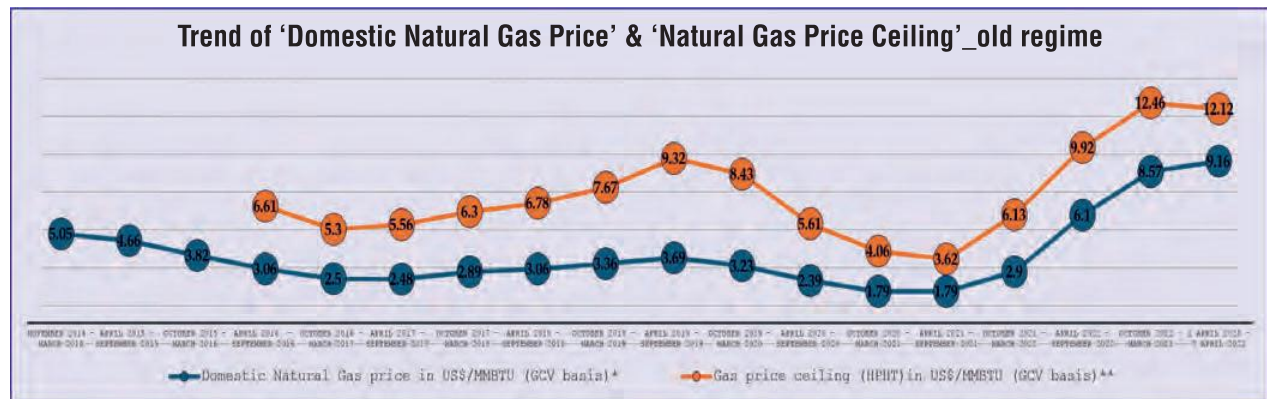


Table 3.12 Statewise CGD Sale Profile* (in MMSCM) :FY 2023-2024

State/Union Territory	CNG	Domestic (PNG)	Commercial (PNG)	Industrial (PNG)	Total	Total (in MMSCMD)
Andhra Pradesh	55	14	1	10	79.87	0.22
Andhra Pradesh, Karnataka & Tamil Nadu	8	0	0	29	37.03	0.10
Assam	2	5	4	57	67.58	0.18
Bihar	87	5	1	1	93.26	0.25
Bihar & Jharkhand	1	0	0	0	1.40	0.004
Bihar & Uttar Pradesh	1	0	0	0	1.18	0.003
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	53	4	2	6	65.37	0.18
Chhattisgarh	0	0	0	0	0.03	0.0001
Dadra & Nagar Haveli (UT)	5	1	0	40	45.74	0.12
DAMAN & DIU (UT)	2	1	1	6	9.06	0.02
Gujarat & UT of Daman and Diu	10	1	0	0	10.74	0.03
Delhi	1667	143	59	65	1933.62	5.28
Goa	7	1	0	19	27.51	0.08
Gujarat	1630	393	78	2306	4405.88	12.04
Haryana	680	31	14	268	992.71	2.71
Haryana & Himachal Pradesh	2	0	0	0	1.88	0.01
Haryana & Punjab	11	0	0	0	10.75	0.03
Himachal Pradesh	1	0	0	0	1.51	0.004
Jharkhand	21	1	0	0	23.12	0.06
Karnataka	153	21	9	128	309.93	0.85
Kerala	58	2	1	9	70.10	0.19
Kerala & Puducherry	6	0	0	0	5.79	0.02
Madhya Pradesh	131	21	4	69	224.98	0.61
Madhya Pradesh and Chhattisgarh	0	0	0	0	0.09	0.0002
Madhya Pradesh and Rajasthan	12	0	0	0	11.87	0.03
Madhya Pradesh and Uttar Pradesh	11	0	0	2	12.75	0.03
Maharashtra	1541	225	55	305	2126.88	5.81
Maharashtra & Gujarat	31	1	0	9	40.59	0.11
Maharashtra and Madhya Pradesh	3	0	0	0	2.54	0.01
Odisha	15	2	0	0	16.81	0.05
Puducherry (UT)	0	0	0	0	0.18	0.0005
Puducherry (UT) & Tamil Nadu	0	0	0	0	0.46	0.001
Punjab	92	8	5	112	217.24	0.59
Punjab & Rajasthan	1	0	0	0	0.62	0.002
Rajasthan	183	6	1	82	271.66	0.74
Tamil Nadu	82	0	0	7	89.32	0.24
Telangana	93	21	0	20	134.45	0.37
Telangana and Karnataka	2	0	0	1	2.50	0.01
Tripura	37	18	4	7	66.20	0.18
UT of Jammu and Kashmir	0	0	0	0	0.02	0.00004
Uttar Pradesh	1081	139	32	252	1503.95	4.11
Uttar Pradesh & Rajasthan	57	1	1	462	520.42	1.42
Uttar Pradesh & Uttarakhand	8	0	0	0	7.91	0.02
Uttarakhand	28	5	1	29	62.40	0.17
West Bengal	15	0	0	1	16.33	0.04
Grand Total	7885	1068	272	4298	13524	37

* Inputs based on the information submitted by CGD entities - subject to revisions, if any.

Categorizations of data under Commercial and Industrial sectors- as per the respective policies of individual CGD entities



Table 3.12(A): CGD Sales Data* (in SCMD) - Six Months

Period	CNG	Domestic (PNG)	Commercial (PNG)	Industrial (PNG)	Total
October-2020 to March 2021	12864911	2621058	922209	16507543	32915721
April-2021 to September 2021	13238071	2456140	489067	14206677	30389956
October 2021 to March 2022	17253563	2801726	678335	13870178	34603802
April-2022 to September 2022	18938879	2570973	671072	12112714	34293638
October-2022 to March 2023	19423450	2908893	690704	10272961	33296008
April-2023 to September 2023	20653851	2652456	665809	11370755	35342871
October-2023 to March 2024	22435095	3183788	823008	12117972	38559863

* Inputs based on the information submitted by CGD entities - subject to revisions, if any.
Sales of SCMD (SCM per day) calculated based on sale period

Segment Trends - CGD Sale Profile vis-à-vis previous Six Months (in %)

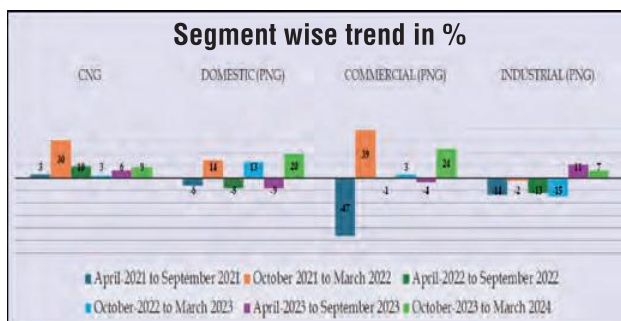
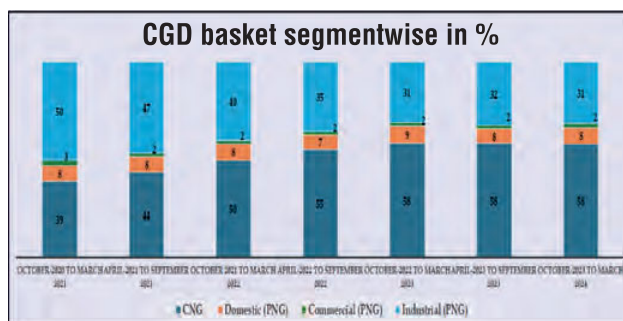


Table 3.12(B): Basket Trends- CGD Sale Profile* (in MMSCM) - Annual

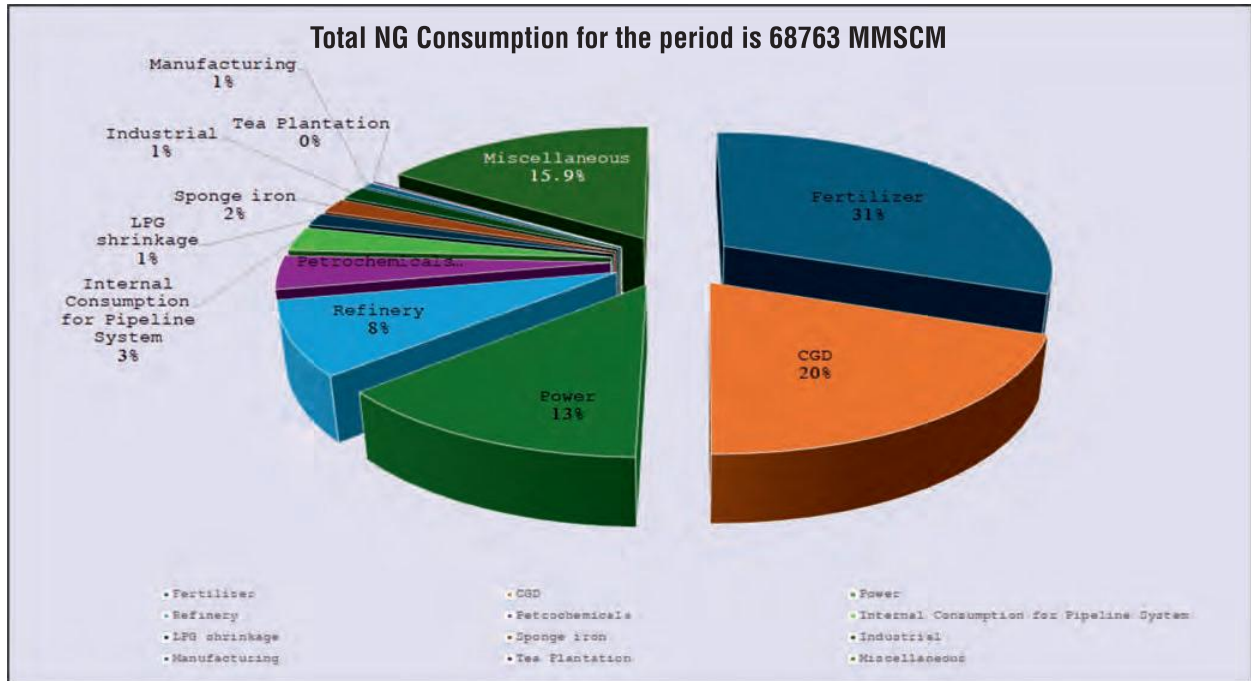
Period	CNG	Domestic (PNG)	Commercial (PNG)	Industrial (PNG)	Total	Total (in MMSCMD)
FY 2023-24 (P)	7885	1068	272	4298	13524	37
FY 2022-23	7001	1000	249	4086	12336	34
FY 2021-22	5563	959	213	5124	11859	32

* Inputs based on the information submitted by CGD entities - subject to revisions, if any.
Sales in % calculated based on sale for period

Sectorial Break up of CGD Sales Profile 2023-24 vs 2022-23



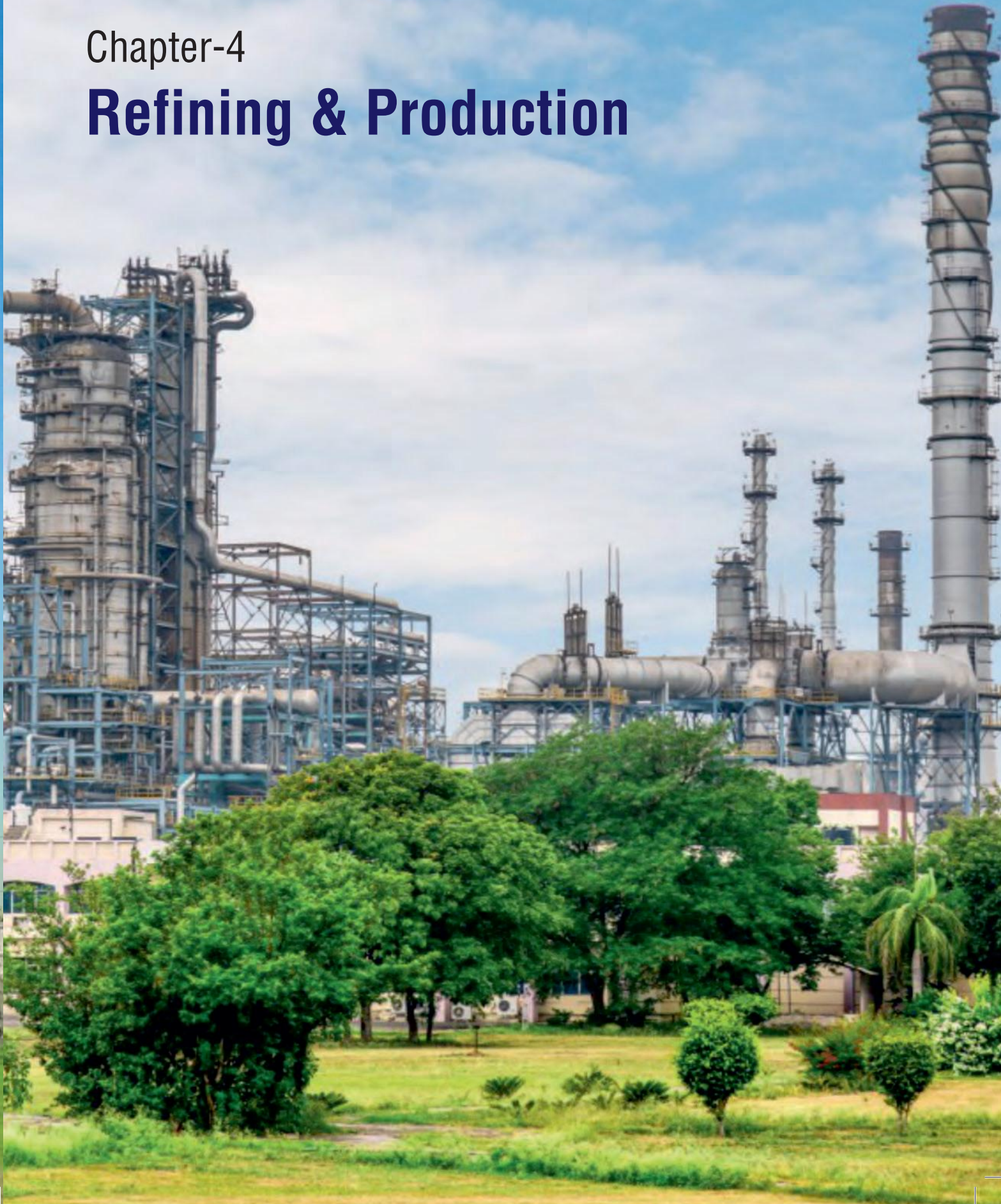
Sectoral Consumption of Natural gas (in %) April 2023- March 2024





Chapter-4

Refining & Production





Chapter - Highlights

Refining & Production

As of April 2024, India's oil refining capacity stood at 256.8 million metric tonnes per annum (MMTPA) from 253.9 MMTPA in April 2023 as the Refining Capacity of HPCL – VISHAKH refinery has increased from 11 MMTPA to 13.7 MMTPA and IOCL – GUWAHATI refinery has increased from 1 MMTPA to 1.2 MMTPA. India stands as the second-largest refiner in Asia and the fourth largest globally. The country is equipped with 22 operational refineries, with private companies holding approximately 34.3% of the total refining capacity.

Cauvery Basin Refinery (CBR) – Nagapattinam is under capacity augmentation from 1 MMTPA to 9 MMTPA. The construction of HPCL Rajasthan Refinery Ltd. (HRRL), a joint venture between Hindustan Petroleum Corporation Limited (HPCL) and the Government of Rajasthan (GoR), is underway. The equity participation in the venture is 74% by HPCL and 26% by the Government of Rajasthan, and it has a capacity of 9.0 million metric tons per annum (MMTPA). Numaligarh Refinery is under capacity augmentation from 3 MMTPA to 9 MMTPA.

Indian refineries have elevated their crude processing, resulting in the processing of 261.5 million metric tons (excluding other inputs) during FY 2023–24. This reflects a 2.5% increase compared to the FY 2022–23. The overall capacity utilization by Indian refineries reached 101.8% in FY 2023–24, showing a growth from 100.5% during FY 2022–23.

Due to recovery of demand, the total production of petroleum products by Indian refineries increased by 3.6% during FY 2023-24 as compared to FY 2022-23. The rise in production can be attributed mainly to increased production of motor spirit (MS), high-speed diesel (HSD) and aviation turbine fuel (ATF). HSD accounts for 42%, MS 16.3% and ATF 6.2% in production basket of petroleum products.

Export & Import

Crude Import

The crude oil imports during FY 2023-24 registered a 0.2% increase compared to the previous year, aligning with the concurrent rise in the consumption of petroleum products.

Product Exports

During FY 2023-24, the exports of Petroleum, Oil, and Lubricants (POL) products saw an increase of 2.3% compared to the previous year. The rise in POL product exports in FY 2023-24 was primarily attributed to an increase in the export of aviation turbine fuel (ATF) and motor spirit (MS). In value terms, exports during FY 2023-24 dropped from 57.3 billion US dollars to 47.7 billion US dollars, marking a 16.9% decrease compared to FY 2022-23. High-speed diesel (HSD), motor spirit (MS), and aviation turbine fuel (ATF) emerged as the top three products in the export basket of petroleum products during FY 2023-24, with shares of 45.2%, 21.6%, and 13.7%, respectively.

Product Imports

During FY 2023-24, imports of petroleum products experienced a notable increase of 9.1% compared to the previous year. The rise in imports during this period was primarily driven by an increase in the import of petcoke, fuel oil (FO), bitumen and naphtha. Within the import basket of petroleum products in FY 2023-24, Liquefied Petroleum Gas (LPG) held the highest share at 38%, followed by petcoke at 22.5%, and fuel oil at 18.6%.

Map of refineries in India

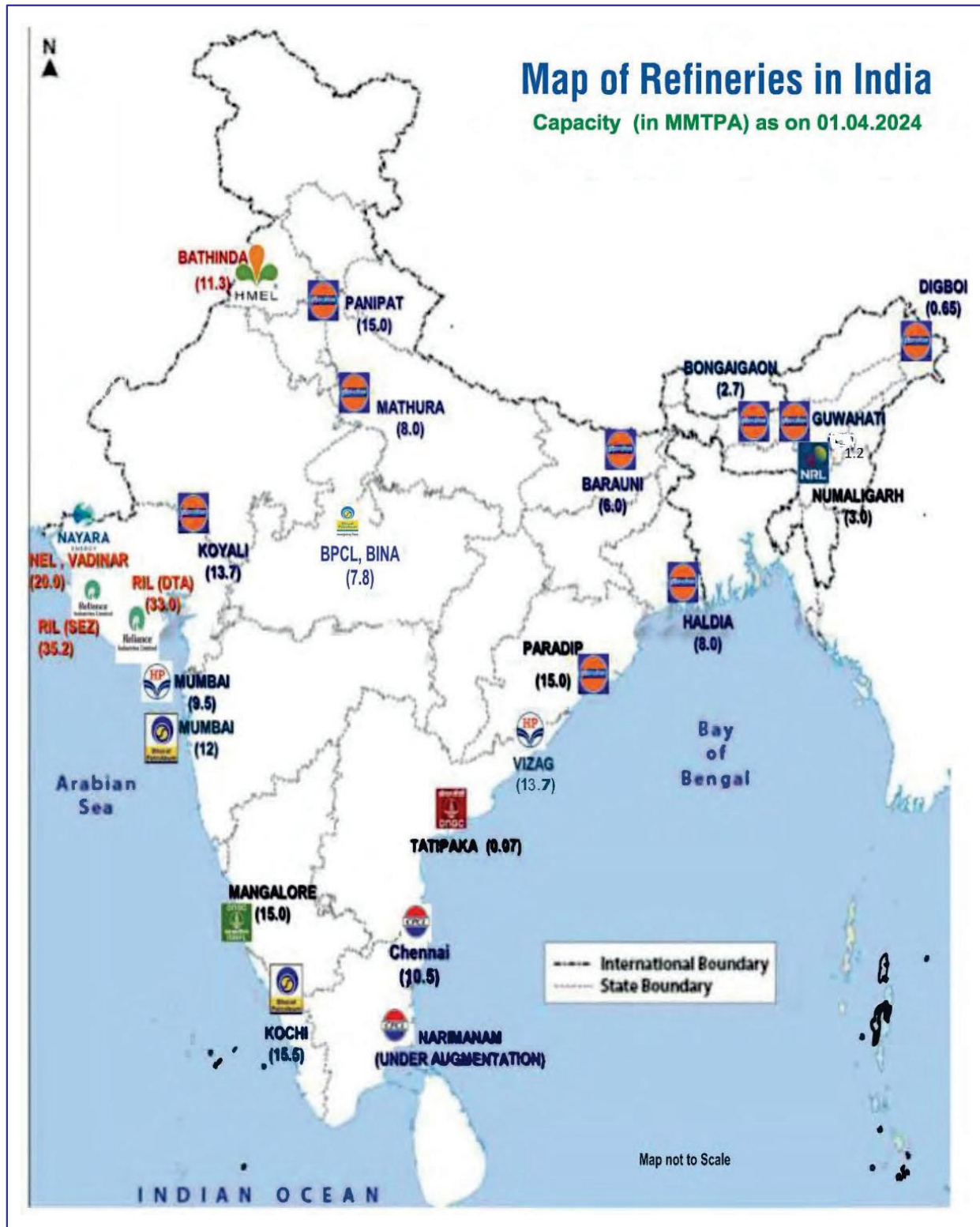


Table 4.1 : Refineries: Installed capacity and crude oil processing

Sr. No.	Refinery	Installed capacity (MMTPA)		Crude oil processing (MMT)				
		01.04.2023	01.04.2024	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
1	Barauni	6.0	6.0	6.5	5.5	5.6	6.8	6.6
2	Koyali	13.7	13.7	13.1	11.6	13.5	15.6	15.2
3	Haldia	8.0	8.0	6.5	6.8	7.3	8.5	8.1
4	Mathura	8.0	8.0	8.9	8.9	9.1	9.6	9.2
5	Panipat	15.0	15.0	15.0	13.2	14.8	13.8	14.3
6	Guwahati	1.0	1.2	0.9	0.8	0.7	1.1	1.0
7	Digboi	0.65	0.65	0.7	0.6	0.7	0.7	0.7
8	Bongaigaon	2.70	2.7	2.0	2.5	2.6	2.8	3.0
9	Paradip	15.0	15.0	15.8	12.5	13.2	13.6	15.2
	IOCL total	70.1	70.3	69.4	62.4	67.7	72.4	73.3
10	Mumbai	9.5	9.5	8.1	7.4	5.6	9.8	9.6
11	Visakh	11.0	13.7	9.1	9.1	8.4	9.3	12.7
12	HMEL-Bathinda	11.3	11.3	12.2	10.1	13.0	12.7	12.6
	HPCL total	31.8	34.5	29.4	26.5	27.0	31.8	35.0
13	Mumbai	12.0	12.0	15.0	12.9	14.4	14.5	15.1
14	Kochi	15.5	15.5	16.5	13.3	15.4	16.0	17.3
15	BORL-Bina	7.8	7.8	7.9	6.2	7.4	7.8	7.1
	BPCL total	35.3	35.3	39.4	32.4	37.2	38.4	39.5
16	Manali	10.5	10.5	10.2	8.2	9.0	11.3	11.6
17	CBR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CPCL total	10.5	10.5	10.2	8.2	9.0	11.3	11.6
18	Numaligarh	3.0	3.0	2.4	2.7	2.6	3.1	2.5
19	Tatipaka	0.07	0.07	0.09	0.08	0.08	0.07	0.07
20	MRPL-Mangalore	15.0	15.0	14.0	11.5	14.9	17.1	16.5
	ONGC total	15.1	15.1	14.0	11.6	14.9	17.2	16.6
21	RIL-Jamnagar (DTA)	33.0	33.0	33.0	34.1	34.8	34.4	34.4
22	RIL-Jamnagar (SEZ)	35.2	35.2	35.9	26.8	28.3	27.9	28.3
23	NEL-Vadinar	20.0	20.0	20.6	17.1	20.2	18.7	20.3
	All India	253.9	256.8	254.4	221.8	241.7	255.2	261.5

Source: Oil companies

(P): Provisional

Table 4.2 : High Sulphur (HS) & Low Sulphur (LS) crude oil processing

(MMT)

Sr. No.	Type of crude	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
1	HS crude	192.4	161.4	185.0	197.9	205.3
2	LS crude	62.0	60.3	56.7	57.4	56.2
	Total crude	254.4	221.8	241.7	255.2	261.5
	Share of HS crude in total crude processing	75.6%	72.8%	76.6%	77.5%	78.5%

Source: Oil companies, (P): Provisional

Table 4.3 : Imported crude & Indigenous crude oil processing

(MMT)

Sl. no.	Indigenous/ Imported crude	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
1	Imported crude	225.1	193.8	214.7	228.8	234.7
2	Indigenous crude	29.3	28.0	27.0	26.5	26.8
	Total crude	254.4	221.8	241.7	255.2	261.5
	Share of imported crude in total crude processing	88.5%	87.4%	88.8%	89.6%	89.7%

Source: Oil companies, (P): Provisional

Table 4.4 : Domestic Production of Petroleum Products

(MMT)

	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)
A) From crude oil/refineries					
Light ends	87.4	83.0	89.3	89.6	92.5
of which: LPG	10.9	10.2	10.6	11.2	11.1
MS	38.6	35.8	40.2	42.8	45.1
Naphtha	19.4	18.4	19.0	16.1	17.3
Others	18.5	18.6	19.5	19.5	19.0
Middle distillates	135.5	115.4	125.4	136.6	142.1
of which: SKO	3.2	2.4	1.9	0.9	1.0
ATF	15.2	7.1	10.3	15.0	17.1
HSD	111.1	100.4	107.1	113.7	115.9
LDO	0.6	0.7	0.8	0.6	0.7
Others	5.5	4.8	5.3	6.3	7.5
Heavy ends	35.3	30.9	35.5	36.8	38.0
of which: Furnace Oil	8.9	7.1	8.5	9.6	9.7
LSHS	0.4	0.4	0.4	0.7	0.7
Lube Oil	0.9	1.1	1.2	1.4	1.4
Bitumen	4.9	4.9	5.1	4.9	5.2
RPC/Petcoke	14.6	12.0	15.5	15.4	15.1
Others	5.5	5.5	4.8	4.8	5.9
Sub total (A)	258.2	229.3	250.3	263.0	272.6
B) From natural gas/fractionators					
Sub total (B)	4.8	4.2	4.1	3.5	3.5
of which: LPG	2.0	1.9	1.6	1.6	1.7
Naphtha	1.2	1.0	1.0	1.0	1.0
SKO	0.05	0.03	0.02	0.00	0.01
ATF	0.03	0.02	0.03	0.05	0.04
HSD	0.06	0.06	0.05	0.1	0.1
Others	1.5	1.3	1.3	0.8	0.7
Total production (A +B)	262.9	233.5	254.3	266.5	276.1

“Source: Oil companies (P): Provisional “



Table 4.5 : Production of Petroleum Products : All sources

(MMT)

Major products	2019-20		2020-21		2021-22		2022-23 (P)		2023-24 (P)	
	Quantity	Percentage	Quantity	Percentage	Quantity	Percentage	Quantity	Percentage	Quantity	Percentage
HSD	111.1	42.3	100.4	43.0	107.2	42.1	113.8	42.7	115.9	42.0
MS	38.6	14.7	35.8	15.3	40.2	15.8	42.8	16.1	45.1	16.3
Naphtha	20.6	7.8	19.4	8.3	20.0	7.9	17.0	6.4	18.3	6.6
FO	8.9	3.4	7.1	3.0	8.5	3.3	9.6	3.6	9.7	3.5
ATF	15.2	5.8	7.1	3.0	10.3	4.0	15.0	5.6	17.1	6.2
LPG	12.8	4.9	12.1	5.2	12.2	4.8	12.8	4.8	12.8	4.6
SKO	3.2	1.2	2.4	1.0	1.9	0.8	0.9	0.4	1.0	0.4
Bitumen	4.9	1.9	4.9	2.1	5.1	2.0	4.9	1.8	5.2	1.9
LSHS	0.4	0.2	0.4	0.2	0.4	0.2	0.7	0.3	0.7	0.3
Lubes	0.9	0.4	1.1	0.5	1.2	0.5	1.4	0.5	1.4	0.5
LDO	0.6	0.2	0.7	0.3	0.8	0.3	0.6	0.2	0.7	0.2
RPC/Petcoke	14.6	5.6	12.0	5.2	15.5	6.1	15.4	5.8	15.1	5.5
Others#	31.0	11.8	30.2	12.9	30.9	12.2	31.4	11.8	33.1	12.0
Total	262.9	100.0	233.5	100.0	254.3	100.0	266.5	100.0	276.1	100.0

Source: Source: Oil companies

Others include products like sulphur, propylene, propane, reformate, butane, MTO (Mineral Turpentine Oil) etc.

(P): Provisional



Table 4.6 : Production vis a vis Consumption of Petroleum Products

(MMT)

Year	Consumption (A)	Production from refineries & other sources*	Surplus (+) / Deficit (-) (B)-(A)
1997-98	84.3	64.7	-19.6
1998-99	90.6	68.4	-22.2
1999-00	97.1	82.9	-14.2
2000-01	100.1	99.6	-0.5
2001-02	100.4	104.3	3.9
2002-03	104.1	108.7	4.5
2003-04	107.8	117.6	9.9
2004-05	111.6	123.3	11.6
2005-06	113.2	124.6	11.4
2006-07	120.7	140.6	19.9
2007-08	128.9	150.4	21.5
2008-09	133.6	157.9	24.3
2009-10	137.8	185.5	47.7
2010-11	141.0	196.2	55.2
2011-12	148.1	204.5	56.3
2012-13	157.1	218.2	61.2
2013-14	158.4	220.7	62.3
2014-15	165.5	221.1	55.6
2015-16	184.7	231.9	47.2
2016-17	194.6	243.5	48.9
2017-18	206.2	254.3	48.1
2018-19	213.2	262.4	49.1
2019-20	214.1	262.9	48.8
2020-21	194.3	233.5	39.2
2021-22	201.7	254.3	52.6
2022-23 (P)	223.0	266.5	43.5
2023-24 (P)	234.3	276.1	41.8

*Note: includes direct imports by private parties

*Fractionators and gas processing plants

(P): Provisional "

Table 4.7 : Gross Refining Margins (GRM) of Refineries

\$/bbl

Company	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
IOCL#	0.08	5.64	11.25	19.52	12.05
BPCL	2.50	4.06	9.09	20.24	14.14
HPCL	1.02	3.86	7.19	12.09	9.08
CPCL	-1.18	7.14	8.85	12.48	8.64
MRPL	-0.23	3.71	8.72	9.88	10.36
NRL#	24.55	37.23	43.46	35.82	29.72
BORL	5.60	6.20	11.00	**	**
RIL	8.90	*	*	*	*
NEL	5.88	*	*	*	*
Singapore	3.25	0.53	4.99	10.76	6.58

((P) - Provisional

GRM of North-East refineries are including excise duty benefit

* Not available

** BPCL figures for the period 2022-23 includes BORL also after its merger with BPCL"

As per U.S. Energy Information Administration (EIA) , Gross Refining Margin is the difference between the revenue from the sale of petroleum products and the cost of the raw materials used to produce the products.

Source : Indian refineries - published results/ information provided by oil companies; Singapore - Reuters

Table 4.8 : Distillate yield of PSU Refineries

(Distillate %)

Company	Refinery	2019-20	2020-21	2021-22	2022-23	2023-24(P)
IOCL	Barauni	86.9	87.1	85.9	83.8	83.8
	Koyali	79.5	72.1	76.7	74.0	73.9
	Haldia	69.0	72.2	72.2	74.8	73.1
	Mathura	75.6	72.3	74.9	71.8	71.3
	Panipat	84.8	80.2	83.9	78.9	79.1
	Guwahati	83.5	82.1	86.4	81.5	79.9
	Digboi	72.5	67.9	79.2	72.8	70.8
	Bongaigaon	80.8	84.8	81.3	80.0	82.3
	Paradip	80.7	79.2	79.6	79.5	79.9
CPCL	Manali	77.6	78.4	74.9	78.3	78.4
	CBR	-	-	-	-	-
HPCL	Mumbai	77.0	76.2	70.4	75.9	76.1
	Visakh	72.1	74.4	70.7	67.9	71.6
BPCL	Mumbai	84.9	83.7	84.4	85.5	80.9
	Kochi	84.2	83.8	85.4	83.9	84.2
	Bina	-	-	84.3	85.3	84.5
NRL	Numaligarh	83.0	86.4	85.7	89.9	86.5
MRPL	Mangalore	76.7	78.1	78.8	77.9	79.4
PSU oil cos. average		80.0	78.6	79.6	78.7	78.5

Source : CHT



Table 4.9 : Fuel & Loss

(MMT)

Sl. no.	Company	Refinery	2019-20			2020-21			2021-22			2022-23 (P)			2023-24 (P)		
			Crude T'put + other inputs	Fuel & Loss		Crude T'put + other inputs	Fuel & Loss		Crude T'put + other inputs	Fuel & Loss		Crude T'put + other inputs	Fuel & Loss		Crude T'put + other inputs	Fuel & Loss	
				Qty	%		Qty	%		Qty	%		Qty	%		Qty	%
1	IOCL	Barauni	6.7	0.6	8.8	5.7	0.6	9.8	5.7	0.5	9.6	6.9	0.6	8.8	6.8	0.6	8.6
2		Koyali	13.9	1.3	9.3	12.4	1.2	10.0	14.2	1.4	9.6	16.1	1.4	8.5	16.1	1.4	8.9
3		Haldia	6.6	0.6	9.6	6.9	0.7	10.5	7.5	0.8	10.7	8.9	0.9	9.8	8.5	0.8	9.2
4		Mathura	9.5	0.6	6.7	9.4	0.7	7.0	9.7	0.7	6.8	10.1	0.7	6.5	9.7	0.6	6.5
5		Panipat	16.7	1.4	8.3	14.9	1.4	9.2	16.7	1.4	8.5	15.1	1.4	9.0	15.9	1.4	8.6
6		Guwahati	1.3	0.1	9.7	1.1	0.1	10.6	1.0	0.1	9.7	1.4	0.13	8.7	1.3	0.12	8.6
7		Digboi	0.7	0.1	11.0	0.7	0.1	11.7	0.8	0.1	10.6	0.8	0.08	10.4	0.8	0.08	10.5
8		Bongaigaon	2.1	0.2	8.5	2.5	0.3	11.1	2.8	0.3	11.9	2.9	0.3	11.8	3.2	0.4	11.5
9		Paradip	15.8	1.5	9.6	12.5	1.4	11.0	13.4	1.5	11.0	13.7	1.4	10.0	15.4	1.6	10.2
		IOCL Total	73.4	6.4		66.1	6.4		71.7	6.8		76.0	6.8		77.7	6.9	
10	HPCL	Mumbai	8.1	0.4	5.1	7.5	0.6	8.0	5.7	0.5	8.2	9.8	0.7	7.4	9.7	0.7	7.2
11		Visakh	9.1	0.7	7.5	9.1	0.7	7.9	8.4	0.7	8.1	9.3	0.7	7.5	12.7	0.9	7.3
12		HMEL-Bathinda	12.3	0.7	5.7	10.1	0.6	6.0	13.1	0.8	6.1	12.8	0.9	7.3	12.9	0.7	5.6
		HPCL Total	29.5	1.8		26.7	1.9		27.2	1.9		31.9	2.4		35.3	2.3	
13	BPCL	Mumbai	15.1	0.6	4.2	13.1	0.5	4.1	14.5	0.6	4.3	14.6	0.7	4.9	15.2	0.7	4.6
14		Kochi	17.2	1.4	8.3	13.9	1.1	8.2	15.9	1.4	8.8	16.4	1.4	8.7	17.7	1.5	8.3
15		BORL-Bina	7.9	0.8	9.9	6.2	0.7	11.8	7.4	0.8	10.6	7.8	0.8	10.2	7.1	0.8	10.5
		BPCL Total	40.2	2.8		33.1	2.4		37.8	2.8		38.9	3.0		40.0	2.9	
16		Numaligarh	2.7	0.3	10.0	3.0	0.3	9.9	2.9	0.3	9.8	3.4	0.3	9.5	2.8	0.3	10.2
17	CPCL	Manali	10.3	1.0	10.0	8.5	0.9	10.7	9.4	0.9	9.7	11.6	1.0	9.1	12.1	1.1	9.1
18		CBR	0.002	0.00	52.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		CPCL Total	10.3	1.0		8.5	0.9		9.4	0.9		11.6	1.0		12.1	1.1	
19	ONGC	Tatipaka	0.1	0.007	7.8	0.1	0.004	5.1	0.1	0.003	4.5	0.07	0.003	4.2	0.07	0.002	2.8
20		MRPL-Mangalore	14.1	1.5	10.6	11.5	1.4	11.9	15.0	1.6	10.8	17.1	1.9	11.1	16.6	1.8	11.0
		ONGC Total	14.2	1.5		11.6	1.4		15.0	1.6		17.2	1.9		16.7	1.8	
21	RIL	Jamnagar (DTA)	40.1	3.8	9.5	40.7	4.0	9.9	41.1	4.0	9.7	41.4	4.3	10.4	41.5	4.3	10.4
22		Jamnagar (SEZ)	52.1	4.6	8.9	45.1	4.4	9.8	50.5	5.0	9.8	51.6	5.3	10.2	53.6	5.7	10.7
23	NEL	Vadinar	21.1	1.2	5.7	17.5	1.0	6.0	20.5	1.1	5.5	19.1	1.1	5.8	20.8	1.2	5.6
		Total	283.5	23.5		252.3	22.8		276.1	24.4		291.0	26.0		300.5	26.6	

*Source: Oil companies
(P): Provisional *

Table 4.10: Specific Energy Consumption of PSU Refineries

(MBTU/Bbl/NRGF)

Company	Refinery	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
IOCL	Barauni	75.9	78.1	76.8	71.9	71.6
	Koyali	77.4	82.6	79.5	71.1	73.7
	Haldia	88.3	89.3	86.9	76.7	71.1
	Mathura	65.8	63.1	62.7	60.7	61.5
	Panipat	64.5	68.0	63.6	60.6	62.8
	Guwahati	121.2	123.7	121.4	105.0	103.6
	Digboi	101.7	98.1	88.4	97.3	91.5
	Bongaigaon	96.8	108.5	111.1	107.2	99.6
	Paradip	64.1	69.0	68.4	61.8	63.3
CPCL	Manali	81.5	86.7	82.8	75.2	72.2
	CBR	-	-	-	-	-
HPCL	Mumbai	84.8	98.2	105.8	75.9	75.0
	Visakhapatnam	84.4	81.2	85.3	80.3	80.5
BPCL	Mumbai	63.0	64.4	64.1	63.7	60.9
	Kochi	68.2	71.7	67.1	65.7	62.7
	Bina			69.9	67.2	66.0
NRL	Numaligarh	64.8	64.4	63.5	61.7	61.6
MRPL	Mangalore	75.3	81.4	73.5	71.6	72.9
PSU average		72.8	76.6	73.7	69.8	69.0

Specific Energy Consumption written as SEC or MBN;mbn=MBTU/Bbl/NRGF;MBTU: Net energy & loss in Refinery(Thousand British Thermal Unit);

BbLs: Barrels of crude processed;NRGF:Composite energy factor for the Refinery



Table 4.11 : Import/Export of crude oil and petroleum products

Import / export	Crude oil & petroleum products	2019-20			2020-21			2021-22			2022-23			2023-24 (P)		
		Quantity	Value		Quantity	Value		Quantity	Value		Quantity	Value		Quantity	Value	
		Million tonne	US\$ (Billion)	Rs. (Crores)	Million tonne	US\$ (Billion)	Rs. (Crores)	Million tonne	US\$ (Billion)	Rs. (Crores)	Million tonne	US\$ (Billion)	Rs. (Crores)	Million tonne	US\$ (Billion)	Rs. (Crores)
I M P O R T *	Crude oil	227.0	101.4	717001	196.5	62.2	459779	212.4	120.7	901262	232.7	157.5	1260372	233.1	132.8	1100589
	of which, PSU/JVs	141.4	64.7	458073	121.8	39.7	292718	134.7	77.3	577372	154.0	106.4	852592	152.5	87.5	725157
	Private	85.5	36.7	258928	74.7	22.6	167060	77.7	43.4	323890	78.7	51.2	407780	80.6	45.3	375432
	Products															
	LPG	14.8	7.1	50347	16.5	7.2	53752	17.0	12.2	91468	18.3	13.3	107191	18.5	10.5	87144
	Petrol	2.1	1.4	9610	1.4	0.7	4950	0.7	0.5	3895	1.1	1.1	8846	0.7	0.7	5494
	Naphtha	1.7	0.9	6678	1.2	0.5	3844	0.2	0.2	1499	0.9	0.6	4781	1.2	0.8	6811
	Aviation Turbine Fuel	0.1	0.04	309	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
	Kerosene	0.0	0.0	0	0.003	0.002	12	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
	Diesel	2.8	1.6	11619	0.6	0.3	1960	0.04	0.03	253	0.3	0.5	3584	0.04	0.04	315
	Lubes/LOBS	2.7	1.7	11869	2.7	1.6	12170	3.1	2.6	19704	2.2	2.3	18449	2.4	2.3	19045
	Fuel Oil	4.6	1.6	11791	6.5	1.9	14312	9.0	4.4	32815	8.6	4.2	33474	9.1	4.1	33669
	Bitumen	1.6	0.5	3634	2.1	0.6	4325	2.6	1.0	7678	2.8	1.2	9945	3.2	1.3	10838
	Petcoke	10.7	1.4	9713	8.3	0.9	6410	4.2	1.1	8203	8.7	2.3	18157	11.0	1.7	14310
	Others**	2.7	1.4	10172	4.1	1.0	7695	2.2	1.5	11319	1.8	1.4	11425	2.5	1.6	13288
	Total product import	43.8	17.7	125742	43.2	14.8	109430	39.0	23.7	176835	44.6	26.9	215854	48.7	23.0	190914
	of which, PSU/JVs	20.0	10.2	72699	18.7	8.3	61332	18.1	13.0	97082	19.9	15.0	120452	19.4	11.4	94064
Private	23.8	7.5	53042	24.6	6.5	48098	20.9	10.7	79753	24.7	11.9	95402	28.5	11.9	98878	
"Total import (crude oil + product)"	270.7	119.1	842743	239.7	77.0	569208	251.4	144.3	1078097	277.3	184.4	1476226	281.8	155.9	1291503	
E X P O R T	Products															
	LPG	0.5	0.3	1970	0.5	0.2	1797	0.5	0.4	3214	0.5	0.5	3891	0.5	0.4	3213
	Petrol	12.7	7.7	54512	11.6	5.0	36530	13.5	10.9	81649	13.1	12.9	102800	13.5	11.2	92875
	Naphtha	8.9	4.4	31509	6.5	2.5	18643	6.9	5.0	37231	5.7	4.2	33357	5.3	3.2	26856
	Aviation Turbine Fuel	6.9	4.0	28458	3.5	1.3	9377	5.2	3.7	27112	7.3	7.3	58598	8.6	7.0	57961
	Kerosene	0.2	0.1	560	0.02	0.01	48	0.01	0.01	77	0.01	0.01	100	0.01	0.01	82
	Diesel	31.7	17.5	123919	30.6	11.1	81611	32.4	22.1	164741	28.5	28.9	230813	28.2	22.0	182280
	LDO	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.001	0.002	13	0.0	0.0	0
	Lubes/LOBS	0.01	0.01	96	0.01	0.01	93	0.01	0.02	114	0.01	0.03	205	0.01	0.03	254
	Fuel Oil	1.5	0.5	3811	1.2	0.3	2318	1.8	0.9	6633	1.8	1.0	7834	2.0	0.9	7746
	Bitumen	0.03	0.01	89	0.01	0.003	23	0.01	0.004	28	0.01	0.01	42	0.01	0.004	34
	Petcoke / CBFS	0.5	0.2	1096	0.6	0.04	292	0.2	0.1	553	0.3	0.1	648	0.03	0.003	23
	Others***	2.9	1.1	7998	2.3	0.9	6436	2.3	1.4	10449	3.7	2.5	20427	4.4	2.8	22828
	Total product export	65.7	35.8	254018	56.8	21.4	157168	62.8	44.4	331801	61.0	57.3	458729	62.4	47.7	394153
	of which, PSU/JVs	14.2	7.5	53276	10.6	4.0	29708	14.2	10.3	76775	12.9	11.6	92805	13.0	9.6	79208
	Private	51.5	28.4	200742	46.1	17.4	127460	48.6	34.2	255026	48.1	45.7	365923	49.4	38.1	314945
	Net import	205.1	83.2	588725	182.9	55.6	412041	188.6	99.9	746296	216.3	127.1	1017497	219.3	108.2	897350
Net product export	21.9	18.2	128276	13.5	6.6	47738	23.7	20.8	154966	16.4	30.4	242875	13.8	24.6	203239	

Source: Oil companies & DGCIS, (P) : Provisional

Note:

*Import does not include LNG imports

**Other imports include Paraffin Wax, Petroleum Jelly, Aviation Gas, MTBE, Reformate etc.

***Other exports include VGO, Benzene, Hexane, MTO, Sulphur etc.

"Others" in exports include RIL-SEZ exports of "Others" with unspecified heavy ends.

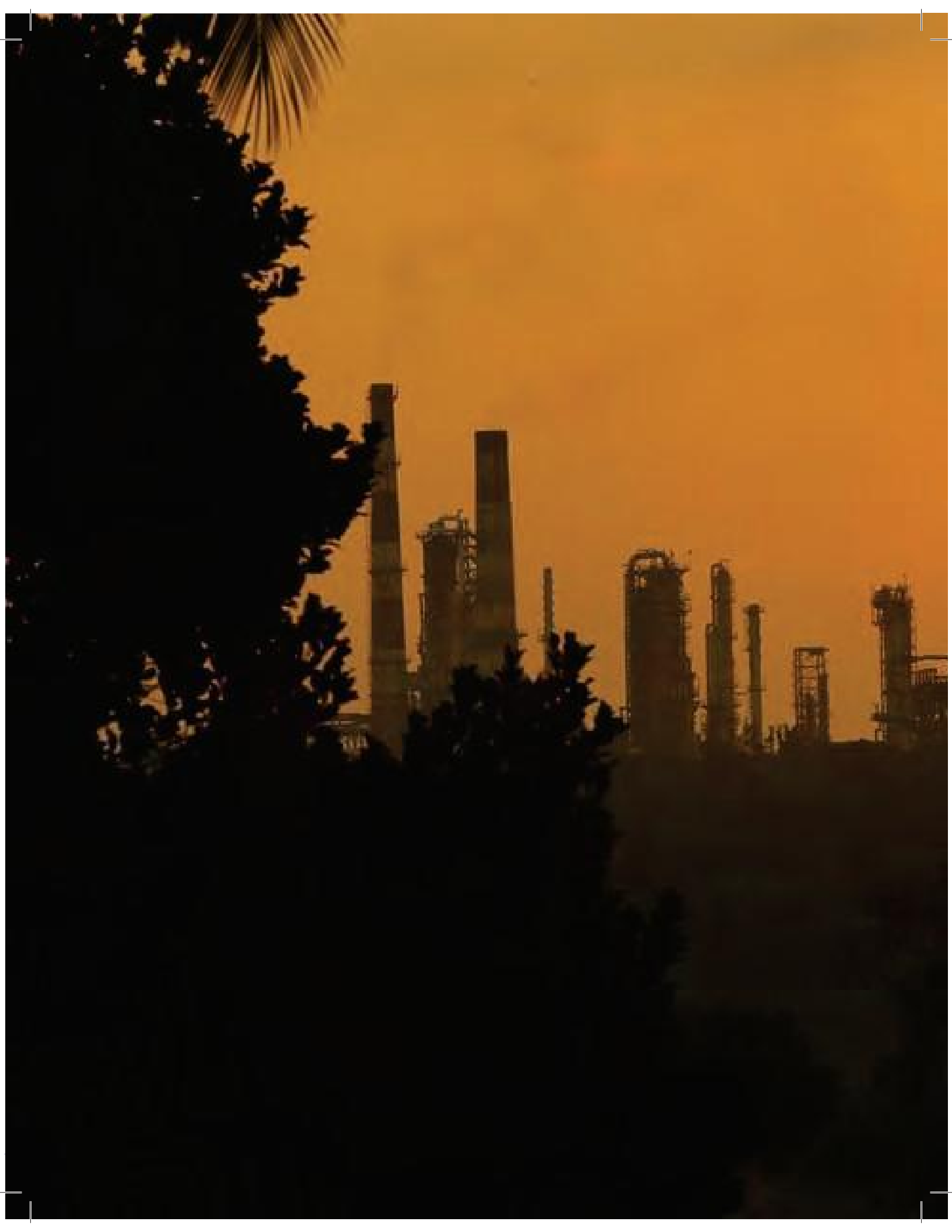
Crude oil imports decreased by 1.1% and increased by 0.2% during March 2024 and April 2023-March 2024 respectively as compared to the corresponding period of the previous year. Imports made due to deficit in production viz. LPG and Lubes/LOBS accounted for 42.9% share of total POL products import during April-March 2023-24 as compared to 45.9% during April-March 2022-23. Increase of 2.3% was recorded in POL products export during April to March 2023-24 as compared to during April to March 2022-23 mainly due to increase in exports of aviation turbine fuel (ATF), vacuum gas oil (VGO) and motor spirit (MS) etc.

Table 4.12 : Exchange rates of Indian rupee (₹)

Year	US dollar (\$)	British pound (£)	Euro (€)	Japanese yen (¥)
	Indian rupee (₹) / foreign currency			
2002-03	48.41	74.84	48.07	0.40
2003-04	45.92	77.74	54.01	0.41
2004-05	44.95	82.95	56.55	0.42
2005-06	44.28	79.02	53.88	0.39
2006-07	45.29	85.72	58.11	0.39
2007-08	40.24	80.80	56.99	0.35
2008-09	45.91	78.45	65.14	0.46
2009-10	47.42	75.88	67.08	0.51
2010-11	45.58	70.88	60.21	0.53
2011-12	47.95	76.40	65.90	0.61
2012-13	54.45	86.02	70.06	0.66
2013-14	60.50	96.23	81.14	0.60
2014-15	61.15	98.56	77.47	0.56
2015-16	65.46	98.76	72.31	0.55
2016-17	67.09	87.71	73.61	0.62
2017-18	64.45	85.47	75.42	0.58
2018-19	69.89	91.74	80.93	0.63
2019-20	70.88	90.15	78.80	0.65
2020-21	74.20	97.06	86.67	0.70
2021-22	74.51	101.78	86.56	0.66
2022-23	80.39	96.83	83.72	0.59
2023-24	82.79	104.07	89.80	0.57
2024 : Month wise				
January	83.12	105.60	90.77	0.57
February	82.96	104.80	89.55	0.56
March	83.00	105.54	90.27	0.55
April	83.41	104.38	89.44	0.54

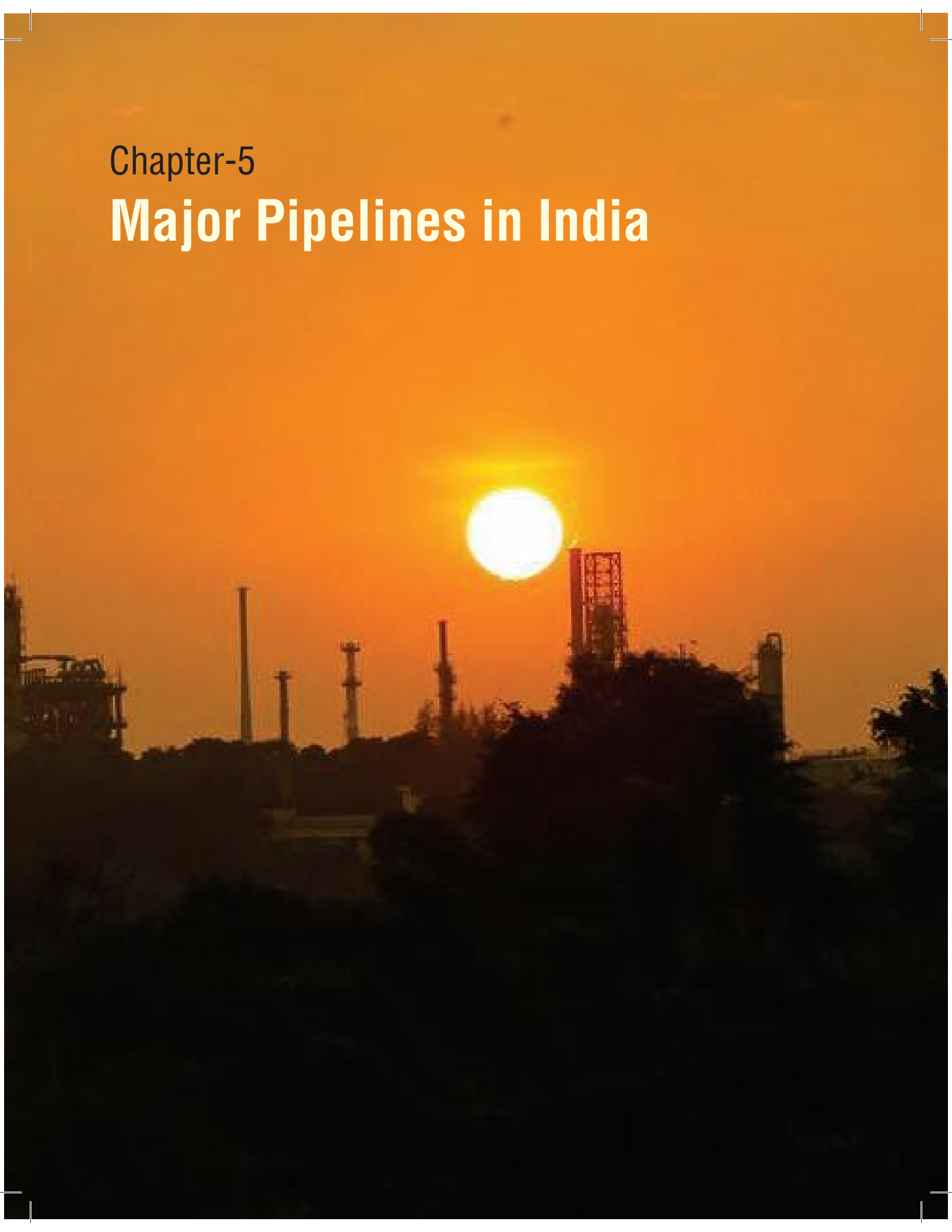
Source: Reserve Bank of India (RBI)/ Financial Benchmark India Private Limited (FBIL) website.

Note: The rates are average for the period.



Chapter-5

Major Pipelines in India





Chapter - Highlights

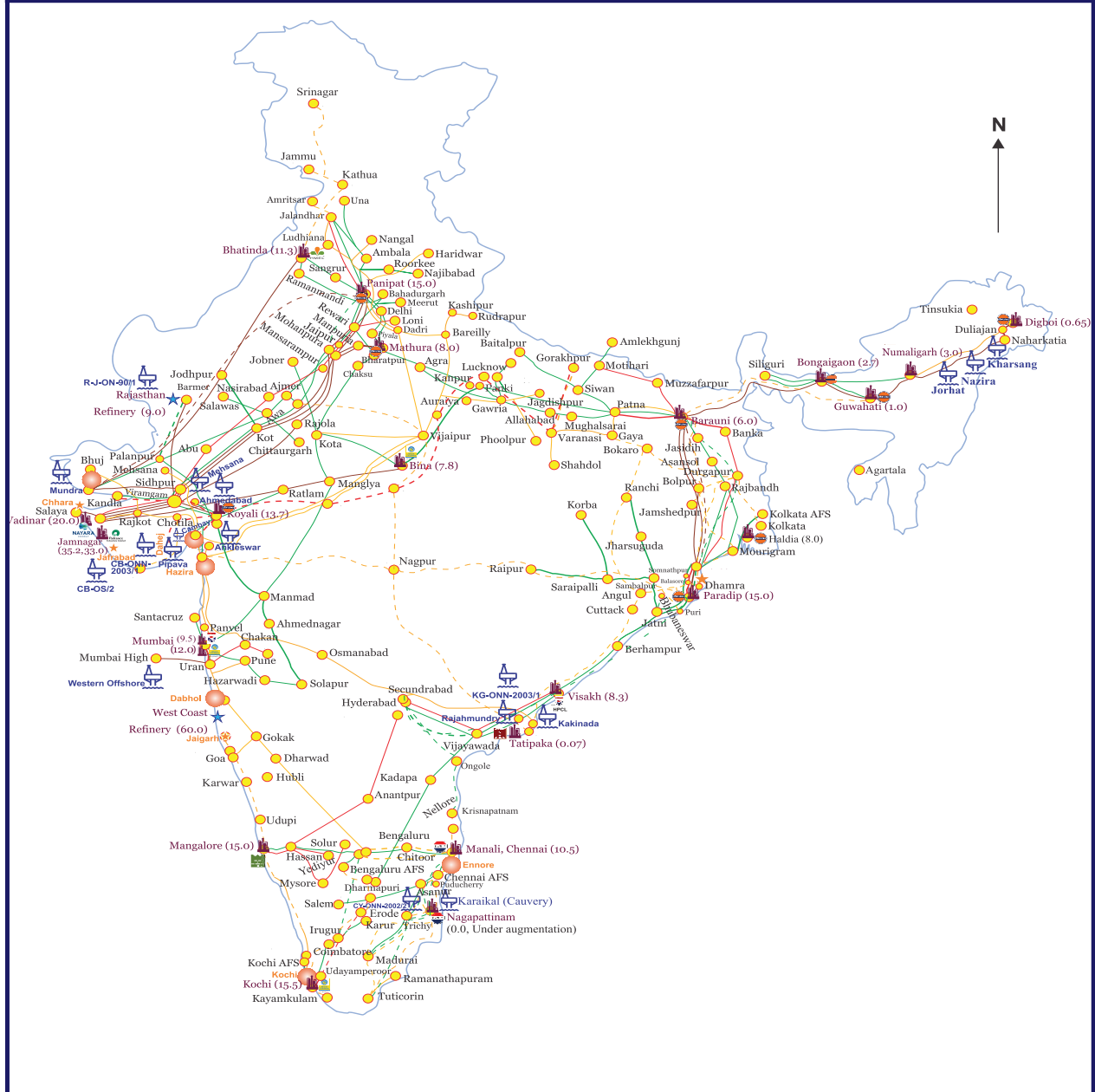
Major Pipelines in India

Pipelines play a crucial role in maintaining the supply chain for crude oil, petroleum products, and gas in the country. Onshore cross-country pipelines are buried underground at a depth of approximately 1.5 meters within a corridor spanning about 18 meters, operating at elevated pressures. As of April 01, 2024, the total length of the crude oil pipeline network in India is 10,941 kilometers, boasting a capacity of 153.1 million metric tons per annum (MMTPA). During FY 2023-24, the utilization of crude oil pipelines stands at 68.1%.

Product pipelines, inclusive of LPG, form a comprehensive network spanning 23375 kilometers with a capacity of 140.3 MMTPA. During FY 2023-24, the utilization of product pipelines reached 71%, an increase from 68% in FY 2022-23. The installed capacity of the Product/LPG pipeline increased by 0.7 MMTPA during FY 2023-24.

Natural Gas Pipeline infrastructure- is an economical and safe mode of transporting natural gas by connecting gas sources to gas consuming markets. Gas pipeline grid determines the structure of the gas market and its development. Therefore, an interconnected National Gas Grid has been envisaged to ensure the adequate availability and equitable distribution of natural gas in all parts of the country. At present (upto December 2023), there is about 24723 km long Natural Gas pipeline network which is operational in the country. In order to make available natural gas across the country, it has been envisaged to develop additional about 10494 km pipelines (excluding Tie-in connectivity, dedicated & STPL) to complete the National Gas Grid and same are at various stages of development. This would ensure easy availability of natural gas across all regions and potentially help to achieve uniform economic and social progress.

Oil & Gas Infrastructure & Pipeline Network in 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

* Pipeline Map is indicative only

Table 5.1: Natural Gas Pipelines in the Country (Operational)

S. No.	Network/Region	Entity	Length (Kms)	"Authorized capacity/ Declared capacity (MMSCMD) "	Pipeline sizeZ	Pipeline Status	Average flow Apr-Mar 2022-23(P) (mmscmd)	% Capacity utilisation 2022-23	Length (Kms)	"Authorized capacity/ Declared capacity (MMSCMD) "	Average flow Apr-Mar 2023-24 (mmscmd)	% Capacity utilisation Apr- Mar 2023-24
1	Assam Natural Gas Pipeline Network	Assam Gas Company Limited (AGCL)	106.713	2.428	800 mm/500 mm/ 400 mm/ 350 mm	Operational	1.50	61.6%	106.713	2.428	1.726	71.1%
2	Cauvery Basin Network	GAIL	272	4.33	18"/ 12"/ 8"/ 6"/ 4"/3"/2"	Operational	1.85	42.7%	272	4.33	2.26	52.3%
6	KG Basin Network	GAIL	917	15.99	18"/16"/14"/ 12"/8"/6"/4"/2"	Operational	3.83	24.0%	917	15.99	4.83	30.2%
7	Gujarat Regional Network (GRN) (in 2023-24 GRN excludes baroda network)	GAIL	615	8.31	24"/18"/14"/12"/ 18"/6"/5"/2"/1"	Operational	3.09	37.2%	67	8.31	1.38	16.6%
8	Agartala Regional Network	GAIL	65	2.00	12"/10"/8"	Operational	0.99	49.5%	65	2.00	1.08	53.9%
13	Kochi-Koottanad-Bangalore-Mangalore #	GAIL	642	12.00	30"/ 24"/ 18"/ 8"/ 4"	"Under Construction / Part Operational"	3.29	27.4%	643	12.00	4.17	34.7%
14	Hazira-Vijaipur-Jagdishpur-GREP (Gas Rehabilitation and Expansion Project)-Dahej-Vijaipur HVJ/ VDPL	GAIL	6725	107	42"/36"/30"/ 18"/16"/ 14"/12"/10"/8"/ 6"/4"/2"	Operational	72.54	67.8%	14053	-	107.56	-
	Dahej-Vijaipur (DVPL)-Vijaipur-Dadri (GREP) Upgradation DVPL 2 & VDPL	GAIL			48"/ 16"/12"	Operational						
	Dahej-Uran-Panvel-Dhabhol	GAIL	943	19.90	30"/24"/18"/ 12"/6"/4"	Operational	16.33	82.1%				
	Mumbai Regional Network	GAIL	125	7.04	26"/20"/18"/12"/4"	Operational	4.40	62.5%				
	Chainsa-Jhajjar-Hissar	GAIL	442	35.00	36"/18"/16"/ 12"/10"/8"/4"	Operational	1.74	5.0%				
	Dadri-Bawana-Nangal	GAIL	909	31.00	36"/30"/ 18"/10"/8"	Operational	7.51	24.2%				
	Dabhol-Bangalore	GAIL	1148	16.00	36"/30"/24"/ 18"/10"/8"	Operational	1.86	11.6%				
Jagdishpur-Haldia-Bokaro Dhamra-Paradip-Barauni-Guwahati #	GAIL	2383	7.44	36"/30"/24"/18"/ 12"/8"/6"/4"	"Under Construction / Part Operational"	5.21	70.0%					
Dedicated pipelines ##	GAIL	-	-	-	-	-	-	226	-	2.75	-	
16	Hazira-Ankleshwar (HAPI) 1	GGL	73.2	4.20	18"	Operational	0.74	17.7%	73.2	4.2	0.52	12.5%
17	Mehsana - Bhatinda^	GIGL	1673	45.94	36"/24"/18"/12"	Partially Commissioned **	3.23	7.0%	1673	45.94	5.68	12.4%

PPAC READY RECKONER



S. No.	Network/Region	Entity	Length (Kms)	"Authorized capacity/ Declared capacity (MMSCMD) "	Pipeline sizeZ	Pipeline Status	Average flow Apr-Mar 2022-23(P) (mmscmd)	% Capacity utilisation 2022-23	Length (Kms)	"Authorized capacity/ Declared capacity (MMSCMD) "	Average flow Apr-Mar 2023-24 (mmscmd)	% Capacity utilisation Apr- Mar 2023-24
18	Bhatinda - Gurdaspur\$	GIGL	261.42	33.93	24"/18"/16"/12"/8"/6"	Partially Commissioned\$	0.04	0.1%	261.42	33.93	0.06	0.2%
19	Mallavaram - Bhopal - Bhilwara - Vijapur#	GITL	2042	78.25	42"/36"/30"/24"/18"/12"	Under Construction	1.28	1.6%	2042	78.25	1.92	2.5%
20	High Pressure Gujarat Gas Grid	GSPL	2657.4	31	36"/30"/24"/20"/18"/12"/8"/6"/4"	Operational	27.00	62.8%	2657.4	31	24.21	67.3%
21	Low Pressure Gujarat Gas Grid	GSPL	57.6	12	36"/30"/24"/12"	Operational			57.6	12	6.28	52.3%
22	Dadri-Panipat	IOCL	132	9.50	30"	"Operational (141 Km) "	4.37	46.0%	141	9.5	4.97	52.0%
23	Ennore-Thiruvallur-Bengaluru-Puducherry-Nagapattinam-Madurai-Tuticorn	IOCL	1421	84.67 (installed capacity 34)	30"/24"/18"/16"/14"/12"/8"/6"	"Under Construction / Part Operational (under operation 285 Km) "	3.24	13.17%*	1084 (operational)	34	3.70	11.0%
24	Dahej-Koyali	IOCL	106	5.23	16"	Operational (106 Km)	1.05	20.1%	106	5.23	1.81	35.0%
25	Uran-Trombay	ONGC	24	6.00	20"	Operational	2.81	46.8%	24	6	3.07	51.2%
26	Kakinada-Bharuch Natural Gas Pipeline (erstwhile East - West Pipeline)	Pipeline Infrastructure Limited	1480	85.00	48"/30"/28"/24"/16"/10"	Operational	23.68	27.9%	1485	85	33.11	38.9%
27	Shahdol-Phulpur	RGPL	304	3.50	16"	Operational	0.65	18.5%	304	3.5	0.58	16.5%

Source: Pipeline entities

Note:

1. GGL Pipeline - Pipeline capacity as determined by GGL

2. GSPL/GIGL/GITL pipelines

^Natural Gas flowing through (i) Barmer - Pali - Palanpur Pipeline (ii) Pali - Ajmer - Jaipur - Sikar - Hanumangargh - Sirsa - Bhatinda Pipeline (iii) Hanumangargh - Sonipat - Panipat Pipeline

**1200 km of the pipeline commissioned, approx. 45.8 km of the pipeline is completed, approx. 1.2 km of mainline and approx. 17 km of spurline in Punjab is pending due to persistent RoU issues

\$101 km of Jalandhar Amritsar pipeline commissioned, approx. 10 km of spurline in Punjab completed, approx. 20 km is pending due to RoU issues.

Please note that the gas is flowing through 365 km x 18" pipeline Kunchanapally in Andhra Pradesh to RFCL, Ramagundam in Telanagana State which was commissioned on 14.10.2019

3. Pipeline Infrastructure Limited Pipeline:

1) For the period April 2022 - March 2023 conversion factor of 37000 Btu/SCM is used for computing volumes in MMSCMD. While, For the period April 2021 - March 2022 conversion factor of 38263.11 Btu/SCM is used for computing volumes in MMSCMD.

2) The capacity above (85 MMSCMD) is as per the authorization letter issued by PNGRB for Kakinada - Bharuch Natural Gas Pipeline (erstwhile East-West Pipeline). Last re-assessed capacity determined by PIL and submitted to PNGRB is 74.83 MMSCMD.

4. GAIL

Capacity of commissioned section

*Total flow will not match with sum of individual pipeline network quantity as some quantity have travelled more than one pipeline network.

Capacity of commissioned section

** w.e.f. 1st April, 2023 GAIL's Integrated Pipeline has been implemented. Capacity of INGPL is yet to be declared by PNGRB. Therefore, % capacity utilization data is not available.

*** Total flow will not match with sum of individual pipeline network flow as some quantity have travelled more than one pipeline network.

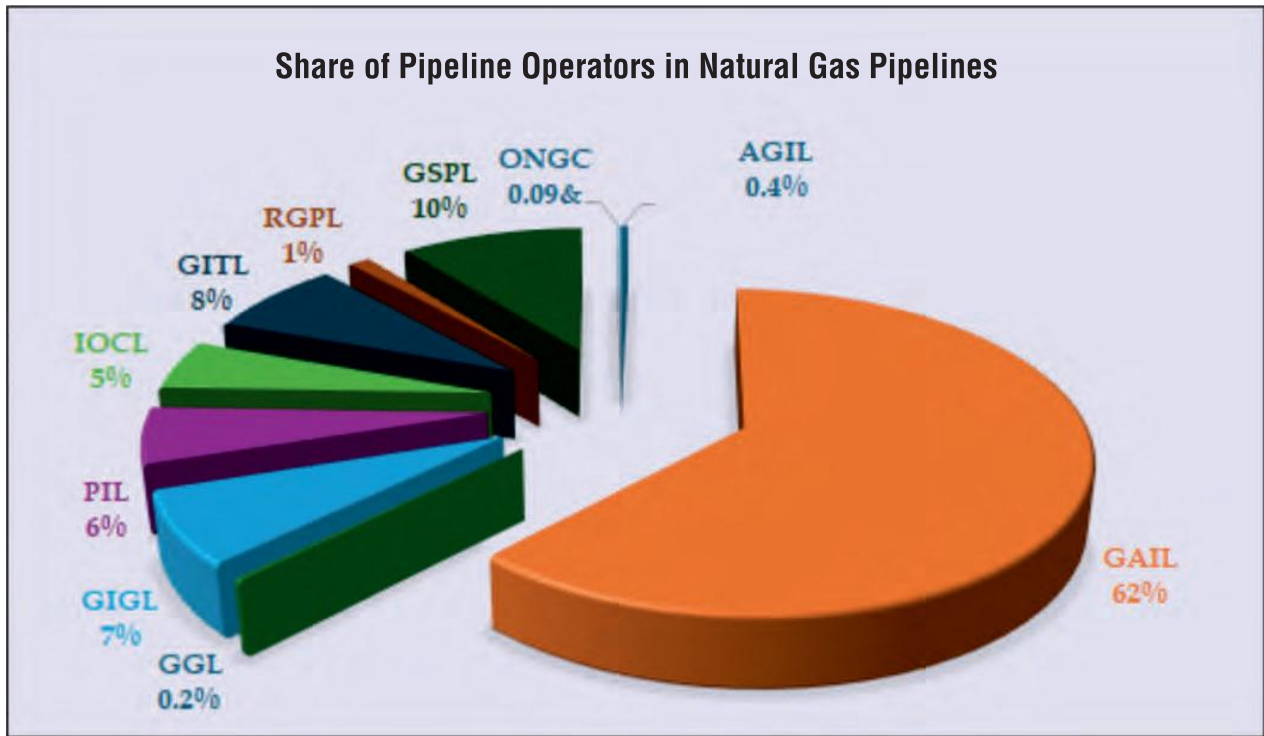
Dedicated pipelines are for connecting multiple end customers having different pipeline capacities. Therefore, Arithmetic Summation of all individual capacities is invalid due to which % capacity utilization cant be calculated

"GAIL Integrated Pipeline (INGPL) consists of following pipelines of GAIL :

1) Integrated Hajira Vijapur Jagdishpur (2) Dahej Uran & Dabhol Panvel (3) Mumbai Regional Network (4)Chainsa-Jhajjar-Hissar (5) Dadri-Bawana-Nangal (6) Dabhol-Bangalore (7) Jagdishpur-Haldia-Bokaro Dhamra-Paradip- Barauni-Guwahati (8) Baroda Sub Network"

5. IOCL

*Capacity Utilisation based on pro-rata commissioning of new sections.



Note: Pipelines includes commissioned and partially commissioned pipelines.



Table 5.2 : Existing Major Crude Oil Pipelines in India

Type of Pipeline- Onshore/Offshore	Name of the pipeline	Owner	Length (KM)	Capacity (MMT)	Througput (MMT)	Percentage Utilisation during
			01.04.2024	01.04.2024	2023-24 (P)	2023-24 (P)
Onshore	CTF (Central Tank Farm) Kalol to CTF Nawagam - New (New line commissioned in Aug'2010)	ONGC	63	3.1	0.9	28.1
Onshore	Nawagam-Koyali (18" line) New		80	5.4	3.8	70.4
Onshore	Nawagam-Koyali (14" line) (Old)		78	3.3	0.0	0.0
Onshore	MHN-NGM (Mehsana-Nawagam) trunk line - New (New crude oil trunk line commissioned. Under operation since Dec'2010)		77	2.3	2.2	95.4
Onshore	CTF (Central Tank Farm), Ankleshwar to Koyali oil pipeline (AKCL- Ankleshwar Koyali Crude Line)		95	2.2	0.5	23.4
Onshore	CTF (Central Tank Farm), Ankleshwar to CPF (Central Processing Facility), Gandhar		44	0.4	0.0	0.0
Onshore	CPF (Central Processing Facility), Gandhar to Saraswani 'T' point		57	1.8	0.4	20.9
Onshore	Akholjuni- Koyali oil pipe line (Commissioned in July 2010). Akholjuni to Laxmipura T' point		66	0.5	0.3	64.7
Onshore	Lakwa-Moran oil line (New)		15	1.5	0.5	34.9
Onshore	Lakwa-Moran oil line (Old)		18	1.5	0.0	0.0
Onshore	Geleki-Jorhat oil line		49	1.5	0.0	0.0
Onshore	Geleki-Jorhat oil line (New)		48	1.5	0.3	20.1
Onshore	Borholla- Jorhat oil line		43	0.6	0.0	0.0
Onshore	Borholla- Jorhat new TPL (New)		43	0.6	0.2	36.0
Onshore	NRM (Narimanam) to CPCL (Chennai Petroleum Corporation Limited)		5	0.7	0.0	0.0
Onshore	KSP-WGGS to TPK Refinery (Kesnapalli-West-Group Gathering Station to Tatipaka)		14	0.1	0.1	63.1
Onshore	GMAA EPT (Gopavaram Early Production Terminal) to S. Yanam Unloading Terminal (3.5 Km long and 4"). New line commissioned on 28.07.10		4	0.1	0.03	28.9
Offshore	Mumbai High - Uran - Trunk (MUT) 30" pipeline		204	15.6	3.2	20.6
Offshore	Heera - Uran - Trunk (HUT) 24" pipeline		81	11.5	5.9	51.3
Offshore	Bombay-Uran Trunk (BUT) 30" pipeline		203	6.4	1.3	20.5
		Sub total ONGC	1284	60.6	19.6	32.3
Onshore	Salaya-Mathura pipeline (SMPL)	IOCL	2646	25.0	27.9	111.4
Offshore	Salaya Mathura Pipeline (Offshore segment) (2)		17	-	-	-
Onshore	Paradip-Haldia-Barauni pipeline (PHBPL) (1)		1873	20.4	17.7	86.8
Offshore	Paradip Haldia Barauni Pipeline (Offshore segment)		92	-	-	-
Onshore	Mundra-Panipat pipeline		1194	8.4	6.2	74.3
		Sub total IOCL	5822	53.8	51.8	96.3
Onshore	Duliajan-Digboi-Bongaigaon-Barauni pipeline	OIL	1193	9.0	6.7	75.3
Onshore	Mangla-Bhogat pipeline	CAIRN	660	8.7	4.6	52.7
Offshore	Bhogat Marine		28	2.0	1.7	83.0
		Sub total CAIRN	688	10.7	6.2	58.3
Onshore	Mundra- Bathinda pipeline	HMPL	1017	11.3	12.7	112.8
Onshore	Vadinar-Bina pipeline	BPCL	937	7.8	7.1	91.5
	Total Crude pipelines		10941	153.1	104.2	68.1

Source : Oil companies (P): Provisional

Notes:

Pipeline utilisation is calculated using formula = (Throughput in MMT * 100) / (Annual capacity in MMTPA)

IOCL

*1) Haldia-Barauni section of Paradip Haldia Barauni Pipeline commissioned on 27th July 2023 (Commissioned section length = 518 km, Dia = 30", Capacity of PHBPL increased from 15.2 to 20.4 MMTPA)

2) SMPL - Change in offshore length due to commissioning of new SPMs at Vadinar (3 km)

5.3 Existing Major POL Pipelines in India

Type of Pipeline	Name of the pipeline	Owner	Length (KM)	Capacity (MMT)	Throughput (MMT)	Percentage utilisation during	
			01.04.2024	01.04.2024	2023-24(P)	2023-24(P)	
Petroleum Products Pipelines							
Onshore	Barauni - Kanpur pipeline	IOCL	1227	3.5	4.2	119.4	
Onshore	Guwahati - Siliguri pipeline		435	1.4	2.0	140.1	
Onshore	Haldia-Barauni pipeline		526	1.3	1.7	132.1	
Onshore	Haldia-Mourigram-Rajbandh pipeline		277	1.4	2.2	159.5	
Onshore	Koyali-Ahmedabad pipeline		79	1.1	0.9	85.5	
Onshore	Koyali-Jaipur-Panipat pipeline		1644	5.0	4.8	96.4	
Onshore	Koyali-Ratlam pipeline		265	2.0	1.4	69.9	
Onshore	Koyali-Dahej pipeline		197	2.6	0.6	24.4	
Onshore	Mathura-Agra-Gawria pipeline		311	4.0	1.7	41.5	
Onshore	Mathura-Bharatpur pipeline		21	1.2	0.2	14.8	
Onshore	Mathura-Delhi pipeline		147	3.7	2.3	62.1	
Onshore	Panipat-Amabala-Jalandhar (Including Kurukshetra-Roorkee-Najibabad branch line)		495	3.5	3.2	92.3	
Onshore	Panipat-Delhi (Including Sonapat-Meerut branch line) pipeline		189	3.0	0.1	3.6	
Onshore	Panipat Bijwasan ATF pipeline		111	1.0	1.06	105.5	
Onshore	Panipat-Bathinda pipeline		219	3.0	1.6	54.1	
Onshore	Panipat-Rewari pipeline		155	2.1	1.5	69.1	
Onshore	Chennai-Trichy-Madurai pipeline		683	3.9	2.9	74.9	
Onshore	Chennai - Meenambakkam ATF pipeline		95	0.2	0.3	155.0	
Onshore	Chennai-Bengaluru pipeline		290	2.5	2.3	94.9	
Onshore	Devangonthi - Devanahalli pipeline		36	0.7	0.6	86.4	
Onshore	Paradip Raipur Ranchi pipeline(PRRPL)		1073	5.0	4.3	86.3	
Onshore	Kolkata ATF Pipeline		27	0.2	0.1	74.5	
Onshore	Lucknow ATF Pipeline		6	0.2	0.10	46.2	
Onshore	Paradip Hyderabad Pipeline (5)		993	4.5	0.49	10.8	
Onshore	Paradip-Somnathpur-Haldia Pipeline (2) (3)		341	4.6	0.14	3.1	
Onshore	Koyali-Ahmednagar-Solapur Pipeline (4) (7)		752	5.0	0.73	14.7	
Onshore	18" HBPL (Haldia - Barauni) Conversion Project		10	0.0	0.00	-	
			Sub total IOCL	10604	66.4	41.36	62.3
Onshore	Mumbai-Manmad-Bijwasan pipeline (MMBPL)		BPCL	1392	6.0	7.5	124.7
Onshore	Kota - Jobner branch pipeline (1)			211	1.7		
Onshore	Bina-Kota pipeline (BKPL)	259		4.4	3.1	70.0	
Onshore	Bina Panki Pipeline	356		3.5	1.8	50.8	
Onshore	ATF P/L Mumbai Refinery (MR)-Santacruz	15		1.0	0.7	70.0	
Onshore	ATF P/L Kochi Refinery (KR)-Kochi Airport	34		0.6	0.4	67.6	
Onshore	Mumbai Refinery- Wadilube Pipeline	12		1.3	0.3	26.9	
Onshore	Cochin-Coimbatore-Karur (CCK) pipeline (2)	293		3.3	4.2	126.2	
		Sub total BPCL	2572	21.8	17.96	82.4	
Onshore	Mumbai-Pune-Solapur pipeline	HPCL	508	4.3	3.6	82.7	
Onshore	Vizag-Vijaywada-Secunderabad pipeline (5)		572	7.7	6.1	79.2	
Onshore	Vijaywada Dharmapuri (VDPL) Pipeline		697				
Onshore	Mundra-Delhi pipeline (1)		1054	6.9	4.9	70.6	
Onshore	Awa-Salawas pipeline		93				
Onshore	Palanpur-Vadodara Pipeline		235				
Onshore	Ramanmandi-Bahadurgarh pipeline (RBPL) (2)		243	7.1	6.0	84.9	
Onshore	Bahadurgarh-Tikrikalan pipeline		14				

Type of Pipeline	Name of the pipeline	Owner	Length (KM)	Capacity (MMT)	Throughput (MMT)	Percentage utilisation during
			01.04.2024	01.04.2024	2023-24(P)	2023-24(P)
Onshore	Rewari- Kanpur Pipeline		443			
Onshore	Barwala Hissar Pipeline (BHPL) (7)		10			
Onshore	Ramanmandi-Bathinda pipeline (RBhPL)		30	2.1	1.3	63.4
Onshore	ATF pipeline from Mumbai Refinery to Mumbai Airport		20	0.5	0.5	94.0
Onshore	Black Oil Pipeline (BOPL)		22	1.5	1.6	107.1
Onshore	Lube Oil Pipeline : Trombay to Wadibundar (3)		17	1.0	0.5	51.5
	Sub total HPCL		3957	31.1	24.5	78.7
Onshore	Mangalore-Hassan-Bengaluru (MHB) pipeline (1)	Petronet MHB	363	5.6	4.1	72.3
Onshore	Numaligarh-Siliguri pipeline	OIL	654	1.7	1.2	70.8
Total Petroleum product pipelines (w/o LPG pipelines)			18150	126.6	89.1	70.3
LPG Pipelines						
Onshore	Panipat-Jalandhar pipeline	IOCL	280	0.7	0.6	85.3
Onshore	Paradip Haldia Barauni Motihari pipeline (1) (6)		1707	3.5	2.0	58.0
	Sub total IOCL		1987	4.2	2.6	62.6
Onshore/ offshore	Mumbai-Uran pipeline	BPCL	28	1	1	86
Onshore	Jamnagar-Loni pipeline	GAIL	1427	3	3	99
Onshore	Vizag-Secunderabad pipeline		609	1	1	88
	Sub total GAIL		2036	4.6	4.4	96.0
Onshore	Mangalore-Hassan-Mysore-Bangalore LPG (6)	HPCL	356	3.1	1.8	58.9
Onshore	Hassan-Cherlapalli LPG Pipeline		649			
Onshore	Uran-Chakan-Shikrapur LPG Pipeline (4)		169	1.0	1.0	101.6
	Sub total HPCL		1174	4.1	2.8	69.3
Total LPG pipelines			5225	13.7	10.6	77.2
Total POL pipelines			23375	140.3	99.6	71.0

Source: Oil Companies (P): Provisional

Notes:

Pipeline utilisation is calculated using formula = (Throughput in MMT * 100) / (Annual capacity in MMTPA)

IOCL

- Hatidah - Muzaffarpur section (10") of PHBMPL (LPG Pipeline) commissioned on 17th May 2023, adding a length of 130 km to existing pipeline
- Somnathpur-Haldia section (18") of PSHPL commissioned on 7th August 2023 with a length of 176 km
- PSHPL Haldia - Haldia refinery section (18" HBPL Conversion Project) of 18" HBPL conversion project commissioned on 8th August 2023 with a length of 10 km
- Manmad-Ahmednagar section (18") of KASPL commissioned on 25th August 2023 with a length of 163 km
- 16" PHPL Vizag twin line commissioned on 19th October 2023 (Section Length:35 km, PHPL Commissioned Length = 993 km)
- Muzaffarpur – Motihari section of PHBMPL with a length of 109 km commissioned on 05.02.2024
- Ahmednagar-Solapur section of KASPL commissioned on 22nd February 2024, having a length of 237 km and dia 18"

BPCL

- Kota-Jobner Pipeline is a branch pipeline of Mumbai Manmad Bijwasan pipeline with annual capacity of 1.7 MMTPA. Throughput of this pipeline is included in MMBPL & BKPL pipelines.
- Petronet CCK was merged with BPCL w.e.f 01.06.2018.

HPCL

- Throughput of Mundra-Delhi Pipeline is including throughputs of branchlines viz. Awa Salawas Pipeline & Palanpur Vadodara Pipeline
- Throughput of Ramanmandi Bahadurgarh Pipeline is including throughput of branchlines viz. Bahadurgarh-TikriKalan Pipeline & Rewari-Kanpur Pipeline.
- Lube Oil Pipeline and ATF Pipeline from Mumbai Refinery to Mazgaon Terminal and Mumbai Airport are Speciality Product Pipelines.
- Throughput of UCSPL includes both HPCL & BPCL volumes.
- Throughput of Vizag-Vijaywada-Secunderabad pipeline includes throughput of branchline Vijaywada Dharmapuri (VDPL) Pipeline
- Throughput of Mangalore-Hassan-Mysore-Bangalore pipeline includes throughput of branchline Hassan-Cherlapalli LPG Pipeline
- Throughput of RBPL includes throughput of branchline BHPL.

Petronet MHB(1) Petronet MHB JV- ONGC & HPCL 26% each, Petronet- 12%, Public- 36%.



Chapter-6

Sales





Chapter - Highlights

Sales

- Overall consumption of POL for the period Apr-Mar'24 in the Country was recorded highest ever volumes of 234.3 MMT with a growth of 5.0% over the previous financial year. Growth in the petroleum products is driven by growth in MS at 6.4%, ATF at 12% and HSD at 4.3%.
- During the last decade (2013-14 to 2023-24), a CAGR of 9% was achieved in MS consumption, CAGR of 6.6% in LPG, Bitumen and Petcoke and CAGR of 4.6% in ATF. Rising Private vehicle ownership, increased economic activities and domestic consumption of cleaner fuel for cooking is driving up the demand for MS, HSD and LPG respectively.
- The sales of Aviation Turbine Fuel (ATF) during Apr-Mar'24 continued its growth journey with a growth of 10.8%.
- The country achieved Ethanol Blending in Petrol of 12.1% during the ESY Dec'22-Oct'23. Blending percentage has been maintained at 12% during current ESY 2023-24 (Nov-23 to Mar-24). As on 31.03.2024, 13,364 RSU RO's out of 81,435 total PSU RO's are dispensing E-20 MS.
- The Retail network in the Country crossed milestone of 90,000 RO with total RO's at 90,084 as on 31.03.2024. Rural RO's also reached to 25,542 as on the same date.
- Alternate fuels are available at 21,613 Nos. of RO's as on 31.03.2024 and EV charging infrastructure is available at 17,078 RO's
- Direct Sales HSD volumes recovered to 10.5 MMT, at 11.7% of the total HSD volumes of 89.7 MMT.
- International aviation contributed to 25% of the total ATF volumes of 8.2 MMT during Apr-Mar'24, against 23.6% in the corresponding period of the previous year with total volumes of 7.4 MMT.
- 313 depots and terminals spread throughout the country ensure uninterrupted supply of fuels to consumers.

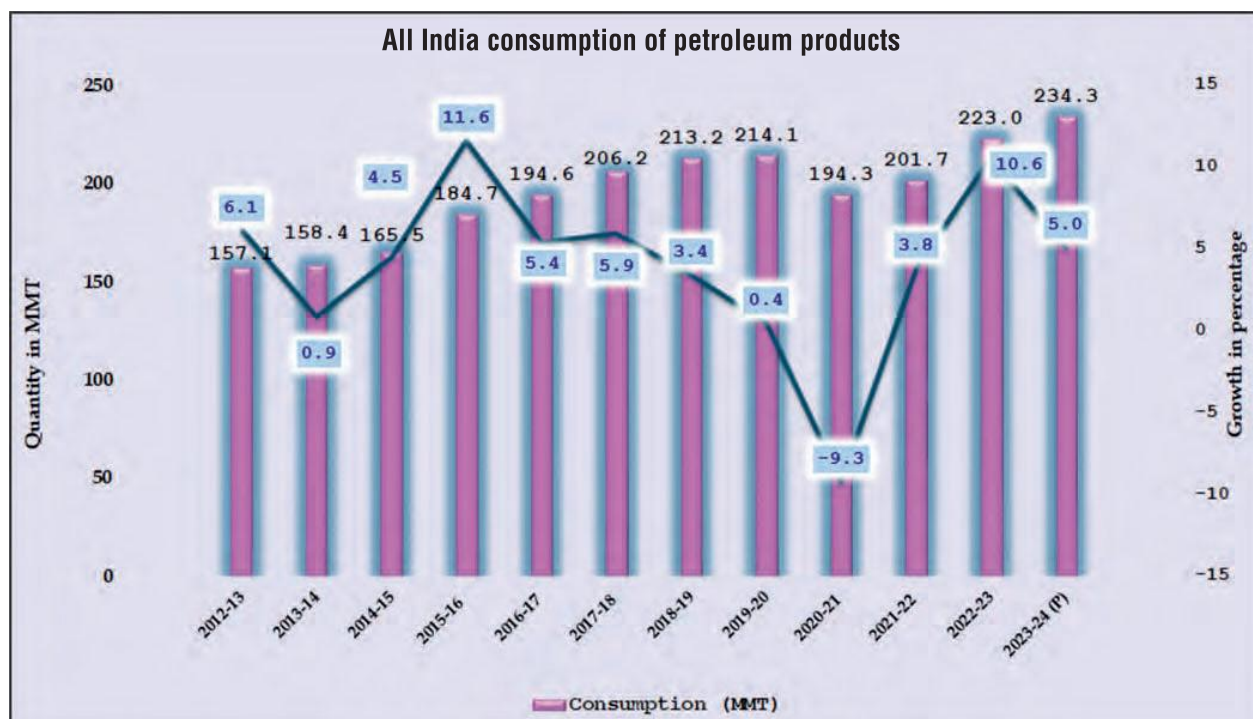
Table 6.1 : Consumption of Petroleum Products

(Million metric tonne)

Products	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
LPG	15.6	16.3	18.0	19.6	21.6	23.3	24.9	26.3	27.6	28.3	28.5	29.7
MS	15.7	17.1	19.1	21.8	23.8	26.2	28.3	30.0	28.0	30.8	35.0	37.2
Naphtha	12.3	11.3	11.1	13.3	13.2	12.9	14.1	14.3	14.1	13.2	12.2	13.8
ATF	5.3	5.5	5.7	6.3	7.0	7.6	8.3	8.0	3.7	5.0	7.4	8.2
SKO	7.5	7.2	7.1	6.8	5.4	3.8	3.5	2.4	1.8	1.5	0.5	0.5
HSD	69.1	68.4	69.4	74.6	76.0	81.1	83.5	82.6	72.7	76.7	85.9	89.6
LDO	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.9	1.0	0.7	0.8
Lubes	3.2	3.3	3.3	3.6	3.5	3.9	3.7	3.8	4.1	4.5	3.7	4.1
FO/LSHS	7.7	6.2	6.0	6.6	7.2	6.7	6.6	6.3	5.6	6.3	7.0	6.5
Bitumen	4.7	5.0	5.1	5.9	5.9	6.1	6.7	6.7	7.5	7.8	8.0	8.8
Petcoke	10.1	11.8	14.6	19.3	24.0	25.7	21.3	21.7	15.6	14.3	18.3	20.3
Others*	5.5	6.0	5.9	6.4	6.6	8.3	11.7	11.4	12.8	12.3	15.8	14.7
All India	157.1	158.4	165.5	184.7	194.6	206.2	213.2	214.1	194.3	201.7	223.0	234.3
Growth (%)	6.1	0.9	4.5	11.6	5.4	5.9	3.4	0.4	-9.3	3.8	10.6	5.0

Note: *Others include sulphur, propylene, propane, reformat, butane, MTO (Mineral Turpentine oil) etc

Source: Oil Companies, Directorate General of Commercial Intelligence and Statistics (DGCIS) & online SEZ data (included from 2017-18 onwards). (Oil company sales+Private imports+SEZ sales to DTA= Consumption);



consumption based decadal-CAGR was highest in 'Others' category, registering 9.5% followed by MS (8.1%), LDO (7.3%), LPG (6.2%), Bitumen (8.5%), Petcoke (5.6%), ATF (4.1%), HSD (2.7%), Lubes (2.1%), Naphtha (2%) and FO & LSHS (0.4%). Negative CAGR in the last decade was observed only in the consumption of SKO (23.7%) due to promotion of LPG and other cleaner cooking fuel.

Table 6.2 : Consumption growth of petroleum products

(Growth in percentage)

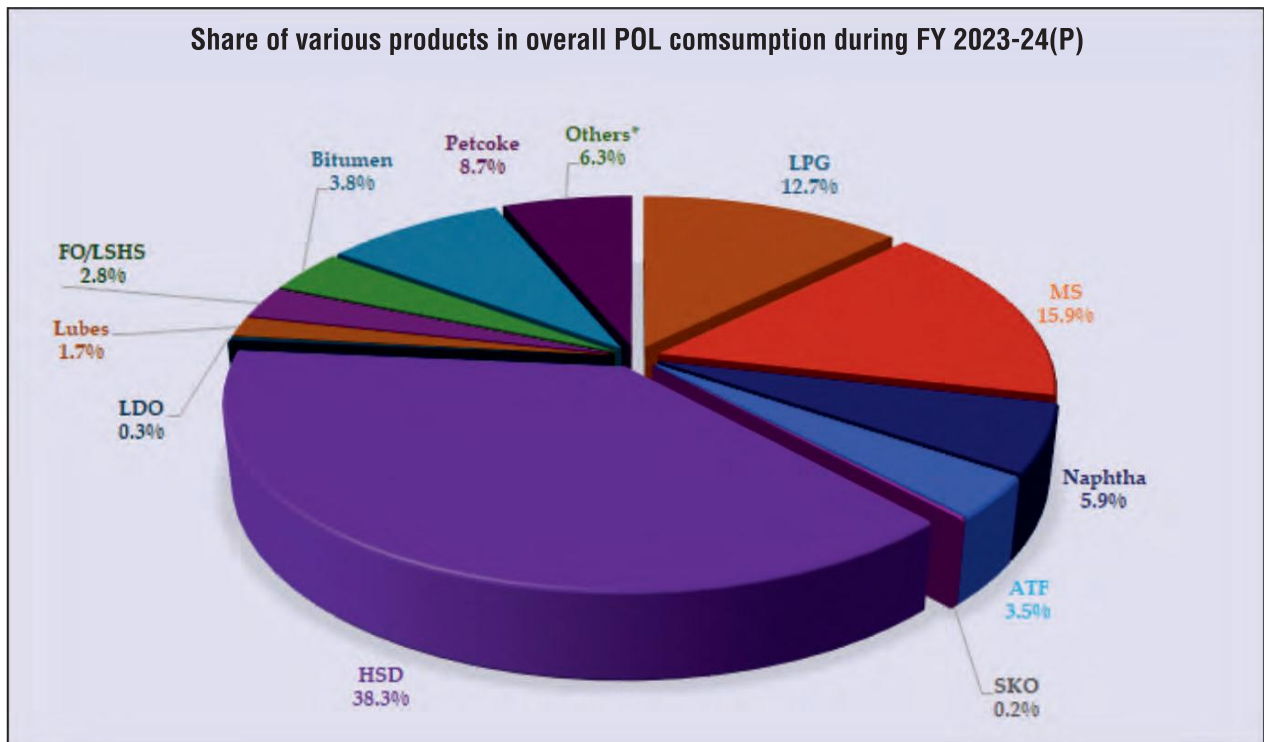
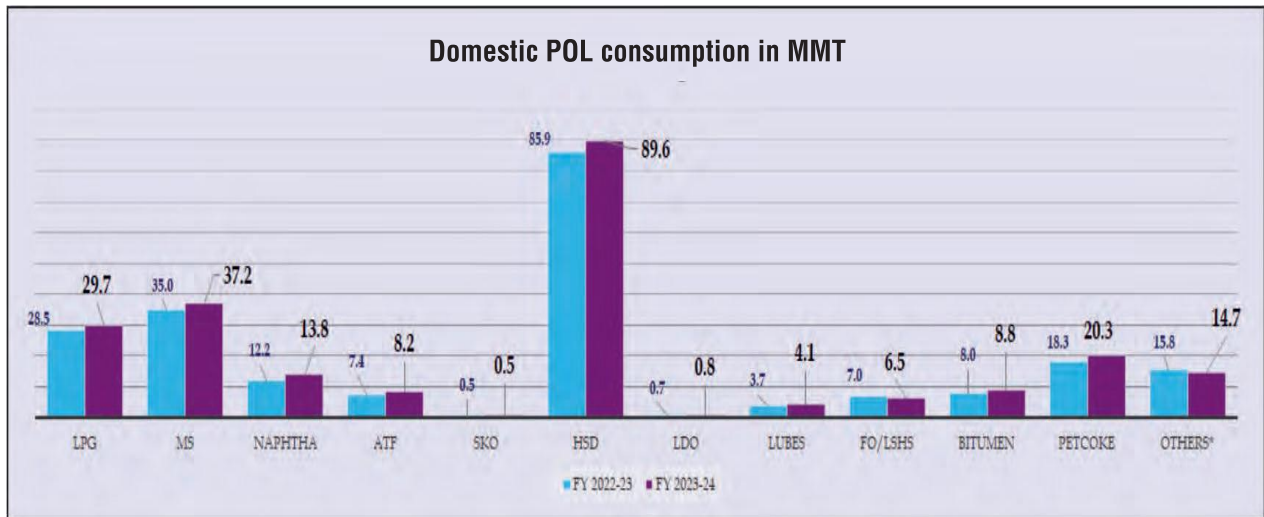
Products	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23 (P)	2023-24 (P)	CAGR calculated FY13-14 vs 23-24
LPG	1.6	4.4	10.5	9.0	10.1	8.0	6.7	5.7	4.7	2.5	0.9	4.1	6.2
MS	5.0	8.8	11.4	14.5	8.8	10.1	8.1	6.0	-6.7	10.3	13.4	6.4	8.1
Naphtha	9.5	-8.0	-2.0	19.8	-0.2	-2.7	9.6	1.0	-1.2	-6.1	-8.2	13.6	2.0
ATF	-4.8	4.4	4.0	9.4	11.7	9.1	8.7	-3.7	-53.8	35.4	47.1	12.0	4.1
SKO	-8.8	-4.5	-1.1	-3.7	-20.9	-28.8	-10.0	-30.7	-25.0	-16.9	-67.2	-2.1	-23.7
HSD	6.7	-1.0	1.5	7.5	1.8	6.6	3.0	-1.1	-12.0	5.4	12.1	4.3	2.7
LDO	-3.9	-3.1	-5.4	11.5	10.3	16.7	14.2	5.0	36.2	19.0	-28.8	7.9	7.3
Lubes	21.4	3.4	0.1	7.9	-2.8	11.9	-5.6	4.5	6.9	10.8	-17.6	9.3	2.1
FO/LSHS	-17.7	-18.6	-4.4	11.3	7.8	-6.0	-2.3	-4.0	-11.3	12.1	11.1	-6.2	0.4
Bitumen	0.8	7.1	1.3	17.1	0.0	2.5	10.2	0.2	12.0	3.9	2.9	9.5	5.8
Petcoke	65.1	16.0	23.8	32.6	24.2	7.1	-16.8	1.7	-28.1	-8.6	28.7	10.8	5.6
Others	11.9	8.1	-1.4	8.2	3.8	26.5	40.6	-3.0	12.6	-3.9	28.6	-7.1	9.5
All India	6.1	0.9	4.5	11.6	5.4	5.9	3.4	0.4	-9.3	3.8	10.6	5.0	4.0

Notes: *Others* include sulphur, propylene, propane, reformat, butane, MTO (Mineral Turpentine oil) etc.

Source: Oil Companies, Directorate General of Commercial Intelligence and Statistics (DGCIS) & online SEZ data (included from 2017-18 onwards). (Oil company sales+Private imports+SEZ sales to DTA=Consumption);



Share of various products in overall POL consumption



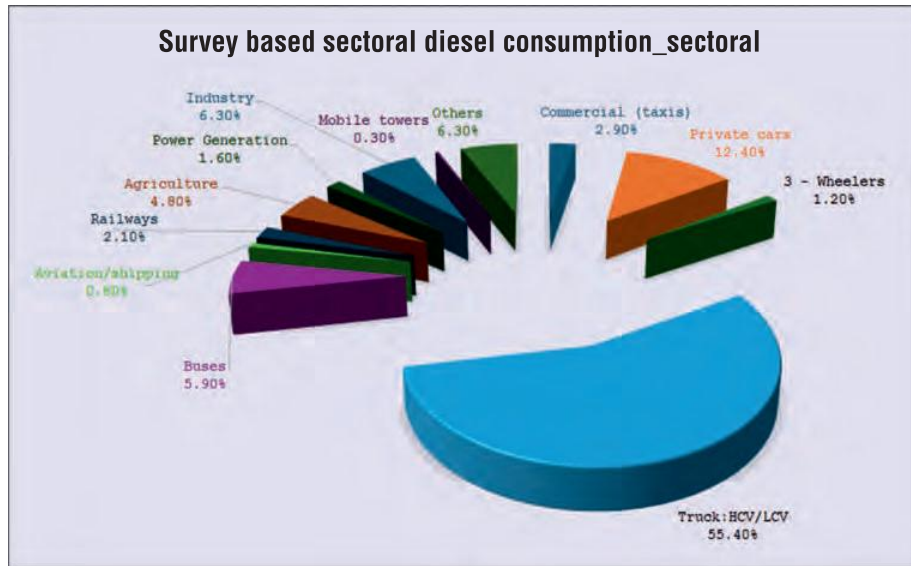
Notes: *Others' include sulphur, propylene, propane, reformat, butane, MTO (Mineral Turpentine oil) etc.



End-use sectoral analysis of POL domestic consumption

End-use-analysis of HSD sales (Oct. 2020-Sep 2021) (PPAC survey based)

Sr. No	End Use Sectors	% of total Sales*
(I)	(II)	(III)
a	Commercial (taxi)	2.90
b	Private cars	12.40
c	3 - Wheelers	1.20
d	Truck:HCV/LCV	55.40
e	Buses	5.90
2	Aviation/shipping	0.80
3	Railways	2.10
4	Agriculture	4.80
5	Power Generation	1.60
6	Industry	6.30
7	Mobile towers	0.30
8	Others	6.30
	Total	100.0

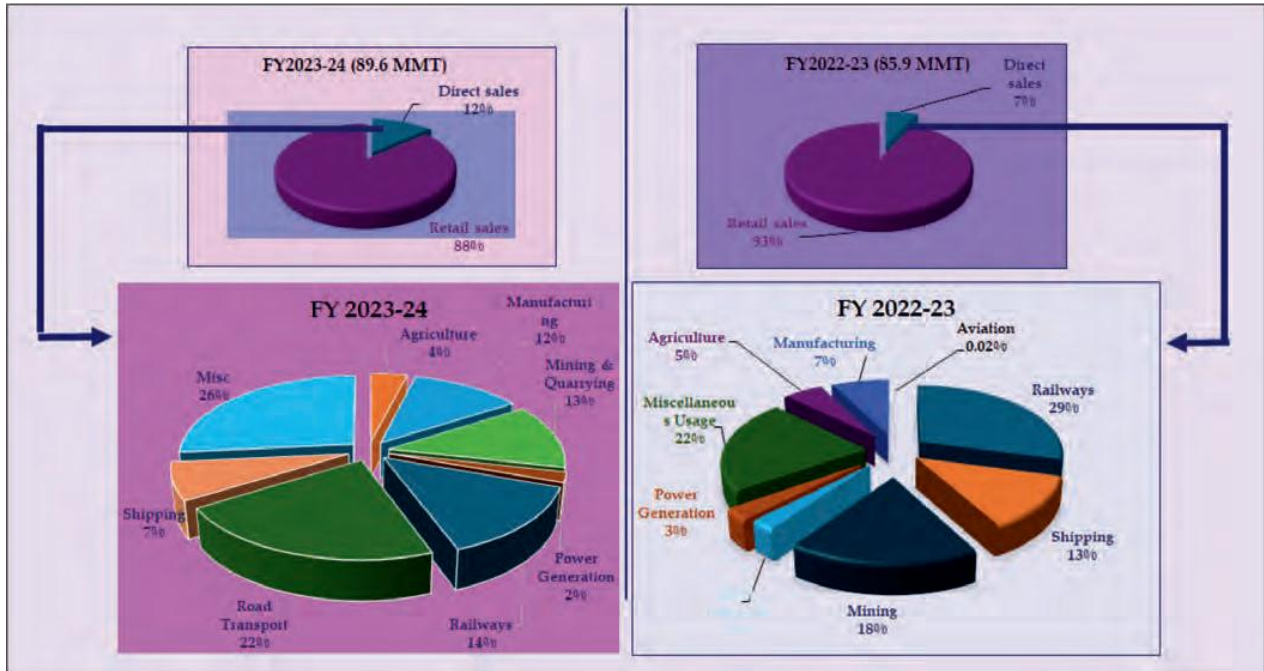


*Figures include consumption through retail and direct imports

End use sector wise break up as per PPAC survey and direct & retail sales as reported by oil companies during October 2020 to September 2021



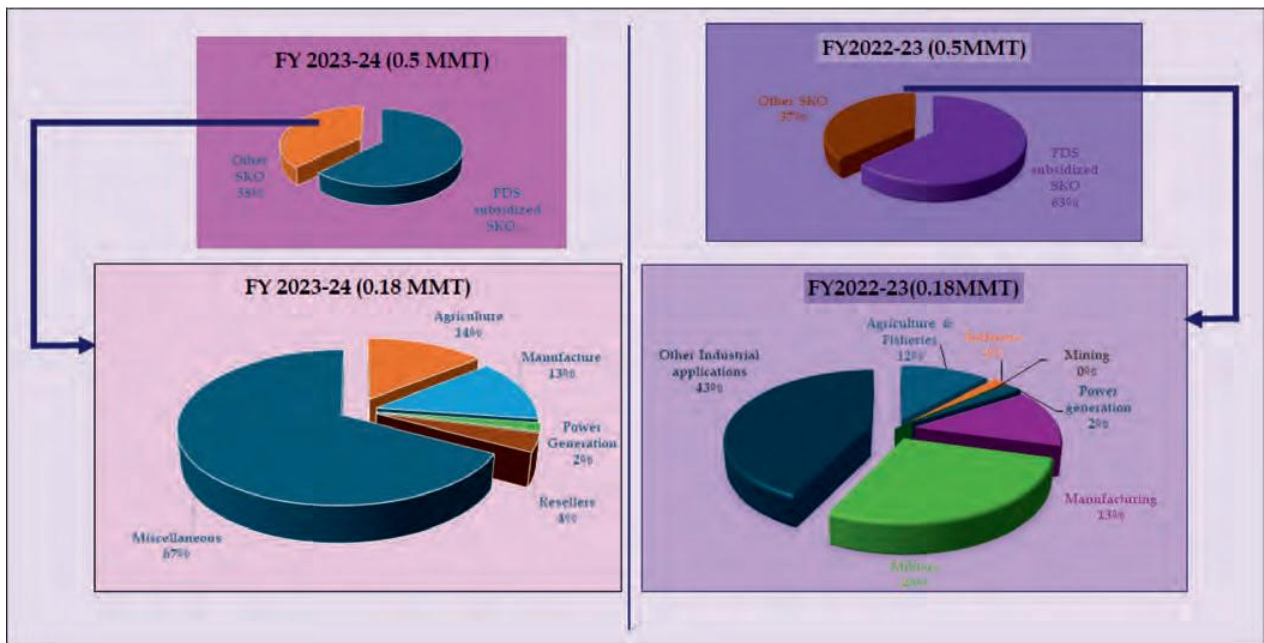
Sector-wise HSD consumption for FY 2023-24 & FY 2022-23



*Miscellaneous Consumption (26%) includes 'Manufacturing' (1.4%), Mining & Quarrying (1.5%), Power Generation (0.23%), Railways (1.63%), Road Transport (2.55%), Shipping (0.85%) and 'other Misc. usage' (3.1%)

**Miscellaneous Usage (25.26%) includes 'Bulk applications' (24.5%), Universities (0.4%), Catering & hotels (0.07%), Posts & telegraphs (0.004%), State electricity boards (0.03%), and 'other domestic distributions' (0.62%)

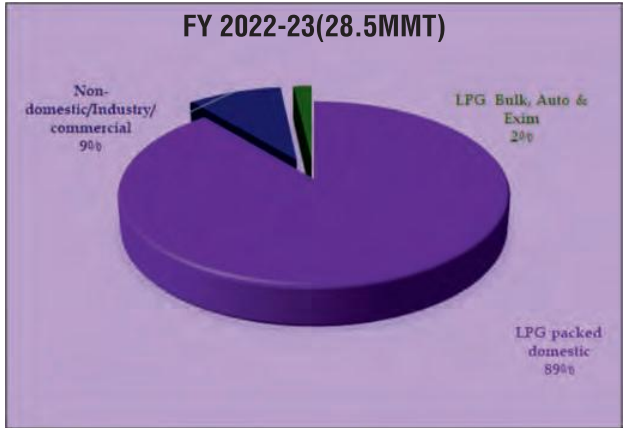
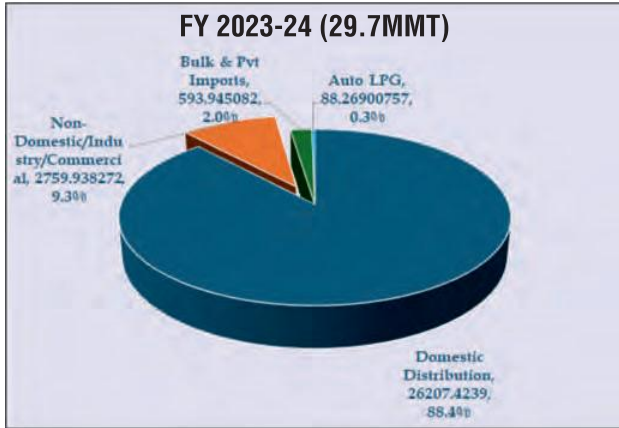
Sector-wise PDS SKO consumption for FY 2023-24 & FY 2022-23



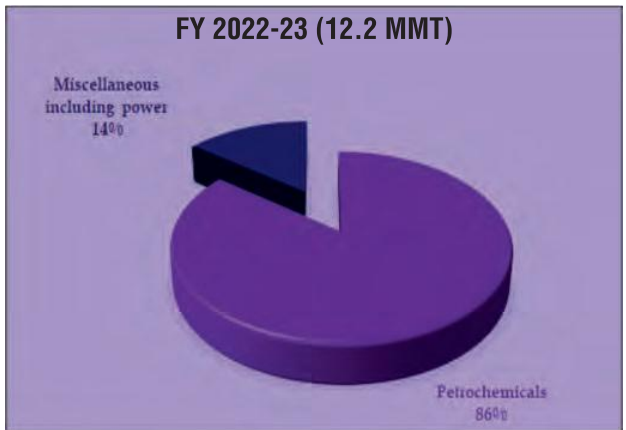
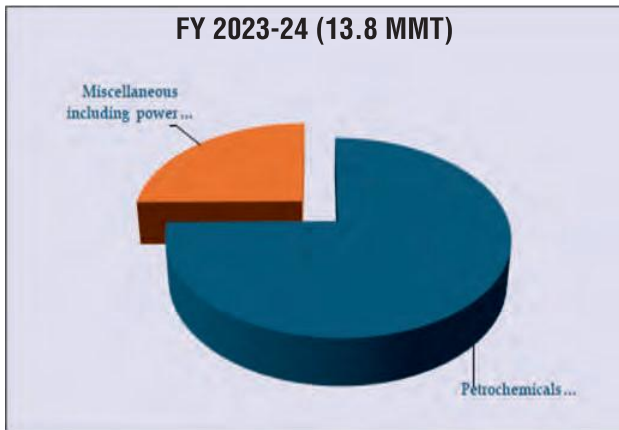
Other SKO includes 'Nonsubsidized PDS SKO', 'non-PDS SKO' and 'Imported SKO' *Miscellaneous usage (67%) includes 'Agriculture' (5%), Manufacture (4.8%) and other miscellaneous application (57%) etc.

Other SKO includes 'Nonsubsidized PDS SKO', 'non-PDS SKO' and 'Imported SKO' Manufacturing (13%) includes 'Chemicals' (3.3%), 'Civil engineering' (5.1%), 'Electrical/electronics' (0.03%), 'Iron, steel & metallurgy' (2.4%), 'Textiles' (0.04%) and 'Bulk applications' (2.8%)

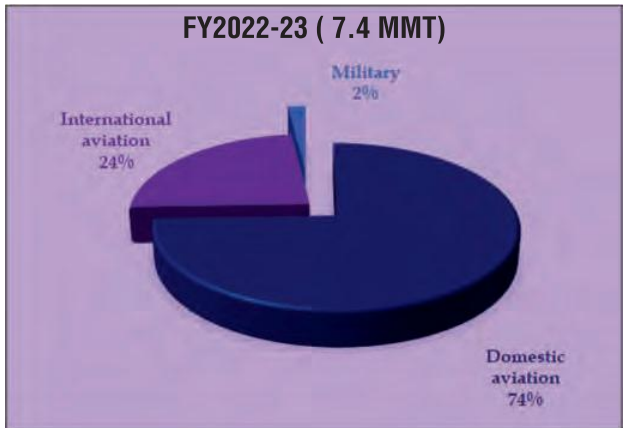
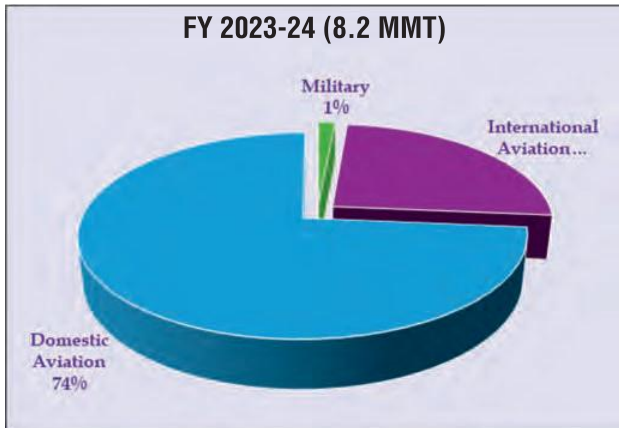
Sector-wise LPG consumption for FY 2023-24 & FY 2022-23



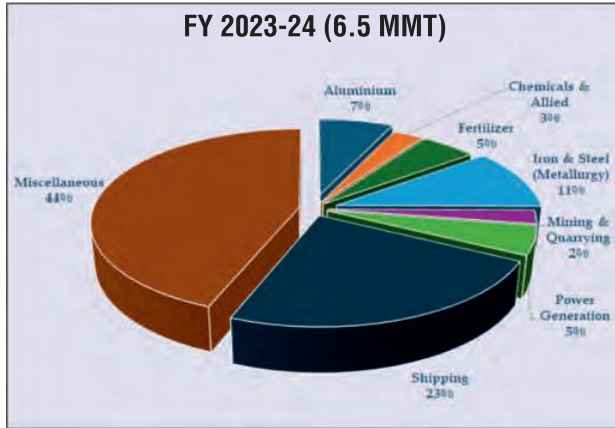
Sector-wise Naphtha consumption for FY 2023-24 & FY 2022-23



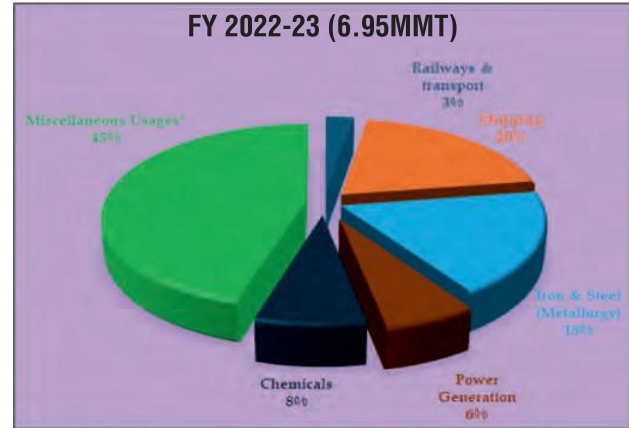
Sector-wise ATF consumption for FY 2023-24 & FY 2022-23



Sector-wise FO+ LSHS consumption for FY 2023-24 & FY 2022-23

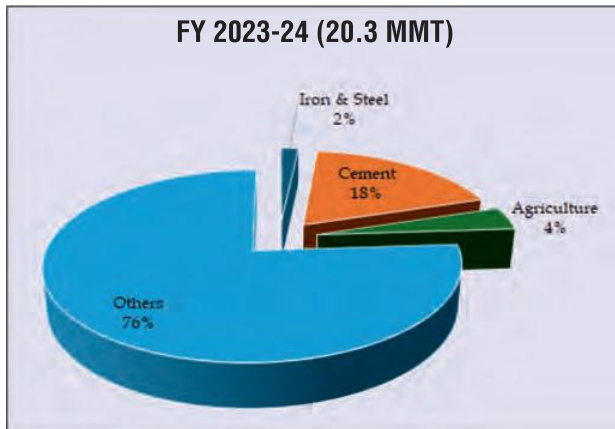


*Miscellaneous usage (44%) includes 'Consumer & Industrial goods' (2%), Road Transport (2.6%) and other miscellaneous application (38%) etc.

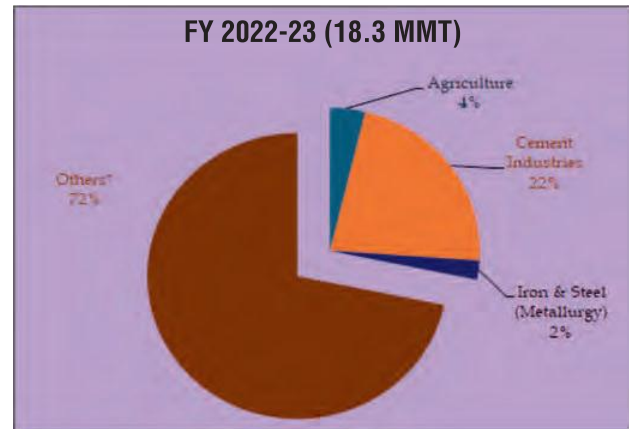


*Miscellaneous usage (45%) includes 'catering & hotels' (0.01%), Bulk Applications (32.65%), Military (0.03%), State Electricity Board (1.13%), Universities (0.006%) etc.

Sector-wise Petcoke consumption for FY 2023-24 & FY 2022-23

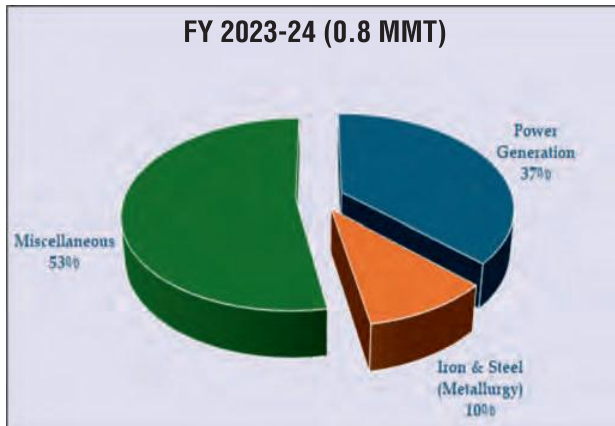


*Others' (76%) includes chemicals (4.2%), Textiles (0.4%), Mining (1 %), & Bulk applications (70 %)

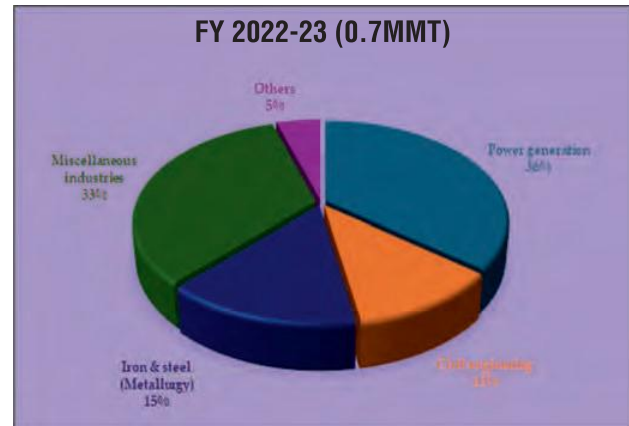


*Others' (72%) includes chemicals (4.4%), Textiles (0.4%), Mining (1.2%), Power Generation (0.1%) & Bulk applications (65.9%)

Sector-wise LDO consumption for FY 2023-24 & FY 2022-23



*Miscellaneous (53%) industries include chemicals (3.2%), electrical & electronics (0.4%), & bulk category (49%)



*Miscellaneous (33%) industries include chemicals (3.3%), electrical & electronics (0.4%), Industrial goods (2.1%) and textiles (0.3%) & bulk category (27.3%)



Table 6.3(A) : State-wise Sales of Petroleum Products consumption: FY 2023-24 (P)

(Figures inTMT unless otherwise specified)

State/UT	LPG		Naphtha		MS		SKO		HSD		ATF	
	Sales	Per capita sales (Kg)	Sales	Per capita sales (Kg)	Sales	Per capita sales (Kg)	Sales	Per capita sales (Kg)	Sales	Per capita sales (Kg)	"Total sales"	Per capita sales (Kg)
Chandigarh	54.5	43.8	0.00	0.00	119.8	96.4	0.15	0.124	244.6	196.8	29.4	23.6
Delhi	792.9	36.5	0.00	0.00	960.3	44.1	0.16	0.007	614.2	28.2	2125.0	97.7
Haryana	1058.7	34.6	3331.19	108.96	1289.9	42.2	0.66	0.022	4274.5	139.8	26.4	0.9
Himachal Pradesh	200.1	26.7	0.00	0.00	320.8	42.7	3.56	0.474	795.2	106.0	4.8	0.6
Jammu and Kashmir	237.0	17.3	0.00	0.00	380.2	27.8	43.95	3.208	916.2	66.9	85.1	6.2
Ladakh	9.5	31.5	0.00	0.00	21.7	71.9	46.85	155.129	97.3	322.1	6.2	20.6
Punjab	1048.3	33.9	38.44	1.24	1182.9	38.3	0.35	0.011	3467.0	112.1	174.5	5.6
Rajasthan	1633.9	20.0	0.00	0.00	1896.4	23.2	2.17	0.027	5495.0	67.1	169.3	2.1
Uttar Pradesh	4085.4	17.2	0.00	0.00	4368.6	18.3	1.16	0.005	10307.6	43.3	288.2	1.2
Uttarakhand	350.0	29.8	0.00	0.00	438.7	37.3	3.80	0.323	815.3	69.4	26.0	2.2
SUB TOTAL NORTH	9470.4	21.6	3369.63	7.70	10979.4	25.1	102.8	0.235	27026.8	61.7	2934.9	6.7
Andaman & Nicobar Islands	13.8	34.2	0.00	0.00	20.2	50.1	0.04	0.098	160.8	398.1	20.5	50.7
Bihar	1607.2	12.5	0.00	0.00	1081.7	8.4	19.34	0.150	2366.9	18.4	34.5	0.3
Jharkhand	414.5	10.4	4.03	0.10	693.0	17.3	8.35	0.209	1888.5	47.3	44.4	1.1
Odisha	683.6	14.7	0.11	0.00	1058.6	22.7	15.06	0.323	3286.8	70.6	90.0	1.9
West Bengal	2029.0	20.4	722.92	7.26	1259.1	12.6	195.05	1.959	3522.3	35.4	356.7	3.6
SUB TOTAL EAST	4748.1	15.1	727.06	2.31	4112.6	13.1	237.8	0.755	11225.3	35.6	546.0	1.7
Arunachal Pradesh	28.4	18.0	0.00	0.00	78.0	49.5	8.84	5.609	244.5	155.2	4.0	2.6
Assam	536.2	14.9	260.12	7.22	668.1	18.5	8.81	0.244	1312.2	36.4	131.4	3.6
Manipur	53.6	16.5	0.00	0.00	75.5	23.2	2.32	0.713	103.6	31.9	11.3	3.5
Meghalaya	32.8	9.7	0.00	0.00	135.5	40.1	2.45	0.724	438.4	129.7	1.3	0.4
Mizoram	33.3	26.6	0.00	0.00	42.7	34.1	0.09	0.075	111.2	89.0	4.4	3.5
Nagaland	30.4	13.5	0.00	0.00	58.5	25.9	0.93	0.414	121.9	54.1	4.3	1.9
Sikkim	21.2	30.6	0.00	0.00	28.9	41.6	7.87	11.319	89.9	129.3	0.4	0.6
Tripura	60.4	14.4	0.00	0.00	68.1	16.3	7.10	1.698	108.9	26.0	16.9	4.0
SUB TOTAL NORTH EAST	796.2	15.1	260.12	4.94	1155.3	21.9	38.4	0.730	2530.7	48.1	174.0	3.3
Chhattisgarh	346.2	11.3	0.00	0.00	798.1	26.1	5.14	0.168	2125.6	69.6	29.4	1.0
Dadra & Nagar Haveli and Daman & Diu	33.2	24.5	0.00	0.00	46.3	34.1	0.00	0.000	182.6	134.7	1.5	1.1
Goa	77.0	48.6	0.00	0.00	216.6	136.9	0.00	0.000	274.0	173.1	197.2	124.5
Gujarat	1441.9	19.9	6694.77	92.51	2546.1	35.2	2.26	0.031	7178.7	99.2	339.2	4.7
Madhya Pradesh	1192.6	13.6	0.00	0.00	1825.1	20.8	0.47	0.005	4163.7	47.5	119.9	1.4
Maharashtra	3425.9	26.9	376.75	2.96	4068.0	31.9	3.93	0.031	9926.7	77.9	1468.4	11.5
SUB TOTAL WEST	6516.8	20.3	7071.52	22.04	9500.3	29.6	11.8	0.037	23851.3	74.3	2155.7	6.7
Andhra Pradesh	1329.7	24.9	27.10	0.51	1571.4	29.5	2.34	0.044	3639.5	68.2	73.7	1.4
Karnataka	2094.6	30.8	0.00	0.00	2899.4	42.6	15.51	0.228	8350.6	122.6	795.9	11.7
Kerala	1135.2	31.6	0.00	0.00	1791.5	49.9	14.28	0.397	2413.3	67.2	544.4	15.2
Lakshadweep	1.0	14.2	0.00	0.00	1.3	18.3	0.02	0.271	19.1	276.6	0.1	1.7
Puducherry	49.0	29.1	0.00	0.00	181.1	107.6	0.00	0.000	572.7	340.3	0.1	0.1
Tamil Nadu	2375.4	30.8	6.39	0.08	3352.0	43.5	55.80	0.724	6287.2	81.6	522.1	6.8
Telangana	1133.1	29.6	0.00	0.00	1675.1	43.8	0.27	0.007	3668.3	95.8	498.8	13.0
SUB TOTAL SOUTH	8118.0	29.6	33.49	0.12	11471.7	41.8	88.2	0.3	24950.7	90.9	2435.0	8.9
All India	29663.6	21.2	13812.06	9.86	37219.4	26.6	479.1	0.3	89626.2	64.0	8247.0	5.9

State wise highest/lowest per capita (only formajor products)

Source: Oil companies; P-Provisional

Lowest Highest

Note:

1-Per capita sales figures are based on provisional sales figures for the period April 2023 - March 2024

2-Population figures have been taken from table no.11 of 'Report of the Technical Group on Population Projections

3- SKO includes both PDS & non PDS sales

Table 6.3(B) : State-wise Sales of Petroleum Products consumption: FY 2023-24 (P)

(Figures inTMT unless otherwise specified)

State/UT	LDO		FO/LSHS		LUBES & GREASES		BITUMEN		PET COKE		OTHERS		TOTAL (All POL Products)*	
	Sales	Per capita sales (Kg)	Sales	Per capita sales (Kg)	Sales	Per capita sales (Kg)	Sales	Per capita sales (Kg)	Sales	Per capita sales (Kg)	"Total sales"	Per capita sales (Kg)	"Total sales"	Per capita sales (Kg)
Chandigarh	0.4	0.3	1.3	1.0	3.1	2.5	0.4	0.3	14.3	11.5	0.1	0.1	467.9	376.5
Delhi	0.0	0.0	0.0	0.0	14.2	0.7	1.4	0.1	0.0	0.0	8.0	0.4	4516.1	207.6
Haryana	21.6	0.7	75.9	2.5	58.9	1.9	198.1	6.5	0.0	0.0	159.9	5.2	10495.8	343.3
Himachal Pradesh	0.0	0.0	18.6	2.5	16.5	2.2	58.1	7.7	617.2	82.2	8.5	1.1	2043.3	272.3
Jammu and Kashmir	0.2	0.0	2.9	0.2	11.0	0.8	38.4	2.8	55.5	4.1	5.7	0.4	1776.3	129.6
Ladakh	0.0	0.0	0.0	0.1	0.3	1.1	24.3	80.4	0.0	0.0	0.2	0.7	206.4	683.5
Punjab	7.3	0.2	136.9	4.4	40.5	1.3	80.5	2.6	614.4	19.9	93.0	3.0	6884.1	222.6
Rajasthan	44.0	0.5	87.4	1.1	61.0	0.7	278.1	3.4	1514.4	18.5	75.0	0.9	11256.7	137.4
Uttar Pradesh	118.9	0.5	137.2	0.6	83.1	0.3	790.0	3.3	34.0	0.1	360.6	1.5	20574.7	86.4
Uttarakhand	0.9	0.1	131.8	11.2	17.3	1.5	37.9	3.2	37.1	3.2	11.4	1.0	1870.2	159.1
SUB TOTAL NORTH	193.3	0.4	592.0	1.4	305.9	0.7	1507.2	3.4	2886.9	6.6	722.2	1.6	60091.5	137.3
Andaman & Nicobar Islands	0.0	0.0	0.0	0.0	0.6	1.6	6.0	15.0	0.0	0.0	0.0	0.0	222.1	549.8
Bihar	30.9	0.2	44.5	0.3	16.4	0.1	314.2	2.4	240.1	1.9	17.1	0.1	5772.7	44.9
Jharkhand	53.5	1.3	142.4	3.6	40.1	1.0	260.1	6.5	33.5	0.8	23.3	0.6	3605.6	90.2
Odisha	56.6	1.2	1070.3	23.0	30.2	0.6	130.9	2.8	697.4	15.0	298.7	6.4	7418.3	159.3
West Bengal	65.1	0.7	326.9	3.3	96.1	1.0	208.8	2.1	322.6	3.2	493.9	5.0	9598.4	96.4
SUB TOTAL EAST	206.1	0.7	1584.0	5.0	183.4	0.6	920.0	2.9	1293.6	4.1	833.0	2.6	26617.1	84.5
Arunachal Pradesh	0.0	0.0	0.0	0.0	0.7	0.4	9.7	6.2	0.0	0.0	0.5	0.3	374.7	237.7
Assam	4.1	0.1	4.7	0.1	53.2	1.5	21.9	0.6	158.6	4.4	37.9	1.1	3197.1	88.7
Manipur	0.1	0.0	0.0	0.0	0.3	0.1	3.1	0.9	0.0	0.0	0.1	0.0	249.9	76.8
Meghalaya	0.0	0.0	0.6	0.2	1.2	0.3	7.6	2.3	0.0	0.0	0.0	0.0	619.8	183.4
Mizoram	0.0	0.0	0.2	0.2	0.3	0.2	5.5	4.4	0.0	0.0	0.0	0.0	197.8	158.2
Nagaland	0.0	0.0	0.0	0.0	0.6	0.3	1.9	0.8	0.0	0.0	0.1	0.0	218.6	97.0
Sikkim	2.6	3.8	0.0	0.0	0.2	0.3	0.3	0.4	0.0	0.0	0.0	0.0	151.4	217.8
Tripura	0.0	0.0	0.0	0.0	1.4	0.3	5.9	1.4	0.0	0.0	0.0	0.0	268.8	64.3
SUB TOTAL NORTH EAST	6.8	0.1	5.6	0.1	57.8	1.1	55.9	1.1	158.6	3.0	38.6	0.7	5278.0	100.3
Chhattisgarh	45.8	1.5	167.9	5.5	26.9	0.9	249.5	8.2	457.2	15.0	33.7	1.1	4285.5	140.4
Dadra & Nagar Haveli and Daman & Diu	4.2	3.1	48.5	35.8	175.7	129.6	1.8	1.3	0.0	0.0	5.6	4.2	499.5	368.4
Goa	1.2	0.8	32.9	20.8	5.9	3.7	19.9	12.6	5.0	3.2	4.1	2.6	833.8	526.7
Gujarat	60.1	0.8	989.8	13.7	134.6	1.9	612.2	8.5	981.3	13.6	3665.3	50.6	24646.2	340.6
Madhya Pradesh	21.1	0.2	72.3	0.8	48.2	0.6	242.6	2.8	955.6	10.9	155.3	1.8	8796.7	100.4
Maharashtra	121.6	1.0	733.5	5.8	486.8	3.8	617.0	4.8	108.2	0.8	693.4	5.4	22030.1	173.0
SUB TOTAL WEST	254.0	0.8	2044.9	6.4	878.0	2.7	1743.0	5.4	2507.2	7.8	4557.5	14.2	61091.9	190.4
Andhra Pradesh	28.0	0.5	467.1	8.8	42.4	0.8	201.0	3.8	599.1	11.2	181.6	3.4	8163.1	153.0
Karnataka	17.8	0.3	309.6	4.5	69.8	1.0	123.0	1.8	576.7	8.5	168.2	2.5	15421.0	226.4
Kerala	9.1	0.3	439.2	12.2	43.5	1.2	184.1	5.1	24.7	0.7	292.5	8.1	6891.7	191.9
Lakshadweep	0.0	0.0	0.0	0.0	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	21.5	312.1
Puducherry	1.2	0.7	39.0	23.2	3.1	1.8	0.0	0.0	1.5	0.9	12.0	7.1	859.8	510.9
Tamil Nadu	29.0	0.4	424.7	5.5	175.3	2.3	728.9	9.5	965.3	12.5	569.1	7.4	15491.2	201.0
Telangana	35.5	0.9	96.3	2.5	47.1	1.2	168.1	4.4	196.5	5.1	48.3	1.3	7567.3	197.7
SUB TOTAL SOUTH	120.7	0.4	1775.8	6.5	381.2	1.4	1405.2	5.1	2363.8	8.6	1271.7	4.6	54415.6	198.2
All India**	781.9	0.6	6520.4	4.7	4087.2	2.9	8807.2	6.3	20318.5	14.5	14696.1	10.5	234258.7	167.2

* Others include sulfur, propylene, propane, reformate, LABS, CBFS, butane, MTO etc.

** Total (all product) sales includes all petroleum oil and lubricants **All India domestic sales figures are including private imports & SEZ data
State wise highest/lowest per capita

Highest Lowest

Source: Oil companies; P-Provisional

Note:

1-Per capita sales figures are based on provisional sales figures for the period April 2023 - March 2024

2-Population figures have been taken from table no.11 of 'Report of the Technical Group on Population Projections

3-SKO includes both PDS & non PDS sales

Table 6.4(A) : All Products Annual Industry Sales-Region & State wise

(Figures in TMT)

STATE/UT	2019-20	2020-21	2021-22	2022-23	2023-24(P)
REGION - NORTH					
Chandigarh	435.9	312.0	369.5	414.8	467.9
Delhi	4621.4	2911.3	3405.0	4322.0	4516.1
Haryana	10222.8	9853.0	10546.3	9453.7	10495.8
Himachal Pradesh	1693.5	1527.8	1924.1	2129.7	2043.3
Jammu & Kashmir	1371.7	1300.8	1500.0	1667.9	1776.3
Ladakh	128.3	140.6	158.9	175.7	206.4
Punjab	7113.9	5964.0	6578.6	6559.8	6884.1
Rajasthan	10920.6	9179.4	10242.3	10770.1	11256.7
Uttar Pradesh	18407.2	18090.2	18791.1	19400.5	20574.7
Uttarakhand	1655.7	1533.6	1619.1	1761.4	1870.2
Region Total	56571.0	50812.8	55134.8	56655.6	60091.5
Region - North East					
Arunachal Pradesh	263.3	275.8	302.1	345.9	374.7
Assam	2823.3	2710.0	2923.1	3102.6	3197.1
Manipur	254.7	236.7	254.0	313.9	249.9
Meghalaya	550.3	409.3	472.6	561.5	619.8
Mizoram	140.9	130.4	146.0	174.9	197.8
Nagaland	171.6	162.5	190.8	203.0	218.6
Sikkim	130.1	108.1	129.7	151.6	151.4
Tripura	231.8	229.8	237.3	249.3	268.8
Region Total	4566.0	4262.7	4655.6	5102.6	5278.0
Region - East					
Andaman & Nicobar	217.1	171.5	189.8	220.4	222.1
Bihar	5396.9	5518.3	5362.9	5571.7	5772.7
Jharkhand	3416.4	3139.3	3245.8	3380.7	3605.6
Odisha	6029.6	5926.7	6154.4	6642.7	7418.3
West Bengal	9308.5	8490.7	8681.0	8896.6	9598.4
Region Total	24368.5	23246.5	23633.9	24712.1	26617.1
Region - West					
Chhattisgarh	3667.0	3420.8	3598.2	4156.2	4285.5
Dadra & Nagar Haveli And Daman & Diu	570.4	541.6	522.1	535.8	499.5
Goa	789.9	555.6	680.1	778.5	833.8
Gujarat	22535.6	21940.1	24220.7	25705.1	24646.2
Madhya Pradesh	7860.0	7283.3	7533.9	8346.0	8796.7
Maharashtra	20796.8	17849.4	19050.5	20950.7	22030.1
Region Total	56219.7	51590.8	55605.6	60472.3	61091.9
Region - South					
Andhra Pradesh	7699.3	7266.3	7552.6	8036.9	8163.1
Karnataka	13067.4	11121.4	12479.3	15009.4	15421.0
Kerala	6533.5	5461.3	5901.7	6879.1	6891.7
Lakshadweep	16.5	17.7	17.6	18.1	21.5
Puducherry	516.7	412.8	531.4	820.2	859.8
Tamil Nadu	14115.6	12195.0	13067.7	14524.9	15491.2
Telangana	6952.5	6222.8	6859.3	7287.8	7567.3
Region Total	48901.4	42697.2	46409.5	52576.4	54415.6
All India Total*	214126.6	194295.3	201696.7	223008.3	234258.7

Source : Oil Companies; P:-provisional

*Domestic sales figures are including private imports & SEZ sales data

6.4(B): MS/Petrol Annual Industry Sales-Region & State wise

(Figures in TMT)

STATE/UT	2019-20	2020-21	2021-22	2022-23(P)	2023-24(P)
REGION - NORTH					
Chandigarh	126.8	91.4	110.0	114.4	119.8
Delhi	876.0	668.8	693.3	899.5	960.3
Haryana	1029.4	1011.6	1113.7	1203.3	1289.9
Himachal Pradesh	238.0	233.1	272.3	306.4	320.8
Jammu & Kashmir	300.4	273.1	316.3	354.7	380.2
Ladakh	3.6	12.5	16.8	20.3	21.7
Punjab	960.2	888.4	1015.8	1133.5	1182.9
Rajasthan	1657.0	1549.4	1621.5	1790.4	1896.4
Uttar Pradesh	3319.9	3210.1	3696.1	4103.4	4368.6
Uttarakhand	326.3	293.0	338.4	410.2	438.7
Region Total	8837.6	8231.3	9194.3	10336.2	10979.4
Region - North East					
Arunachal Pradesh	51.8	50.6	55.4	66.7	78.0
Assam	445.1	431.9	510.0	611.2	668.1
Manipur	68.2	62.1	67.5	88.4	75.5
Meghalaya	99.8	81.3	95.5	124.6	135.5
Mizoram	31.2	26.0	26.0	35.4	42.7
Nagaland	39.2	31.9	40.9	51.2	58.5
Sikkim	21.1	15.8	19.4	26.5	28.9
Tripura	57.7	53.7	57.5	64.3	68.1
Region Total	814.1	753.2	872.3	1068.3	1155.3
Region - East					
Andaman & Nicobar	18.9	13.8	15.7	19.4	20.2
Bihar	852.1	848.9	926.7	1034.3	1081.7
Jharkhand	526.5	512.5	574.1	660.3	693.0
Odisha	834.5	782.4	863.9	992.5	1058.6
West Bengal	996.1	997.5	1076.9	1191.1	1259.1
Region Total	3227.9	3155.2	3457.3	3897.6	4112.6
Region - West					
Chhattisgarh	613.1	604.3	660.9	743.4	798.1
Dadra & Nagar Haveli And Daman & Diu	38.9	30.0	38.6	44.2	46.3
Goa	186.1	145.1	167.0	204.7	216.6
Gujarat	2066.8	1860.2	2134.0	2397.8	2546.1
Madhya Pradesh	1463.7	1461.1	1542.7	1705.3	1825.1
Maharashtra	3462.0	3014.4	3387.6	3815.2	4068.0
Region Total	7830.6	7115.1	7930.9	8910.6	9500.3
Region - South					
Andhra Pradesh	1278.4	1321.9	1419.4	1504.1	1571.4
Karnataka	2270.5	2123.9	2235.0	2648.1	2899.4
Kerala	1558.8	1371.1	1495.8	1747.6	1791.5
Lakshadweep			0.0	0.7	1.3
Puducherry	133.8	108.4	128.5	168.3	181.1
Tamil Nadu	2735.4	2580.6	2758.1	3152.9	3352.0
Telangana	1288.3	1199.5	1357.3	1541.4	1675.1
Region Total	9265.2	8705.4	9394.1	10763.3	11471.7
All India Total	29975.5	27960.3	30848.9	34976.0	37219.3

Source : Oil Companies; P:-provisional

*Domestic sales figures are including private imports & SEZ sales data

6.4(C): HSD Annual Industry Sales-Region & State wise

(Figures in TMT)

STATE/UT	2019-20	2020-21	2021-22	2022-23(P)	2023-24(P)
REGION - NORTH					
Chandigarh	197.7	126.6	171.0	210.6	244.6
Delhi	835.3	499.2	597.5	662.0	614.2
Haryana	4716.8	4434.9	4450.1	4205.9	4274.5
Himachal Pradesh	667.6	609.8	776.6	1002.8	795.2
Jammu & Kashmir	675.5	576.0	698.5	821.7	916.2
Ladakh	5.0	56.1	67.7	80.3	97.3
Punjab	3213.7	2741.7	3113.0	3264.8	3467.0
Rajasthan	5271.9	4336.8	4452.4	5073.8	5495.0
Uttar Pradesh	9484.9	9384.8	9496.3	9858.6	10307.6
Uttarakhand	744.0	657.2	699.7	779.7	815.3
Region Total	25812.4	23423.0	24522.7	25960.0	27026.8
Region - North East					
Arunachal Pradesh	161.5	174.9	192.5	227.0	244.5
Assam	1023.8	904.0	1123.0	1327.5	1312.2
Manipur	118.4	109.0	119.4	149.5	103.6
Meghalaya	355.9	281.1	331.1	397.4	438.4
Mizoram	74.9	68.9	82.7	100.7	111.2
Nagaland	90.4	88.9	101.1	109.9	121.9
Sikkim	78.0	60.4	73.6	90.8	89.9
Tripura	86.8	88.7	94.7	101.3	108.9
Region Total	1989.6	1775.7	2118.1	2504.0	2530.7
Region - East					
Andaman & Nicobar	157.2	132.4	141.9	162.8	160.8
Bihar	2366.7	2136.6	2055.1	2398.4	2366.9
Jharkhand	1968.4	1741.5	1660.6	1754.8	1888.5
Odisha	2661.7	2534.5	2593.6	2929.1	3286.8
West Bengal	3438.7	3007.9	2962.3	3496.9	3522.3
Region Total	10592.8	9553.0	9413.6	10742.0	11225.3
Region - West					
Chhattisgarh	1648.2	1607.7	1656.9	1930.3	2125.6
Dadra & Nagar Haveli And Daman & Diu	234.0	161.7	175.3	212.7	182.6
Goa	305.5	233.4	276.4	294.0	274.0
Gujarat	5607.6	5089.8	5780.1	6927.3	7178.7
Madhya Pradesh	3654.9	3368.9	3375.0	3884.5	4163.7
Maharashtra	9528.9	8031.2	8322.1	9291.0	9926.7
Region Total	20979.2	18492.8	19585.7	22539.9	23851.3
Region - South					
Andhra Pradesh	3833.6	3405.4	3432.2	3460.4	3639.5
Karnataka	6601.8	5574.5	6203.6	8042.0	8350.6
Kerala	2557.3	1922.7	2101.1	2485.6	2413.3
Lakshadweep	15.3	16.0	16.1	16.3	19.1
Puducherry	290.3	210.9	300.2	553.0	572.7
Tamil Nadu	6191.3	5006.9	5371.1	5999.3	6287.2
Telangana	3621.8	3253.3	3555.8	3528.8	3668.3
Region Total	23111.4	19389.7	20980.1	24085.4	24950.7
All India Total	82485.4	72634.2	76620.2	85831.2	89626.2

Source : Oil Companies; P:-provisional

*Domestic sales figures are including private imports & SEZ sales data

Table 6.5 : PDS SKO allocation v/s sales

(Figures in thousand kilo litres)

State/UT	2019-20		2020-21		2021-22		2022-23		2023-24 (P)	
	Allocn	Sales	Allocn	Sales	Allocn	Sales	Allocn	Sales	Allocn	Sales
Chandigarh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
Delhi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
Haryana	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
Himachal Pradesh	11.4	10.8	9.8	6.8	6.9	2.3	4.0	0.1	2.0	0.01
Jammu & Kashmir	45.0	40.9	45.0	36.5	38.3	29.2	30.6	0.8	15.3	0.01
Ladakh	3.5	1.0	3.5	3.5	3.5	3.3	2.8	0.6	1.4	0.00
Punjab	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
Rajasthan	40.0	16.2	14.2	0.9	0.0	0.0	0.0	0.0	0.0	0.00
Uttar Pradesh	517.9	449.5	181.7	26.5	0.0	0.0	0.0	0.0	0.0	0.00
Uttarakhand	8.0	0.5	2.2	0.4	0.7	0.0	0.1	0.0	0.0	0.00
SUB TOTAL NORTH	625.8	518.8	256.4	74.6	49.3	34.9	37.6	1.5	18.7	0.016
Andaman & Nicobar Islands	1.9	1.5	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0
Bihar	263.0	243.9	212.7	212.4	170.2	169.8	127.6	48.4	63.8	24.7
Jharkhand	135.2	107.2	90.0	83.2	72.0	68.9	54.0	18.9	27.0	10.6
Odisha	210.6	208.3	194.3	190.3	155.4	150.3	116.5	28.7	51.9	19.3
West Bengal	704.0	692.7	704.0	696.5	704.0	689.7	462.7	171.5	615.3	248.3
SUB TOTAL EAST	1314.8	1253.5	1201.1	1182.4	1101.6	1078.6	760.9	267.5	758.0	302.9
Arunachal Pradesh	6.4	5.2	4.8	3.7	3.3	2.9	3.0	0.2	2.1	0.0
Assam	181.9	176.9	155.6	153.1	124.5	117.3	99.6	12.7	49.8	10.3
Manipur	13.3	12.7	11.1	11.3	10.0	10.0	9.0	2.6	4.5	2.7
Meghalaya	19.3	18.9	18.9	17.9	17.0	16.0	15.3	2.5	10.7	3.0
Mizoram	3.6	3.6	3.2	3.2	2.9	2.7	2.6	0.1	1.3	0.1
Nagaland	9.3	8.9	8.6	8.4	7.7	7.7	7.0	1.1	4.8	1.0
Sikkim	2.6	2.5	2.3	2.1	22.7	22.5	1.8	0.2	0.9	0.2
Tripura	26.4	26.2	25.2	25.1	2.0	2.0	20.4	8.4	14.3	9.1
SUB TOTAL NORTH EAST	262.7	254.9	229.5	224.8	190.0	181.0	158.6	27.9	88.3	26.5
Chhattisgarh	82.4	69.1	58.3	56.1	46.6	43.9	34.9	9.7	16.6	6.3
Dadra & Nagar Haveli and Daman & Diu	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Goa#	0.8	0.6	0.4	0.4	0.3	0.3	0.2	0.0	0.0	0.0
Gujarat\$	138.8	120.8	84.0	83.1	55.8	53.7	25.1	6.0	0.0	0.0
Madhya Pradesh	260.7	238.5	213.4	187.1	160.0	116.8	120.0	3.4	32.9	0.4
Maharashtra	106.5	52.9	46.5	21.6	27.9	15.6	16.8	3.9	7.5	1.8
SUB TOTAL WEST	589.3	482.1	402.6	348.2	290.7	230.2	197.0	23.0	56.9	8.6
Andhra Pradesh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Karnataka	84.3	66.4	42.5	38.7	5.0	0.4	17.9	6.3	8.8	5.2
Kerala	41.7	41.7	37.1	37.1	29.8	17.8	15.6	15.6	7.8	7.7
Lakshadweep	0.8	0.6	0.8	0.9	25.9	25.9	0.4	0.0	0.3	0.0
Puducherry	0.0	0.0	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0
Tamil Nadu	145.3	145.3	129.2	129.2	0.0	0.0	54.2	54.2	32.5	32.5
Telangana	56.6	29.8	16.0	2.9	90.4	90.4	1.5	0.0	0.4	0.0
SUB TOTAL SOUTH	328.7	283.8	225.5	208.8	151.7	135.1	89.6	76.1	49.8	45.5
All India	3121.3	2793.2	2315.0	2038.8	1783.3	1659.9	1243.6	396.1	971.8	383.5

Allocn= Allocation

Source: MoP&NG

12 States & UTs including Andhra Pradesh, Delhi, Gujarat, Uttar Pradesh, Rajasthan, Haryana, Punjab, Goa, Andaman & Nicobar Islands, Dadra & Nagar Haveli and Daman & Diu, Puducherry and Chandigarh have become kerosene free. Further during the financial year 2023-24 State/UT of Uttarakhand, Ladakh, Telangana & Lakshadweep uplifted nil kerosene and have nil allocation further. Himachal Pradesh also came to be kerosene free State Nov'23 and after with nil allocation in the next year.

*On an all India basis, the drop in allocation in the last five years (till 2023-24) has been 86% due to voluntary surrender of PDS SKO allocation by some of the states in addition to nil PDS SKO allocation to the above states. The allocation drop has been steepest in the Northern region (97%) followed by Western region (90%), Southern region (85%) North Eastern region (66%), North Eastern region 53.2% & Eastern region (42%).

Overall India based PDS SKO upliftment with respect to allocation during FY 2023-24 was 39%. Highest upliftment was observed in South zone 91% followed by East zone 40%, North East zone 30%, West zone 15% and North zone 9%.

Overall lapse quota of PDS SKO on subsidized rate for the FY 2023-24 was 61%

Table 6.6 : Oil industry Retail Outlets, SKO / LDO agencies

State/UT	Number of Retail Outlets (as on)					No of SKO /LDO agencies (as on)				
	1.4.2020	1.4.2021	1.4.2022	1.4.2023	1.4.2024	1.4.2020	1.4.2021	1.4.2022	1.4.2023	1.4.2024
Chandigarh	42	47	47	48	50	12	12	12	11	11
Delhi	398	400	400	402	403	116	111	111	112	112
Haryana	3060	3412	3660	3769	3895	141	139	139	150	150
Himachal Pradesh	494	563	638	701	725	26	26	26	25	25
Jammu and Kashmir	530	552	581	643	673	45	45	45	50	50
Ladakh	3	12	27	32	35	2	2	2	2	2
Punjab	3551	3772	3920	4000	4062	237	237	237	232	232
Rajasthan	4967	5615	6028	6348	6611	250	248	248	285	285
Uttar Pradesh	8210	9315	10162	10709	11309	691	675	674	772	758
Uttarakhand	629	686	763	798	844	73	69	69	73	73
SUB TOTAL NORTH	21884	24374	26226	27450	28607	1593	1564	1563	1712	1698
Andaman & Nicobar Islands	16	16	19	19	19	2	2	2	2	2
Bihar	2968	3158	3341	3523	3610	371	362	362	349	349
Jharkhand	1358	1535	1634	1681	1723	87	87	87	110	109
Odisha	1894	2070	2246	2340	2420	177	176	176	172	172
West Bengal	2523	2750	2894	3006	3066	457	455	455	470	470
SUB TOTAL EAST	8759	9529	10134	10569	10838	1094	1082	1082	1103	1102
Arunachal Pradesh	116	152	178	195	201	33	33	33	30	30
Assam	979	1104	1312	1417	1459	359	359	359	227	227
Manipur	136	160	178	195	206	36	36	36	40	40
Meghalaya	225	238	270	285	294	35	35	35	31	31
Mizoram	45	55	72	96	105	19	19	19	27	27
Nagaland	94	120	150	167	190	19	19	19	19	19
Sikkim	55	57	63	65	69	12	12	12	7	7
Tripura	79	94	108	114	131	40	40	40	48	48
SUB TOTAL NORTH EAST	1729	1980	2331	2534	2655	553	553	553	429	429
Chhattisgarh	1462	1808	1969	2071	2137	108	108	108	105	105
Dadra & Nagar Haveli and Daman & Diu	61	61	64	66	66	7	7	7	7	7
Goa	118	122	127	135	138	22	22	22	19	19
Gujarat	4573	5149	5502	5661	5825	473	470	470	466	466
Madhya Pradesh	4230	4981	5566	5909	6112	284	284	284	279	279
Maharashtra	6457	7048	7667	8045	8358	766	752	752	786	786
SUB TOTAL WEST	16901	19169	20895	21887	22636	1660	1643	1643	1662	1662
Andhra Pradesh	3721	4047	4230	4345	4461	394	384	384	328	328
Karnataka	4811	5500	5929	6199	6496	315	311	309	376	376
Kerala	2238	2396	2559	2694	2820	237	234	234	200	196
Lakshadweep	0	0	1	4	4	0	0	0	1	1
Puducherry	164	174	179	186	197	8	8	8	6	6
Tamil Nadu	5804	6355	6745	7018	7251	465	458	458	392	392
Telangana	3078	3571	3798	3969	4119	202	202	202	205	205
SUB TOTAL SOUTH	19816	22043	23441	24415	25348	1621	1597	1595	1508	1504
All India	69089	77095	83027	86855	90084	6521	6439	6436	6414	6395

“Source: Oil companies (Includes dealers of private oil companies); P-Provisional

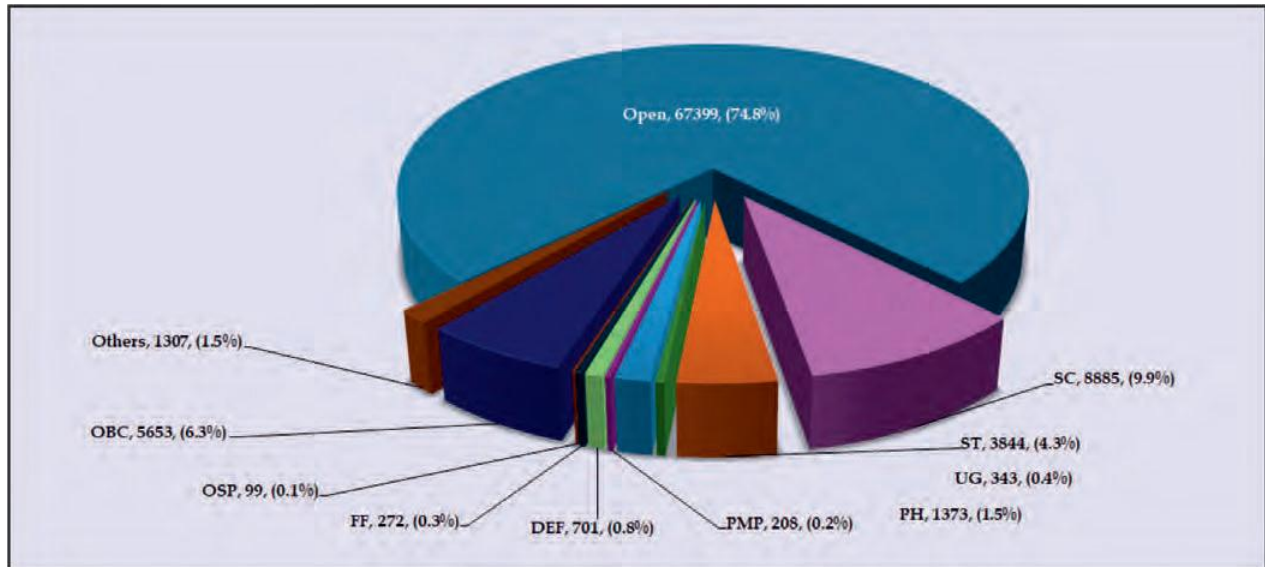
“ On all India basis the percentage growth in the number of retail outlets from 01.04.2020 to 01.04.2024 has been 30.4%. The region wise growth is highest for the North Eastern region (53.6%), followed by Western region (33.9%), Northern region(30.7%) Southern region (27.9%) and whereas Eastern region growth rate was 23.7% . As many states have become kerosene free in the last five years and due to voluntary surrender of PDS kerosene quota by some others there has been a decline in the number of kerosene dealers in the country.

All India number of Retail Outlets in PSU and private category



On 1.04.2024 the number of public sector oil company owned retail outlets was 81436 out of a total of 90084 outlets on all India basis, whereas the number of retail outlets owned by private oil companies was 8648. Participation by private sector in retail outlet business started in FY 2004 with 27 retail outlets. As on 31.03.2024 it accounted for 10.% of the total market representation.

Category wise PSU Retail Outlets (Total 81436) as on 01.04.2024



*Note:

(1) SC: Scheduled Caste; ST: Scheduled Tribe; UG: Unemployed Graduate; UEG: Unemployed Engineering Graduate.; PH: Physically Handicapped; DEF: Defence Category; FF: Freedom Fighter; OSP: Outstanding Sports Persons; OBC: Other Backward Classes; PMP: Para Military/Police/Govt. Personnel; Others: Includes Social Worker Category, Dealerships given on compassionate grounds/ under discretionary quota, 2/3 wheeler outlets and Company Owned and Operated outlets, Operation Vijay.

(2) Open category also includes private oil company retail outlets.

(3) OP: Open Category

Table 6.7: Industry Marketing Infrastructure as on 01.04.2024 (P)

Particulars	IOCL	BPCL	HPCL	RIL/RBML/ RSIL *	NEL	Shell	MRPL & Others	Total
POL terminal/depots (Nos.)\$	126	80	81	17	3		6	313
Aviation fuel stations (Nos.)@	129	62	55	31			10	287
Retail Outlets (total) (Nos.)^	37,473	21,840	22,022	1,706	6,599	343	101	90,084
Out of which, Rural ROs (Nos.)	12,197	5,527	5,453	130	2,112	88	35	25,542
SKO/LDO agencies (Nos.)	3,830	927	1,638					6,395
LPG distributors (total) (Nos.) (PSUs only)	12,880	6,252	6,349					25,481
LPG bottling plants (Nos.) (PSUs only)#	98	53	56				3	210
LPG bottling capacity (TMTPA) (PSUs only)&	10,950	5,100	6,590				203	22,843
LPG active domestic consumers (Nos. crore) (PSUs only)	15.2	8.4	8.9					32.5

“\$(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.
Source: Oil companies; P-Provisional



Table 6.8 : Break-up of consumption data (PSU and Private)

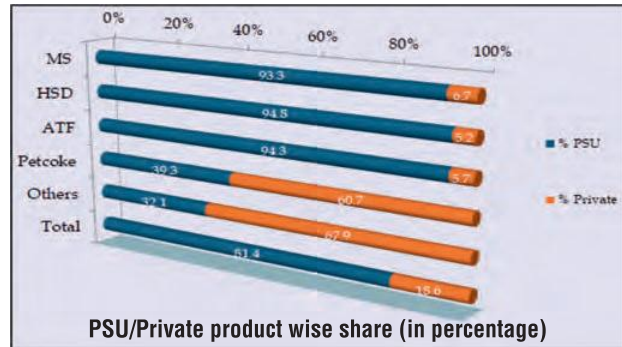
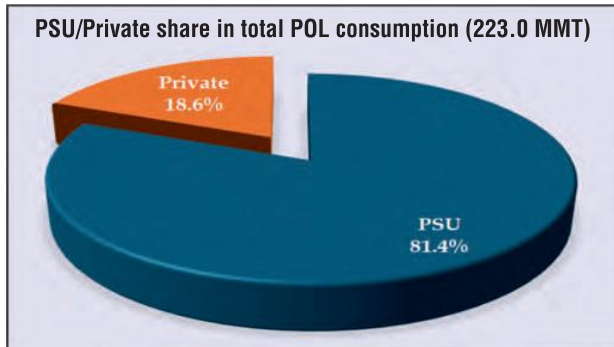
(TMT)

Product	2020-21			2021-22			2022-23 (P)			2023-24 (P)		
	PSU/JV	Private	Total	PSU	Private	Total	PSU	Private	Total	PSU	Private	Total
LPG	27494	64	27558	28253	0	28253	28504	0	28504	29650	14	29664
MS	25168	2801	27969	27905	2944	30849	32631	2345	34976	34152	3067	37219
Naphtha	6050	8051	14100	6426	6820	13246	5428	6699	12127	6621	7191	13812
ATF	3525	172	3698	4707	301	5008	6960	418	7378	7567	680	8247
SKO	1795	3	1798	1493	0	1493	490		490	479	0	479
HSD	64504	8208	72713	68411	8248	76659	81435	4466	85900	80700	8926	89626
LDO	713	142	855	765	252	1017	625	100	726	650	132	782
Lubes	1475	2622	4097	1563	2977	4540	1690	2047	3737	1806	2281	4087
FO/LSHS	4925	662	5586	5542	720	6262	6174	783	6958	5782	739	6520
Bitumen	5356	2168	7524	5093	2723	7816	5211	2830	8041	5576	3231	8807
PetCoke	5034	10571	15605	6110	8145	14255	7206	11137	18343	7015	13304	20319
Others	4149	8643	12791	5073	7224	12297	5078	10764	15842	4939	9757	14696
Total	150189	44107	194295	161343	40354	201697	181432	41590	223022	184937	49321	234259

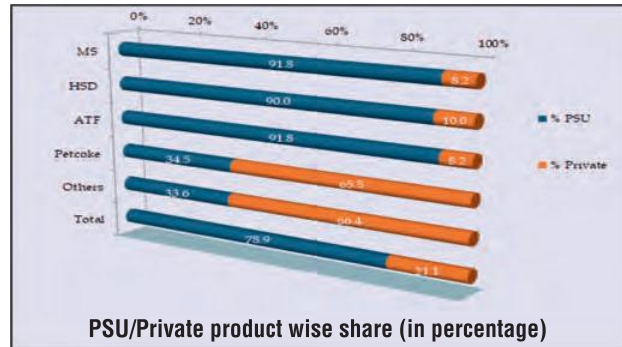
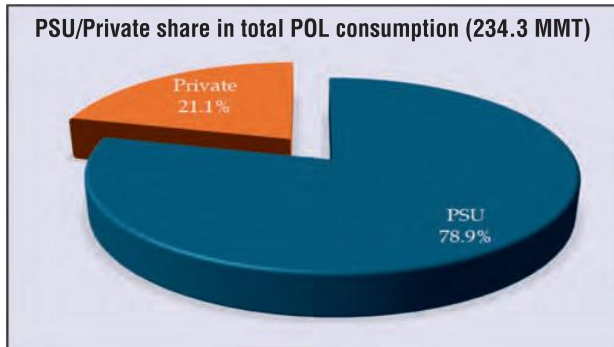
Source: Oil companies, Directorate General of Commercial Intelligence and Statistics (DGCIS) & SEZ data (included from FY 2017-18 onwards).
(Oil company sales+Private imports+SEZ sales to DTA=Consumption)

Note: Private consumption includes direct imports as well as marketing by private oil companies.

FY 2022-23



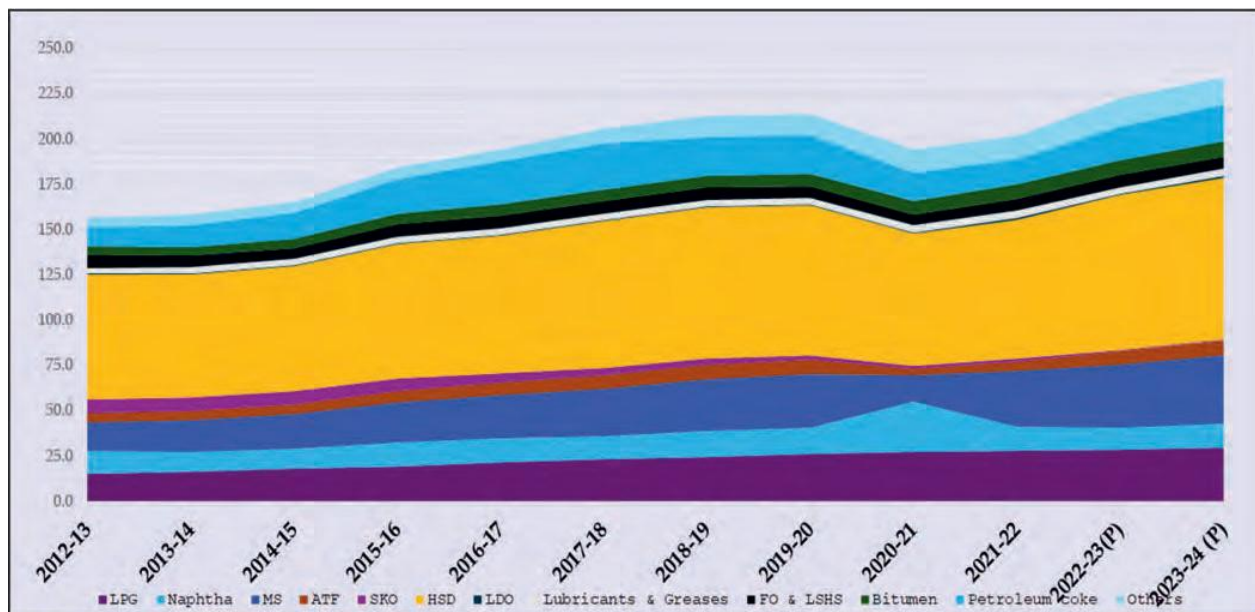
FY 2023-24 (P)



Note: In the above bar charts; others include all other products except MS, HSD, ATF & Petcoke.
 • The share of the public sector in total consumption decreased during FY2023-24 by 2.5% as compared to the same period last year.
 • The share of the public sector during FY 2023-24 has been increase marginally in Others (1.5%) as compared to FY 2022-23.
 • In the private sector the growth has been observed for MS(1.5%), HSD(4.8%), ATF (2.5%) and Petcoke (4.8%)

POL consumption by product

(MMT)



Zone Distribution of total domestic POL sales in India

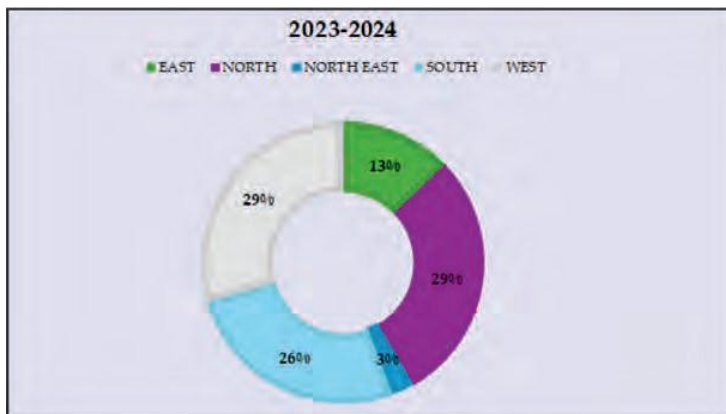
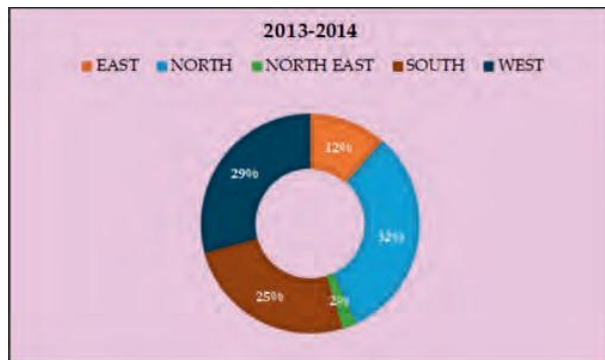


Table 6.9: Oil industry Alternate fuel infrastructure at retail outlets as on 01.04.2024

State/UT	CNG_CBG_LNG	EV CHARGING	AUTO LPG	RETAIL OUTLETS WITH AT LEAST 1 ALTERNATE FUEL
Chandigarh	12	12	5	22
Delhi	267	193	1	311
Haryana	352	709	2	993
Himachal Pradesh	26	118	0	137
Jammu and Kashmir	2	150	3	156
Ladakh	0	2	0	3
Punjab	248	677	9	863
Rajasthan	333	1358	23	1583
Uttar Pradesh	964	2189	33	2948
Uttarakhand	44	176	5	207
SUB TOTAL NORTH	2248	5584	81	7223
Andaman & Nicobar Islands	0	3	0	3
Bihar	168	414	1	570
Jharkhand	104	286	0	375
Odisha	127	591	4	686
West Bengal	103	761	37	847
SUB TOTAL EAST	502	2055	42	2481
Arunachal Pradesh	0	50	0	49
Assam	23	364	0	372
Manipur	0	52	0	51
Meghalaya	0	46	0	46
Mizoram	0	13	0	13
Nagaland	0	36	0	37
Sikkim	0	12	0	12
Tripura	22	55	0	72
SUB TOTAL NORTH EAST	45	628	0	652
Chhattisgarh	20	436	4	452
Dadra & Nagar Haveli and Daman & Diu	11	5	0	14
Goa	16	61	0	65
Gujarat	764	1033	18	1688
Madhya Pradesh	302	1029	21	1278
Maharashtra	796	1296	48	1889
SUB TOTAL WEST	1909	3860	91	5386
Andhra Pradesh	184	792	12	893
Karnataka	349	1377	140	1695
Kerala	179	580	37	723
Lakshadweep	0	1	0	1
Puducherry	7	28	1	35
Tamil Nadu	306	1288	106	1530
Telangana	170	885	63	994
SUB TOTAL SOUTH	1195	4951	359	5871
All India	5899	17078	573	21613

Source: Oil companies



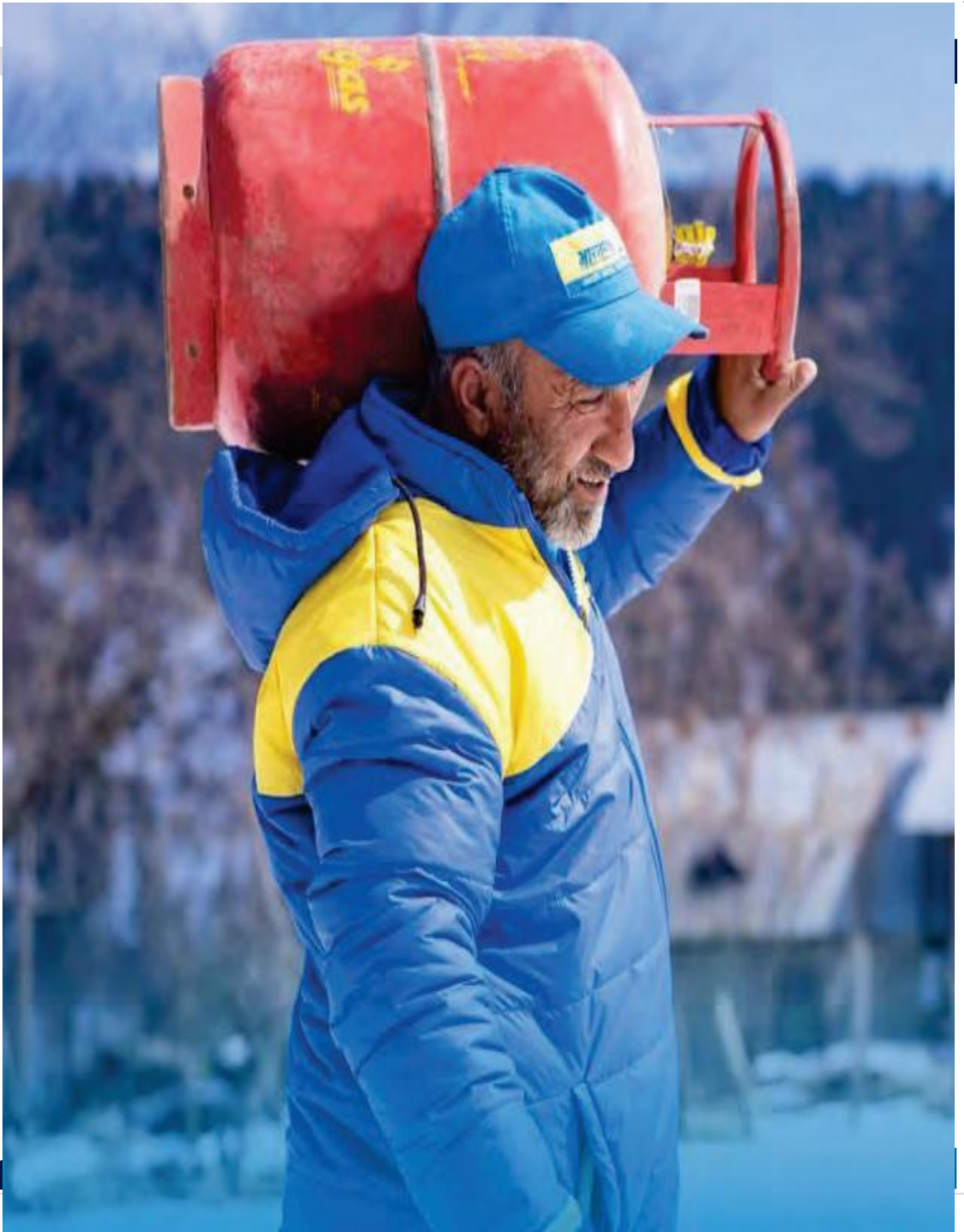
Table 6.10 : Ethanol Blending Programme

Sr.no.	State	(1st December 2022 to 31st Oct 2023 (P))		(1st November 2023 to 31st Mar 2024 (P))	
		Ethanol received by PSU OMCs under EBP program (Quantity Cr. Litrs)	Average percentage blending sales (EBP%)**	Ethanol received by PSU OMCs under EBP program (Quantity Cr. Litrs)	Average percentage blending sales (EBP%)**
1	Andhra Pradesh	21.17	11.9%	9.59	11.7%
2	Andaman & Nicobar	0.00	0.0%	0.00	7.7%
3	Arunachal Pradesh	0.04	12.0%	0.00	13.3%
4	Assam	8.26	12.1%	4.49	13.2%
5	Bihar	15.94	12.4%	6.03	12.9%
6	Chandigarh	0.22	11.8%	0.00	12.6%
7	Chhattisgarh	10.71	11.7%	3.83	10.9%
8	Dadra And Nagar Haveli And Daman & Diu	0.18	12.2%	0.00	11.5%
9	Delhi	13.76	12.0%	6.08	12.3%
10	Goa	2.83	12.0%	0.94	10.2%
11	Gujarat	25.76	12.1%	11.74	11.8%
12	Haryana	27.97	12.1%	14.30	12.5%
13	Himachal Pradesh	3.22	11.4%	1.33	12.8%
14	Jammu & Kashmir	1.29	12.1%	0.53	12.1%
15	Jharkhand	8.69	12.3%	3.63	12.7%
16	Karnataka	35.24	12.3%	17.84	12.2%
17	Kerala	22.20	11.5%	10.61	10.7%
18	Lakshadweep	0.00	9.1%	0.00	11.2%
19	Ladakh	0.04	7.4%	0.00	11.8%
20	Madhya Pradesh	22.11	12.1%	9.30	12.1%
21	Maharashtra	53.78	12.2%	26.71	11.4%
22	Manipur	0.02	11.6%	0.00	14.2%
23	Meghalaya	0.21	12.0%	0.00	12.8%
24	Mizoram	0.03	11.8%	0.00	12.6%
25	Nagaland	0.04	12.0%	0.00	13.2%
26	Odisha	13.70	11.6%	6.30	12.9%
27	Puducherry	0.41	11.8%	0.00	11.1%
28	Punjab	19.71	12.0%	8.03	13.1%
29	Rajasthan	23.28	12.0%	9.58	11.9%
30	Sikkim	0.02	10.4%	0.00	12.4%
31	Tamil Nadu	44.95	11.9%	22.15	11.7%
32	Telangana	20.86	11.8%	9.81	11.1%
33	Tripura	0.04	12.5%	0.00	14.1%
34	Uttar Pradesh	75.94	12.4%	31.37	12.2%
35	Uttarakhand	3.65	12.4%	1.59	12.7%
36	West Bengal	17.79	12.1%	8.68	12.8%
	Grand Total	494.0	12.06%	224.5	11.96%

* Ethanol Supply Year : Ethanol supplies take place between 1st December of the present year to 31st October of the following year.

**EBP %age in all the States has been calculated based on the MS sale in the geographical limit of the respective State. In the States/UTs where receipt is zero but EBP %age has been calculated is due to the fact that sale of Ethanol blended MS which comes from nearby supply locations of other States contribute to the EBP %age in this State/UTs.

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





Chapter - Highlights

- Cabinet approved expansion of Ujjwala Yojana (PMUY 2.0 - Extended) in Sep' 2023 to release for 75 lakh additional LPG connections in 3 years (2023-24 to 2025-26). It will take total number of PMUY beneficiaries to 10.35 crores.
- The PMUY scheme has covered around 10.33 crores beneficiaries since its launch in May 2016. As on 01.04.2024, since inception of the scheme on 01.05.2016, the highest percentage of PMUY connections have been released in Eastern region (32.4%), followed by Northern region (29.7%), Western region (21.5%), Southern region (10.5%) and North-east region (6.0%).
- PSU OMCs sold nearly 29.7 MMT of LPG in FY 2023-24 and recorded YoY growth of 4.0% in total LPG sales as compared to FY 2022-23.
- Highest LPG consumption in Northern region (31%) followed by Southern (27%), Western (23%), Eastern (16%) & North-eastern (3%) in FY 2023-24.
- Packed domestic segment (86.3%) dominated LPG consumption with a share of around on all India basis, followed by Packed non-domestic segment (9.1%), Bulk sales (4.4%) and Auto LPG sales (0.3%) in FY 2023-24.
- PSU OMCs have a total of 210 LPG bottling plants all over India with rated bottling capacity of around 22.8 million metric tonne per annum (MMTPA).
- PSU OMCs enrolled 112.46 lakhs new domestic customers during FY 2023-24. During the same period, PSU OMCs have added 96 distributorships.
- The total LPG tankage on all-India basis is around 1240.9 TMT which is equivalent to about 15 days of consumption.
- PSU OMCs have a total of 468 Auto LPG Dispensing Stations (ALDS) all over India for catering to LPG demand in the automotive sector. The total auto LPG sales of PSU OMCs was about 88.3 TMT during FY 2023-24, out of which around 80.3% sales were in the Southern region.
- As on 01.04.2024, PSU OMCs (IOCL, BPCL and HPCL) together have 32.42 crores active LPG customers in the domestic category who are being served by 25,481 LPG distributors.
- On 4th Oct'23 Government of India raised the LPG subsidy for 'Ujjwala' scheme beneficiaries by Rs. 100 taking it to total Rs. 300 per cylinder (upto 12 cylinders per year), thus reducing the cost of each refill (14.2kg cylinder) to Rs. 503 (Delhi Market Price) for poor households against Rs. 803 (Delhi Market Price) for non-subsidised domestic consumers.
- Earlier price reduction of Rs. 200 on domestic LPG cylinder (14.2kg) declared by Government of India w.e.f. 30.08.2023.
- Further price reduction of Rs. 100 on domestic LPG cylinder (14.2kg) declared by Government of India w.e.f. 09.03.2024.

Chapter-7 LPG



Table 7.1 : LPG Marketing

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
								(TMT)
LPG production	11253	12364	12786	12823	12072	12238	12831	12778
LPG consumption	21608	23342	24907	26330	27540	28253	28503	29663
PSU sales	21179	22977	24591	26126	27476	28253	28503	29649
of which:								
Domestic	18871	20352	21728	23076	25117	25502	25382	26208
Non-Domestic	1776	2086	2364	2614	1885	2239	2606	2760
Bulk	364	355	318	263	355	391	409	594
Auto LPG	167	184	180	172	118	122	107	88
Imports	11097	11379	13235	14809	16476	17125	18309	18461
of which:								
PSU imports	10668	11015	12919	14605	16412	17125	18309	18447
Private imports	429	364	316	204	64	0.1	0.1	14.1
Import dependency percentage of LPG[^]	49%	47%	52%	51%	56%	57%	55%	57%
								(Lakh)
Enrolment (domestic)	331.7	284.7	455.1	161.1	85.8	158.4	101.2	112.5
As on	1.4.2017	1.4.2018	1.4.2019	1.4.2020	1.4.2021	1.4.2022	1.4.2023	1.04.2024
LPG active domestic customers	1988	2243	2654	2787	2895	3053	3140	3242
PMUY beneficiaries	200	356	719	802	800	899	959	1033
Non-domestic customers	25	28	30	32	34	35	36	32
								(Percent)
LPG coverage (Estimated)	72.8	80.9	94.3	97.5	99.8	*	*	*
								(Numbers)
LPG distributors	18786	20146	23737	24670	25083	25269	25385	25481
of which:								
Shehri Vitrak	7677	7821	7908	7914	7899	7894	7925	7921
Rurban Vitrak	3152	3463	3626	3671	3697	3720	3716	3754
Gramin & Durgam Kshetriya Vitrak	7957	8862	12203	13085	13487	13655	13744	13806
Auto LPG dispensing stations (ALDS)	675	672	661	657	651	601	525	468
								(TMTPA)
Bottling capacity (rated)	16264	17395	18338	20292	21249	21573	22225	22843
								(TMT)
Gross tankage	878	912	929	978	994	1088	1178	1241

Source: Oil companies & Directorate General of Commercial Intelligence and Statistics (DGCIS); *PSU OMCs

Note:

1. Data in respect of enrolment, customers, distributors, ALDS and rated bottling capacity pertain to PSU OMCs only. 2. Gross tankage includes LPG tankage at LPG bottling plants owned by PSU oil companies, all refineries, fractionators and LPG import terminals.

3. MOPNG vide letter no. P-20019/2/2016-LPG dated 23 June 2016 had issued unified guidelines for selection of LPG distributors. In the said guidelines, LPG distributor categories have been redefined. The historical data on LPG distributors has been rearranged in line with the new classification for comparison.

4. * 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."

5. [^]Import dependency percentage of LPG = $\{1 - (\text{production}/\text{consumption})\} \times 100\%$

Figure 7.1: Numbers of Active Domestic LPG Customers (In Crore) as on 1st April

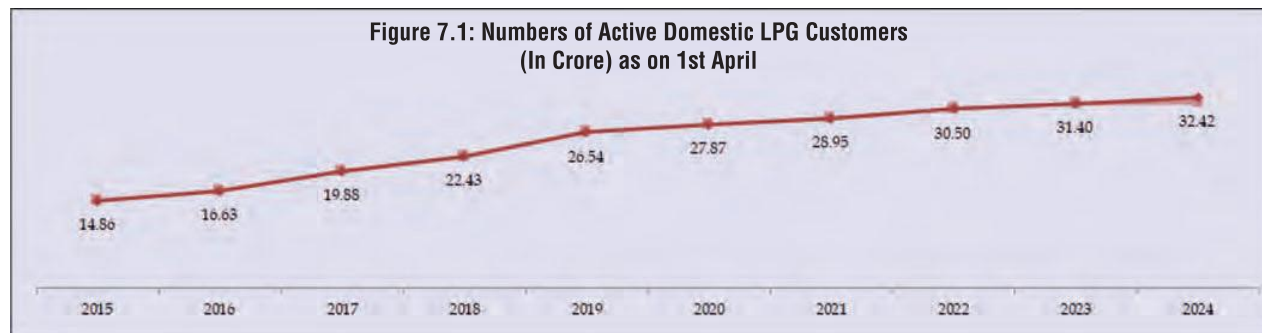


Table 7.2 : State-wise Active Domestic LPG connections

(Number in lakhs)

States/UT	01.04.2023	01.04.2024
CHANDIGARH	2.9	3.0
DELHI	53.3	55.9
HARYANA	76.1	80.7
HIMACHAL PRADESH	21.5	21.9
JAMMU & KASHMIR	34.6	35.0
LADAKH	0.9	1.0
PUNJAB	93.4	95.2
RAJASTHAN	175.7	181.7
UTTAR PRADESH	463.4	476.7
UTTARAKHAND	30.3	31.3
SUB TOTAL NORTH	952.2	982.4
ARUNACHAL PRADESH	3.1	3.2
ASSAM	83.9	90.4
MANIPUR	6.6	6.8
MEGHALAYA	4.1	4.8
MIZORAM	3.4	3.6
NAGALAND	3.3	3.7
SIKKIM	1.7	1.8
TRIPURA	7.9	8.3
SUB TOTAL NORTH EAST	113.9	122.6
ANDAMAN & NICOBAR ISLANDS	1.2	1.3
BIHAR	215.2	225.4
JHARKHAND	62.8	65.5
ODISHA	97.0	99.6
WEST BENGAL	267.8	268.5
SUB TOTAL EAST	643.9	660.3
CHHATTISGARH	59.0	62.1
DADRA & NAGAR HAVELI and DAMAN & DIU	1.7	1.7
GOA	5.5	5.6
GUJARAT	120.6	125.8
MADHYA PRADESH	166.6	173.0
MAHARASHTRA	303.9	310.8
SUB TOTAL WEST	657.2	679.0
ANDHRA PRADESH	149.2	155.2
KARNATAKA	178.6	184.7
KERALA	95.0	96.6
LAKSHADWEEP	0.1	0.1
PUDUCHERRY	3.9	4.0
TAMILNADU	226.1	233.3
TELANGANA	120.1	124.0
SUB TOTAL SOUTH	773.1	797.9
ALL INDIA	3140.3	3242.2

Source: PSU OMCs (IOCL, BPCL and HPCL)



Table 7.3 : State-wise PMUY Connections

(Number in lakhs)

State/UT	1.4.2023	1.4.2024
Chandigarh	0.00659	0.02000
Delhi	1.42	2.60
Haryana	7.67	11.10
Himachal Pradesh	1.41	1.50
Jammu & Kashmir	12.45	12.70
Ladakh	0.11	0.10
Punjab	12.84	13.60
Rajasthan	69.27	73.80
Uttar Pradesh	175.03	185.90
Uttarakhand	4.96	5.30
Sub Total North	285.18	306.60
Arunachal Pradesh	0.49	0.50
Assam	44.15	50.90
Manipur	2.02	2.20
Meghalaya	2.15	3.20
Mizoram	0.34	0.40
Nagaland	0.92	1.20
Sikkim	0.14	0.20
Tripura	2.84	3.20
Sub Total North East	53.04	61.80
Andaman & Nicobar Islands	0.13	0.10
Bihar	107.33	116.20
Jharkhand	36.46	39.00
Odisha	53.20	55.50
West Bengal	123.72	123.80
Sub Total East	320.85	334.50
Chhattisgarh	34.92	37.90
Dadra & Nagar Haveli and Daman & Diu	0.15	0.20
Goa	0.01	0.02
Gujarat	38.43	43.00
Madhya Pradesh	82.27	88.30
Maharashtra	48.90	52.20
Sub Total West	204.69	221.60
Andhra Pradesh	5.12	9.70
Karnataka	37.58	41.50
Kerala	3.41	3.90
Lakshadweep	0.003	0.004
Puducherry	0.15	0.20
Tamil Nadu	37.04	41.00
Telangana	11.53	11.90
Sub Total South	94.83	108.10
All India	958.59	1032.70

Source: PSU OMCs (IOCL, BPCL and HPCL)

"PMUY connections" refer to those households where subscription vouchers have been issued

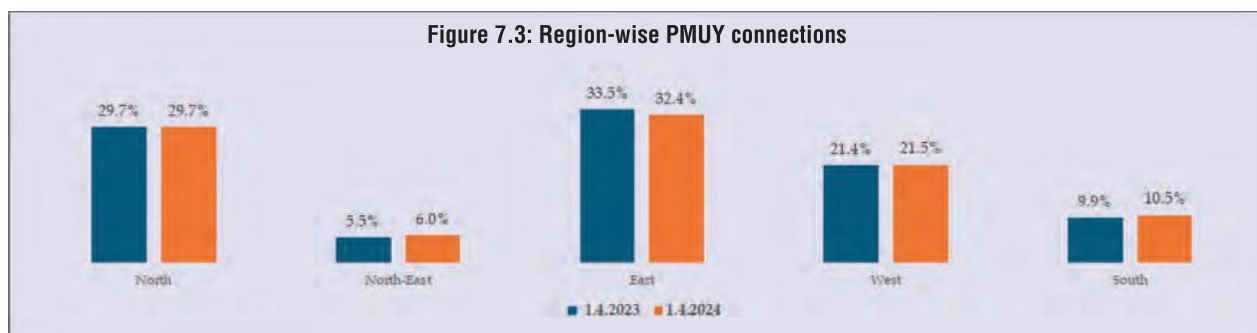
Figure 7.3: Region-wise PMUY connections


Table 7.4 : LPG Domestic customers enrolment (14.2 kg/5 kg) by PSU OMCs

(Number in lakhs)

State/UT	FY 2022-23			FY 2023-24 (P)		
	14.2 Kg	5 Kg	Total	14.2 Kg	5 Kg	Total
Chandigarh	0.05	0.0006	0.05	0.06	0.0005	0.07
Delhi	1.10	0.0327	1.13	1.91	0.0065	1.91
Haryana	1.75	0.0085	1.75	4.71	0.0061	4.71
Himachal Pradesh	0.44	0.0053	0.45	0.40	0.0037	0.41
Jammu & Kashmir	0.33	0.0032	0.33	0.49	0.0015	0.50
Ladakh	0.02	0.0001	0.02	0.03	0.0001	0.03
Punjab	1.37	0.0996	1.47	1.65	0.0144	1.66
Rajasthan	4.08	0.2376	4.32	6.00	0.2198	6.22
Uttar Pradesh	12.37	0.0972	12.47	14.79	0.0687	14.86
Uttarakhand	1.05	0.0353	1.08	0.91	0.0026	0.91
Sub Total North	22.56	0.52	23.08	30.94	0.32	31.27
Arunachal Pradesh	0.11	0.0026	0.11	0.13	0.0012	0.13
Assam	5.02	0.1736	5.19	7.29	0.1062	7.39
Manipur	0.33	0.0007	0.33	0.29	0.0039	0.29
Meghalaya	0.37	0.1356	0.51	0.93	0.1538	1.09
Mizoram	0.10	0.0013	0.10	0.09	0.0059	0.10
Nagaland	0.23	0.0006	0.23	0.36	0.0010	0.36
Sikkim	0.06	0.0003	0.06	0.11	0.0008	0.11
Tripura	0.24	0.0010	0.25	0.41	0.0097	0.4
Sub Total North-East	6.48	0.32	6.79	9.61	0.28	9.90
Andaman & Nicobar Islands	0.04	0.0007	0.04	0.03	0.0071	0.04
Bihar	8.79	0.1042	8.89	11.29	0.0782	11.37
Jharkhand	2.33	0.0390	2.37	3.03	0.0320	3.06
Odisha	2.46	0.0169	2.47	3.02	0.0081	3.02
West Bengal	16.65	0.0596	16.71	1.93	0.0318	1.96
Sub Total East	30.27	0.22	30.49	19.30	0.16	19.46
Chhattisgarh	1.83	0.0288	1.86	3.19	0.1698	3.36
Dadra & Nagar Haveli and Daman & Diu	0.05	0.0001	0.05	0.07	0.0001	0.07
Goa	0.14	0.0001	0.14	0.12	0.0001	0.12
Gujarat	5.68	0.1272	5.81	5.92	0.0226	5.94
Madhya Pradesh	3.96	0.1034	4.06	7.12	0.1816	7.30
Maharashtra	8.30	0.0435	8.34	8.64	0.0317	8.68
Sub Total West	19.95	0.30	20.25	25.06	0.41	25.47
Andhra Pradesh	2.68	0.0032	2.68	5.93	0.0348	5.96
Karnataka	6.32	0.0863	6.41	7.02	0.0711	7.09
Kerala	2.00	0.0141	2.01	1.77	0.0073	1.78
Lakshadweep	0.00	0.0000	0.00	0.01	0.0000	0.01
Puducherry	0.07	0.0010	0.07	0.11	0.0007	0.11
Tamil Nadu	6.22	0.1378	6.36	7.91	0.1994	8.11
Telangana	3.01	0.0052	3.02	3.30	0.0126	3.32
Sub Total South	20.30	0.25	20.55	26.04	0.33	26.37
All India	99.56	1.61	101.16	110.97	1.50	112.46

Source: PSU OMCs (IOCL, BPCL and HPCL)

Figure No 7.4: Region-wise percentage of new enrolments in 2022-23 & 2023-24

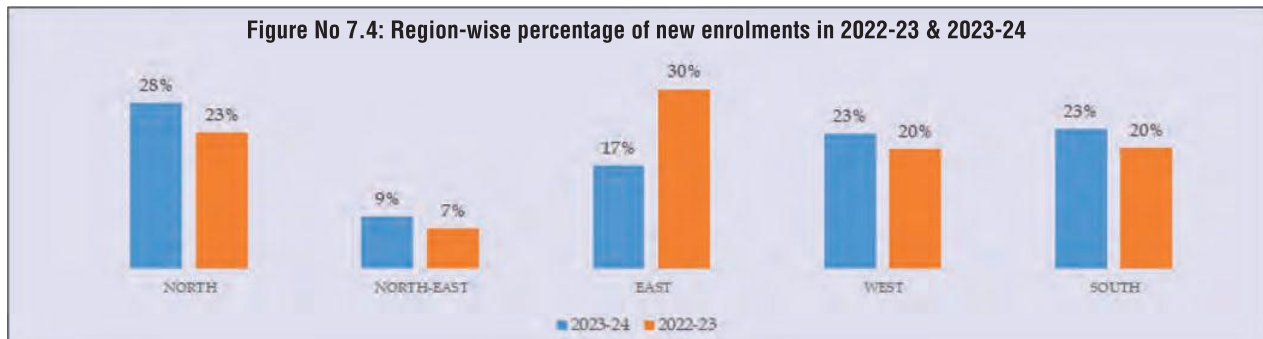
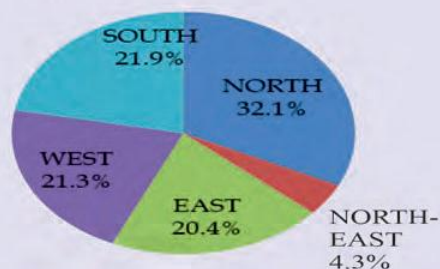
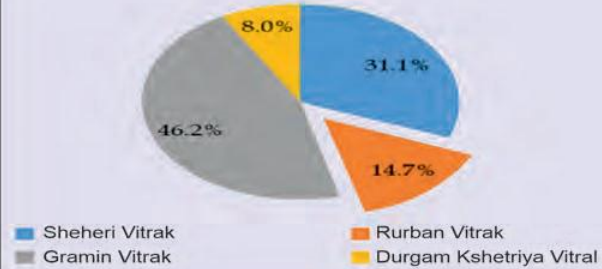


Table 7.5 : Number of LPG Distributors as on 01.04.2024 (P)

(Nos.)

State/UT	Sheheri Vitrak	Rurban Vitrak	Gramin Vitrak	Durgam Kshetriya Vitrak	Total
Chandigarh	26	0	0	0	26
Delhi	317	0	0	0	317
Haryana	282	103	232	9	626
Himachal Pradesh	69	13	91	36	209
Jammu & Kashmir	125	34	74	40	273
Ladakh	0	13	2	9	24
Punjab	334	256	249	21	860
Rajasthan	434	163	654	133	1384
Uttar Pradesh	1008	706	2306	122	4142
Uttarakhand	114	105	59	40	318
Sub Total North	2709	1393	3667	410	8179
Arunachal Pradesh	6	6	33	40	85
Assam	128	101	307	61	597
Manipur	15	13	36	38	102
Meghalaya	21	9	19	16	65
Mizoram	11	6	26	16	59
Nagaland	15	11	17	40	83
Sikkim	9	1	9	10	29
Tripura	18	8	46	11	83
Sub Total North-East	223	155	493	232	1103
Andaman & Nicobar Islands	0	4	5	1	10
Bihar	240	252	1502	39	2033
Jharkhand	163	51	353	20	587
Odisha	173	100	579	113	965
West Bengal	405	164	948	74	1591
Sub Total East	981	571	3387	247	5186
Chhattisgarh	105	75	172	182	534
Dadra & Nagar Haveli and Daman & Diu	5	1	1	0	7
Goa	44	4	5	2	55
Gujarat	422	120	486	13	1041
Madhya Pradesh	472	210	484	385	1551
Maharashtra	1008	192	846	191	2237
Sub Total West	2056	602	1994	773	5425
Andhra Pradesh	323	286	427	108	1144
Karnataka	534	139	547	51	1271
Kerala	225	132	319	22	698
Lakshadweep	1	0	0	0	1
Puducherry	15	11	3	0	29
Tamil Nadu	566	362	609	106	1643
Telangana	288	103	332	79	802
Sub Total South	1952	1033	2237	366	5588
All India	7921	3754	11778	2028	25481

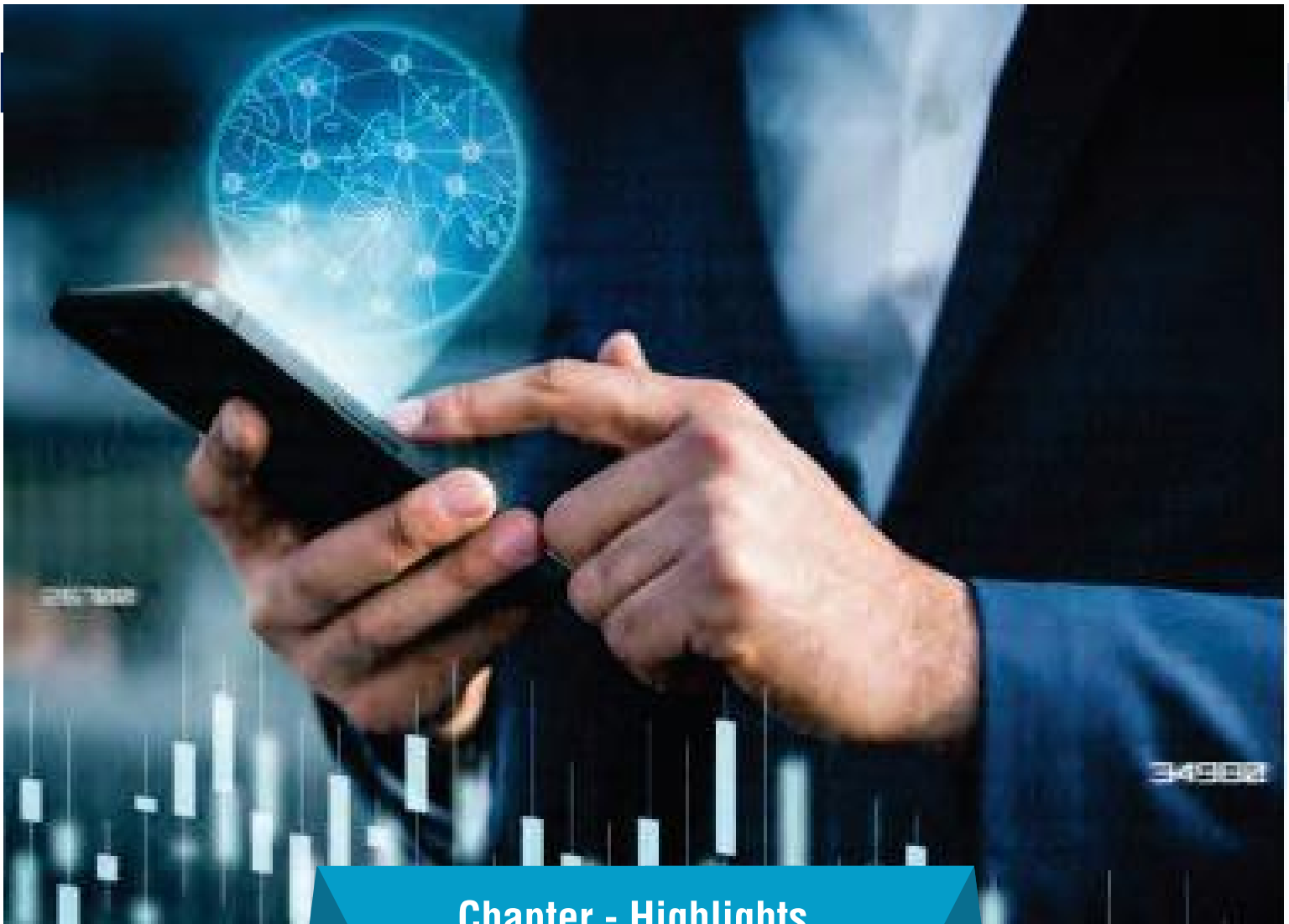
Source: PSU OMCs (IOCL, BPCL and HPCL)

Figure 7.5.1: Region-wise distribution of distributors as on 1.4.2024

Figure 7.5.2: Category wise distribution of distributors as on 1.4.2024


Chapter-8

Prices & Taxes





Chapter - Highlights

Price & Taxes

- Current fiscal year (FY 2023-24) started on a positive note with softening of international crude oil prices from the levels witnessed during Russia - Ukraine war in 2022-23. This softening was driven by various global events including weakening global economic outlook, rising US 10-year bond interest rates, etc. leading to fall in prices. The monthly average prices of Dated Brent was \$74.70/bbl in June'23 compared to an average of \$95.95/bbl during 2022-23.
- During the second half of the year, prices started to rise again due to tighter supply on account of attacks on Russian refineries, OPEC+ sticking with oil supply cuts, geopolitical tensions in Middle East/Israel and rising PMI index in China and USA. However, Brent prices in March 24 have dropped by about 9.06% since reaching a monthly peak of \$94/bbl in September 23. As of March 24, the average dated Brent price has settled around \$85.48/bbl.
- The average price of Dated Brent during 2023-24 has decreased to \$83.15/bbl from the average of \$95.95/bbl during 2022-23 i.e. decrease of 13.34%. Similarly, the average price of Indian Basket of crude oil during 2023-24 has decreased to \$82.58/bbl from the average of \$93.15/bbl during 2022-23 i.e., decrease of 11.35%.
- Oil & Gas industry is one of the most important contributors to Central & State Exchequers. During the FY 2023-24, Petroleum sector contributed Rs.432,394 crores (Rs.428,067 crores for FY 2022-23) to Central exchequer by way of various Taxes /duties on crude oil & petroleum products, Corporate Income tax and other ways like dividend, etc. The Contribution of petroleum sector to State exchequer during FY 2023-24 is Rs.318,762 crores (Rs. 320,651 crores for FY 2022-23) by way of VAT and other taxes, royalty, etc.
- The subsidy burden on petroleum products was Rs.12,696 crores during FY 23-24 (Rs.30,396 crores during FY 2022-23 including onetime grant of Rs.22,000 crores on account of under recovery on domestic LPG to OMCs.

Table 8.1 : Indian Basket Crude Oil Price

Year	Indian basket
	(\$/bbl)
2002-03	26.60
2003-04	27.98
2004-05	39.21
2005-06	55.72
2006-07	62.46
2007-08	79.25
2008-09	83.57
2009-10	69.76
2010-11	85.09
2011-12	111.89
2012-13	107.97
2013-14	105.52
2014-15	84.16
2015-16	46.17
2016-17	47.56
2017-18	56.43
2018-19	69.88
2019-20	60.47
2020-21	44.82
2021-22	79.18
2022-23	93.15
2023-24	82.58
2024 : Month wise	
January	79.22
February	81.62
March	84.49
April	89.46

Notes:

1. The Indian basket of crude oil for the year 2020-21 & subsequent period is calculated based on a weightage of 75.62% for the price of sour grades of crude oil (average of Oman & Dubai) and 24.38% sweet grade of crude oil (Brent Dated). The percentages of 75.62 and 24.38 was based on the ratio of low sulphur and high sulphur crude oil processed (indigenous and imported) by all the Indian refineries (PSU and Pvt.).

Trend in Spreads of International benchmark Crude Oil



Trend in Spreads of Petroleum Products vs Indian Basket of Crude Oil

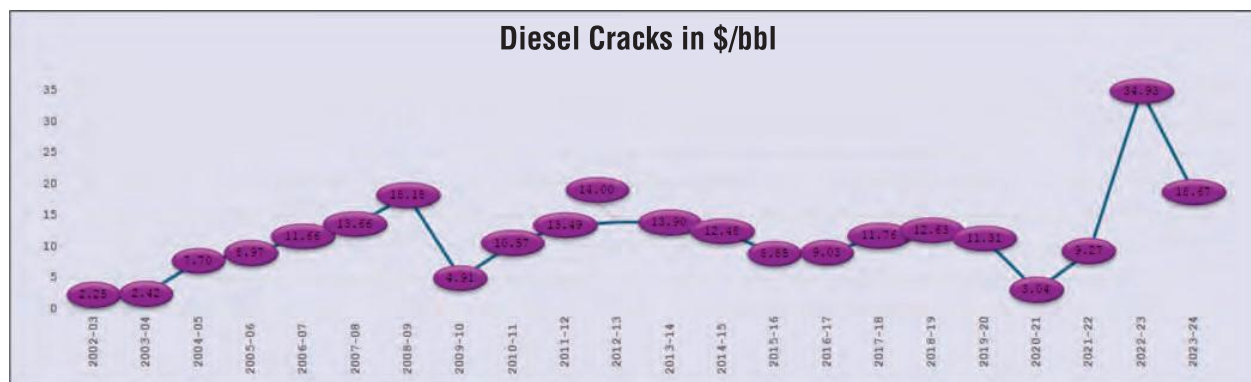
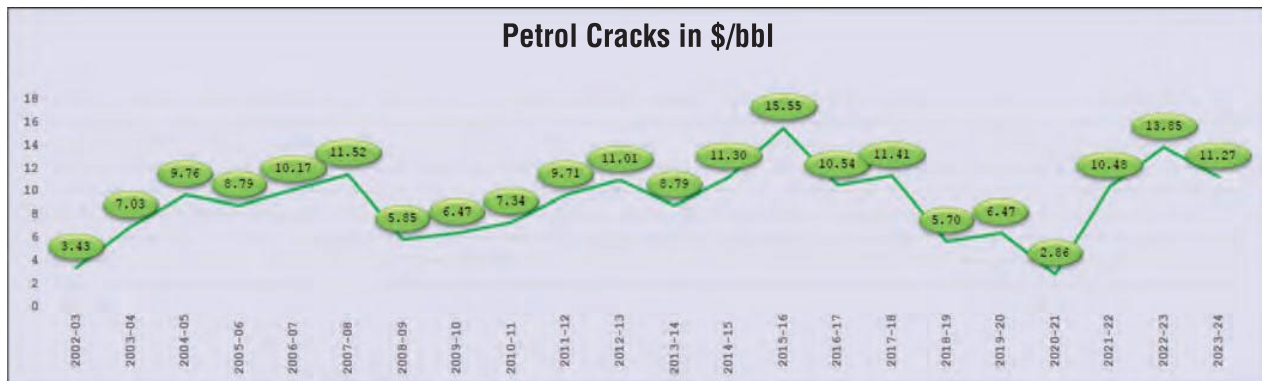


Table 8.2 : Price built-up of PDS Kerosene at Mumbai

Elements	Unit	As on 01.05.2024
Price before taxes and dealers' commission	₹ / litre	60.11
Add : Dealers' commission	₹ / litre	2.66
Add : GST (incl GST on dealers' commission)	₹ / litre	3.14
Retail selling price	₹ / litre	65.91

Source : As per IOCL.

Table 8.3 : Price built-up of Domestic LPG at Delhi

Elements	Unit	As on 01.05.2024
Price before taxes and distributors' commission	₹ / 14.2 kg cylinder	691.68
Add : Distributors' commission	₹ / 14.2 kg cylinder	73.08
Add : GST (including GST on distributors' commission)	₹ / 14.2 kg cylinder	38.24
Retail selling price	₹ / 14.2 kg cylinder	803.00

Source : As per IOCL.

Table 8.4 : Price built-up of Petrol at Delhi

Elements	Unit	As on 01.05.2024
Price charged to dealers (excluding excise duty and VAT)	₹ / litre	55.66
Add : Excise duty	₹ / litre	19.90
Add : Dealers' commission (average)	₹ / litre	3.77
Add : VAT (including VAT on dealers' commission)	₹ / litre	15.39
Retail selling price	₹ / litre	94.72

Source : As per IOCL.

Table 8.5 : Price built-up of Diesel at Delhi

Elements	Unit	As on 01.05.2024
Price charged to dealers (excluding excise duty and VAT)	₹ / litre	56.42
Add : Excise duty	₹ / litre	15.80
Add : Dealers' commission (average)	₹ / litre	2.58
Add : VAT (including VAT on dealer's commission)	₹ / litre	12.82
Retail selling price	₹ / litre	87.62

Source : As per IOCL.

Table 8.6 : Break up of Central excise duty on Petrol & Diesel (As on 01.05.2024)

Particulars	₹/litre	
	Petrol	Diesel
Basic duty	1.40	1.80
Additional excise duty (Road & Infrastructure Cess)	5.00	2.00
Special additional excise duty	11.00	8.00
Agriculture Infrastructure and Development Cess	2.50	4.00
Total excise duty	19.90	15.80

Note - An additional Basic Excise duty @Rs 2/ltr has been levied on unblended petrol (not blended with ethanol or methonal) intended for retail sale w.e.f. 01.11.2022.

Table 8.6 (A) : Excise duty on Export of MS, HSD & ATF and Special Additional Excise Duty (SAED) on Domestic Crude Production

Effective Date	Excise duty on Export			SAED on production of Crude oil
	Motor Spirit	High Speed Diesel	Aviation Turbine Fuel	Rs. /MT
	Rs. /Ltr	Rs. /Ltr	Rs. /Ltr	
01-Jul-22	6.00	13.00	6.00	23,250.00
20-Jul-22	-	11.00	4.00	17,000.00
03-Aug-22	-	5.00	-	17,750.00
19-Aug-22	-	7.00	2.00	13,000.00
01-Sep-22	-	13.50	9.00	13,300.00
17-Sep-22	-	10.00	5.00	10,500.00
02-Oct-22	-	5.00	-	8,000.00
16-Oct-22	-	12.00	3.50	11,000.00
02-Nov-22	-	13.00	5.00	9,500.00
17-Nov-22	-	10.50	5.00	10,200.00
02-Dec-22	-	8.00	5.00	4,900.00
16-Dec-22	-	5.00	1.50	1,700.00
03-Jan-23	-	6.50	4.50	2,100.00
17-Jan-23	-	5.00	3.50	1,900.00
04-Feb-23	-	7.50	6.00	5,050.00
16-Feb-23	-	2.50	1.50	4,350.00
04-Mar-23	-	0.50	-	4,400.00
21-Mar-23	-	1.00	-	3,500.00
04-Apr-23	-	0.50	-	-
19-Apr-23	-	-	-	6,400.00
02-May-23	-	-	-	4,100.00
16-May-23	-	-	-	-
15-Jul-23	-	-	-	1,600.00
01-Aug-23	-	1.00	-	4,250.00
15-Aug-23	-	5.50	2.00	7,100.00
02-Sep-23	-	6.00	4.00	6,700.00
16-Sep-23	-	5.50	3.50	10,000.00
30-Sep-23	-	5.00	2.50	12,100.00
18-Oct-23	-	4.00	1.00	9,050.00
01-Nov-23	-	2.00	-	9,800.00
16-Nov-23	-	1.00	-	6,300.00
01-Dec-23	-	1.00	-	5,000.00
19-Dec-23	-	0.50	-	1,300.00
02-Jan-24	-	-	-	2,300.00
16-Jan-24	-	-	-	1,700.00
03-Feb-24	-	-	-	3,200.00
16-Feb-24	-	1.50	-	3,300.00
01-Mar-24	-	-	-	4,600.00
16-Mar-24	-	-	-	4,900.00
04-Apr-24	-	-	-	6,800.00
16-Apr-24	-	-	-	9,600.00
01-May-24	-	-	-	8,400.00
16-May-24	-	-	-	5,700.00

Source: www.cbic.gov.in

Share of Taxes in Retail Selling Price of Petroleum Products

Table 8.7 : Share of taxes in Retail Selling Price of PDS Kerosene as on 1.05.2024 at Mumbai

Particulars	₹/litre	Share in RSP (%)
Price before taxes and dealers' commission	60.11	91.2%
Customs duty	-	
GST (Including GST on dealers' commission)	3.14	
Total taxes	3.14	4.8%
Dealers' commission	2.66	4.0%
Retail selling price	65.91	100.0

Table 8.8 : Share of taxes in Retail Selling Price of Domestic LPG as on 1.05.2024 at Delhi

Particulars	₹/14.2 kg cylinder	Share in RSP (%)
Customs duty	691.68	86.1%
Customs duty	-	
GST (including GST on distributors' commission)	38.24	
Total taxes	38.24	4.8%
Distributors' commission	73.08	9.1%
Retail selling price	803.00	100.0%

Table 8.9 : Weightage of Crude Oil, Natural Gas and Petroleum Products in Wholesale Price Index (WPI)

Product	Weight in %
Crude Petroleum	1.95
Natural Gas	0.46
High Speed Diesel (HSD)	3.10
Petrol	1.60
Naphtha	0.87
Furnace Oil (FO)	0.67
LPG	0.64
Aviation Turbine Fuel (ATF)	0.32
Lube Oils	0.29
Bitumen	0.23
Kerosene	0.19
Petroleum Coke	0.05
Total	10.37

Source: Website of Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade

Table 8.10 : Dealers' commission on Petrol & Diesel

(₹/KL)

Effective date	Petrol	Diesel
As on 1-Apr-04	707.00	425.00
21-Jun-05	778.00	467.00
01-Aug-05	848.00	509.00
01-Mar-07	894.00	529.00
16-May-07	1024.00	600.00
23-May-08	1052.00	631.00
27-Oct-09	1125.00	673.00
07-Sep-10	1218.00	757.00
01-Jul-11	1499.00	912.00
27-Oct-12	1794.00	1089.00
21-Dec-13	1390.15/KL + 0.883% of product billable price	1186.00
23-Oct-14	1499.37/KL + 0.887% of product billable price	1116.09/KL + 0.290% of product billable price
01-Aug-15	1749.86/KL + 0.883% of product billable price	1301.70/KL + 0.286% of product billable price
16-Nov-15	1750.08/KL + 0.883% of product billable price	1301.88/KL + 0.286% of product billable price
01-Jun-16	1750.29/KL + 0.883% of product billable price	1302.06/KL + 0.286% of product billable price
05-Oct-16	Rs. 1868.14/KL + 0.875% of product billable price	Rs. 1389.35/KL + 0.280% of product billable price
16-Nov-16	Rs. 2006.33/KL + 0.875% of product billable price	Rs. 1491.72/KL + 0.280% of product billable price
01-Apr-17	Rs. 2020.38/KL + 0.859% of product billable price	Rs. 1502.13/KL + 0.267% of product billable price
01-Jul-17	Rs. 2025.97/KL + 0.859% of product billable price	Rs. 1506.81/KL + 0.267% of product billable price
01-Aug-17	Rs. 2674.74/KL + 0.859% of product billable price	Rs. 2031.38/KL + 0.257% of product billable price
19-Feb-19	Rs. 2637.80/KL + 0.859% of product billable price	Rs. 2000.60/KL + 0.257% of product billable price

Note: In addition to above, effective 1st Aug 2017, slab based incentive is also given to eligible dealers through credit notes.

Table 8.11 : Wholesale dealers' commission on PDS kerosene

(₹/KL)

Effective date	With form XV	Other than form XV
As on 01-Apr-04	204.00	161.00
01-Mar-07	243.00	200.00
24-May-08	255.00	212.00
07-Jul-09	263.00	220.00
07-Sep-10	275.00	232.00
28-Dec-12	438.24	377.73
21-Oct-14	536.09	475.58
05-Feb-16	714.18	649.16
28-Oct-16	787.82	723.87
05-Sep-17	1008.83	928.10
04-Oct-18	1016.37	1005.95
22-Feb-19	1341.88	1230.98

Table 8.12: Distributors' commission on domestic LPG

(₹/cylinder)

Effective date	14.2 KG cyl.	Additional commission for sale at market determined price (₹/14.2 KG cyl.)	5 KG cyl.
As on 01-April-04	16.71	NA	8.60
01-Mar-07	19.05	NA	9.81
04-Jun-08	20.54	NA	10.58
30-Jun-09	21.94	NA	11.30
01-Jul-11	25.83	NA	13.30
07-Oct-12	37.25	0.75	18.63
11-Dec-13	40.71	0.75	20.36
23-Oct-14	44.06	0.82	22.03
09-Dec-15	45.83	0.26	22.67
01-Jan-16	45.83	0.33	22.67
01-Feb-16	45.83	0.22	22.67
01-Mar-16	45.83	0.13	22.67
01-May-16	45.83	0.15	22.67
01-Jun-16	45.83	0.18	22.67
01-Jul-16	45.83	0.16	22.67
01-Aug-16	45.83	0.09	22.67
01-Sep-16	45.83	0.06	22.67
01-Oct-16	45.83	0.09	22.67
28-Oct-16	47.48	0.09	23.74
01-Nov-16	47.48	0.14	23.74
01-Dec-16	47.48	0.21	23.74
01-Feb-17	47.48	0.30	23.74
01-Mar-17	47.48	0.43	23.74
01-Apr-17	47.48	0.40	23.74
01-May-17	47.48	0.27	23.74
01-Jun-17	47.48	0.15	23.74
01-Jul-17	47.48	0.13	23.74
01-Aug-17	47.48	0.06	23.74
01-Sep-17	47.48	0.16	23.74
30-Sep-17	48.89	0.16	24.20
01-Oct-17	48.89	0.23	24.20
01-Nov-17	48.89	0.36	24.20
01-Jan-18	48.89	0.35	24.20
01-Feb-18	48.89	0.34	24.20
01-Mar-18	48.89	0.28	24.20
01-Apr-18	48.89	0.23	24.20
01-Jun-18	48.89	0.29	24.20
01-Jul-18	48.89	0.36	24.20
01-Aug-18	48.89	0.42	24.20
01-Sep-18	48.89	0.46	24.20
01-Oct-18	48.89	0.54	24.20



Table 8.12 : Continued

(₹/cylinder)

Effective date	14.2 KG cyl.	Additional commission for sale at market determined price (₹/14.2 KG cyl.)	5 KG cyl.
01-Nov-18	48.89	0.63	24.20
07-Nov-18	50.58	0.63	25.29
01-Dec-18	50.58	0.45	25.29
01-Jan-19	50.58	0.28	25.29
01-Feb-19	50.58	0.24	25.29
01-Mar-19	50.58	0.30	25.29
01-Apr-19	50.58	0.31	25.29
01-Jun-19	50.58	0.35	25.29
01-Jul-19	50.58	0.21	25.29
01-Aug-19	56.20	-	28.10
01-Sep-19	59.02	-	29.51
01-Oct-19	61.84	-	30.92
19-May-22	64.84	-	32.42
04-Oct-23	73.08	-	36.54

Source: MoP&NG circulars & OMCs

Table 8.13 (A) : Retail Selling Price of major Petroleum Products in India & Neighbouring Countries

Country/City	Petrol (Rs/ltr)	Diesel (Rs/ltr)	Kerosene (Rs/ltr)	Domestic LPG (Rs/14.2 kg cyl.)
India (New Delhi)	94.72 [^]	87.62 [^]	65.91 [#]	803.00 ^{**}
Pakistan (Lahore)	85.92	84.70	55.08	1017.25 ^{##}
Bangladesh (Dhaka)	95.73	82.27	82.27	602.71
Sri Lanka (Colombo)	103.99	94.10	60.75	1320.94
Nepal (Kathmandu)	110.67	100.55	100.55	1207.84

[^] Petrol and Diesel at Delhi as on 01.05.2024 as per IOCL

[#] at Mumbai as on 01.05.2024 for PDS Kerosene

^{##} at Islamabad as on 01.05.2024 for Domestic LPG

^{**} Non subsidised Domestic LPG at Delhi as on 01.05.2024

^{*}Note - Prices for neighboring countries as available on their respective website as on 01.05.2024

Sources: Websites:

Pakistan- Pakistan State Oil (www.psopk.com) and Oil and Gas Regulatory Authority (www.ogra.org.pk);

Bangladesh- Bangladesh Petroleum Corporation (www.bpc.gov.bd); Nepal- Nepal Oil Corporation (www.nepaloil.com.np);

Sri Lanka- Petrol, Diesel & Kerosene- Ceylon Petroleum Corporation (www.ceypetco.gov.lk); LPG- Litro Gas Lanka (www.litrogas.com) ;

Exchange rate - www.oanda.com "

Table 8.13(B) : Monthly Average End-User Prices For Petroleum Products in India & Developed Countries

Country	Petrol1 (₹ /ltr)	Petrol1 (₹ /ltr)
India (Delhi)	94.72	87.62
France	172.32	158.64
Germany	170.65	154.97
Italy	170.48	160.81
Spain	149.55	138.70
UK	154.47	164.06
Japan	94.75	83.66
Canada	105.76	106.09
USA	79.57	88.24

Note:1. Unleaded premium (95 RON) for France, Germany, Italy, Spain, UK; regular unleaded for Canada, Japan and the United States

2. Automotive Diesel For Non Commercial Use

3. Prices of France, Germany, Italy, Spain, UK, Japan, Canada & USA: IEA report for May 2024 with prices of April'24. Monthly Average Exchange Rates of Apr 2024 considered for conversion: Rs. 83.41/USD.

4. Prices in India as of 01.05.2024 as per IOCL. Monthly Average exchange rate of Apr 2024 (up to 30.04.2024) considered for conversion Rs. 83.41/USD.

Table 8.14 : Retail selling price of petroleum products at State capitals / UTs as on 01.05.2024

State/Union Territory	City	Petrol	Diesel	Domestic LPG Non subsidized
		(₹/litre)		(₹/14.2 KG Cylinder)
Andaman & Nicobar Islands	Port Blair	82.42	78.01	879.00
Andhra Pradesh	Amaravati	109.69	97.52	835.50
Arunachal Pradesh	Itanagar	90.85	80.35	868.50
Assam	Guwahati	96.13	88.38	852.00
Bihar	Patna	105.18	92.04	901.00
Chandigarh	Chandigarh	94.24	82.40	812.50
Chhattisgarh	Raipur	100.39	93.33	874.00
Dadra and Nagar Haveli and Daman & Diu	Daman	92.39	87.88	812.00
Delhi	New Delhi	94.72	87.62	803.00
Goa	Panjim	95.21	87.77	817.00
Gujarat	Gandhinagar	94.65	90.32	828.50
Haryana	Ambala	95.49	88.32	820.50
Himachal Pradesh	Shimla	95.29	87.28	847.50
Jammu & Kashmir	Srinagar	99.91	84.99	919.00
Jharkhand	Ranchi	97.81	92.56	860.50
Karnataka	Bengaluru	99.84	85.93	805.50
Kerala	Thiruvananthapuram	107.56	96.43	812.00
Ladakh	Leh	102.28	87.39	1040.00
Madhya Pradesh	Bhopal	106.47	91.84	808.50
Maharashtra	Mumbai	104.21	92.15	802.50
Manipur	Imphal	99.11	85.19	954.50
Meghalaya	Shillong	96.27	86.97	870.00
Mizoram	Aizawl	93.79	80.38	955.00
Nagaland	Kohima	97.34	85.55	822.00
Odisha	Bhubaneswar	101.06	92.64	829.00
Puducherry	Puducherry	94.21	84.43	815.00
Punjab	JULLANDHAR	96.19	86.41	832.50
Rajasthan	Jaipur	104.88	90.36	806.50
Sikkim	Gangtok	100.85	88.00	955.50
Tamil Nadu	Chennai	100.75	92.34	818.50
Telangana	Hyderabad	107.41	95.65	855.00
Tripura	Agartala	97.47	86.50	963.50
Uttar Pradesh	Lucknow	94.65	87.76	840.50
Uttarakhand	Dehradun	93.47	88.29	822.00
West Bengal	Kolkata	103.94	90.76	829.00

Source: IOCL

Highest	Lowest
---------	--------

Table 8.15 : Retail selling price of PDS kerosene at major Metro cities as on 01.05.2024

State	Metro City	(₹/litre)
Maharashtra	Mumbai	65.91
Tamil Nadu	Chennai	15.00
West Bengal	Kolkata	69.18

Source: IOCL

Note: The allocation of PDS kerosene in Delhi is nil presently.

Table 8.16 (A) : Customs ,excise duty and GST rates on petroleum products as on 01.05.2024

Customs duty and Excise duty (Petroleum products on which GST is not levied)							
Particulars	Customs		Central Excise				Agriculture Infrastructure & Development Cess(AIDC)
	Basic customs duty	Additional customs duty (CVD)	Additional customs duty	Basic Excise Duty	Special additional excise duty	Additional excise duty (Road and Infrastructure Cess)	
Crude oil	Rs 1/MT + Rs. 50/ MT as NCCD	Rs.1/MT	-	Rs. 1/MT+ Cess @ 20% +Rs.50/ MT as NCCD	Rs. 5,700/ MT	-	-
Petrol	2.50%	Rs.1.40/ltr. + Rs.11.00/ ltr SAD+ Rs.2.50/ ltr AIDC	Rs.5.00/ltr.	Rs.1.40/ltr	Rs.11.00/ltr	Rs.5.00/ltr.	Rs.2.50/ltr
Petrol (branded)	2.50%	Rs.2.60/ltr. + Rs.11.00/ ltr SAD+ Rs.2.50/ ltr AIDC	Rs.5.00/ltr.	Rs.2.60/ltr	Rs.11.00/ltr	Rs.5.00/ltr.	Rs.2.50/ltr
High speed diesel	2.50%	Rs.1.80/ltr. + Rs.8.00/ ltr SAD+ Rs.4.00/ ltr AIDC	Rs.2.00/ltr.	Rs.1.80/ltr	Rs.8.00/ltr	Rs.2.00/ltr.	Rs.4.00/ltr
High speed diesel (branded)	2.50%	Rs.4.20/ltr. + Rs.8.00/ ltr SAD+ Rs.4.00/ ltr AIDC	Rs.2.00/ltr.	Rs.4.20/Ltr	Rs.8.00/ltr	Rs.2.00/ltr.	Rs.4.00/ltr
Aviation Turbine Fuel (ATF) (note-2)	5.00%	11%	-	11%	-	-	-
Liquefied Natural Gas (LNG)	2.50%	Nil	-	Nil	-	-	-
Natural gas [gaseous state]	5.00%	Nil	-	Nil	-	-	-
Natural gas [compressed]	5.00%	14.00%	-	14.00%	-	-	-

8.16 (B)-Customs duty and GST rates (Petroleum products on which GST is levied)

Particulars	Customs		GST
	Basic Customs Duty	CVD (in lieu of IGST)	
LPG	Domestic (Note-3)	Nil	5.00%
	Non - Domestic	5.00%	18.00%
Kerosene	PDS	5.00%	5.00%
	Non PDS	5.00%	18.00%
Naphtha	Fertilizer	Nil	18.00%
	Non- Fertilizer	2.50%	18.00%
Butane / Propane	Domestic (Note-5)	Nil	5.00%
	Non - Domestic	2.50%	18.00%
Bitumen & Asphalt		5.00%	18.00%
Furnace Oil	Fertilizer	Nil	18.00%
	Non- Fertilizer	2.50%	18.00%
Light Diesel Oil		5.00%	18.00%
Low Sulphur Heavy Stock/ HPS & other Residue	Fertilizer	Nil	18.00%
	Non- Fertilizer	5.00%	18.00%
Lube oil/greases		5.00%	18.00%
Petroleum Coke		10.00%	18.00%
Petroleum Jelly		5.00%	18.00%
Transformer Oil		5.00%	18.00%
Waxes all types		5.00%	18.00%

Source: www.cbic.gov.in

Note :

- In addition to the above , 10% Social Welfare Surcharge is also applicable on the total duties of Customs.
- In case of ATF, Basic Excise Duty /Additional Customs Duty (CVD) is 2% in place of 11%, for supply to scheduled commuter airlines (SCA) from the regional connectivity scheme (RCS) airports.
- Basic Customs duty is Nil for import of domestic LPG sold to household consumers (including non domestic exempted category) by PSU OMCs. Basic Customs duty rate is 5% for other importers of domestic LPG
- An additional Basic Excise duty @Rs 2/ltr has been levied on unblended petrol (not blended with ethanol or methonal) intended for retail sale w.e.f. 01.11.2022.
- Basic Customs duty is Nil for import of Butane / Propane intended to be used as domestic LPG sold to household consumers (including NDEC) by PSU OMCs.

Table 8.17 : Actual rate of sales tax/ VAT/GST and other taxes levied by State/UT Governments on major petroleum products as on 01.05.2024

Sl. no.	State/Union Territory	Petrol	Diesel	PDS kerosene	Domestic LPG
		Sales Tax /VAT		GST	
1	Andaman & Nicobar Islands	1%	1%		
2	Andhra Pradesh	31% VAT + Rs.4/litre VAT+Rs.1/litre Road Development Cess and Vat thereon	22.25% VAT + Rs.4/litre VAT+Rs.1/litre Road Development Cess and Vat thereon		
3	Arunachal Pradesh	14.50%	7.00%		
4	Assam	21.95% or Rs.16.80 per litre whichever is higher	*20.88% OR Rs. 13.60 per litre whichever is higher Rebate of Rs. 1.66 per litre subject to minimum tax of Rs. 13.60 per litre*		
5	Bihar	23.58% or Rs 16.65/Litre whichever is higher (30% Surcharge on VAT as irrecoverable tax)	16.37% or Rs 12.33/Litre whichever is higher (30% Surcharge on VAT as irrecoverable tax)		
6	Chandigarh	Rs.10/KL cess +15.24% or Rs 12.42 per liter which ever is higher	Rs.10/KL cess + 6.66% or Rs5.07 per liter which ever is higher		
7	Chhattisgarh	24% VAT + Rs.2/litre VAT	23% VAT + Rs.1/litre VAT		
8	Dadra & Nagar Haveli and Daman & Diu	12.75% VAT	13.50% VAT		
9	Delhi	19.40% VAT	Rs.250/KL air ambience charges + 16.75% VAT		
10	Goa	20% VAT + 0.5% Green cess	17% VAT + 0.5% Green cess		
11	Gujarat	13.7% VAT+ 4% Cess on Town Rate & VAT	14.9% VAT + 4 % Cess on Town Rate & VAT		
12	Haryana	18.20% or Rs.14.50/litre whichever is higher as VAT+5% additional tax on VAT	16% VAT or Rs.11.86/litre whichever is higher as VAT+5% additional tax on VAT		
13	Himachal Pradesh	17.50% or Rs 13.50/Litre- whichever is higher	13.90% or Rs 10.40/Litre- whichever is higher		
14	Jammu & Kashmir	24% MST+ Rs.2/Litre employment cess, Reduction of Rs.4.50/Litre	16% MST+ Rs.1.00/Litre employment cess, Reduction of Rs.6.50/Litre		
15	Jharkhand	22% on the sale price or Rs. 17.00 per litre , which ever is higher + Cess of Rs 1.00 per Ltr	22% on the sale price or Rs. 12.50 per litre , which ever is higher + Cess of Rs 1.00 per Ltr		
16	Karnataka	25.92% sales tax	14.34% sales tax		
17	Kerala	30.08% sales tax+ Rs.1/litre additional sales tax + 1% cess , Social security cess Rs.2 per litre	22.76% sales tax+ Rs.1/litre additional sales tax + 1% cess , Social security cess Rs.2 per litre		
18	Ladakh	15% MST+ Rs.5/Litre employment cess, Reduction of Rs.2.5/Litre	6% MST+ Rs.1/Litre employment cess , Reduction of Rs.0.50/Litre		
19	Lakshadweep	10% VAT	10% VAT	5%	5%
20	Madhya Pradesh	29 % VAT + Rs.2.5/litre VAT+1% Cess	19% VAT+ Rs.1.50/litre VAT+1% Cess		
21	Maharashtra – Mumbai, Thane , Navi Mumbai, & Aurangabad	26% VAT+ Rs.5.12/Litre additional tax	24% VAT		
22	Maharashtra (Rest of State)	25% VAT+ Rs.5.12/Litre additional tax	21% VAT		
23	Manipur	25% VAT	13.50% VAT		
24	Meghalaya	13.50% or Rs13.50/Litre- whichever is higher (Rs.0.10/Litre pollution surcharge)	5% or Rs 9.00/Litre- whichever is higher (Rs.0.10/ Litre pollution surcharge)		
25	Mizoram	16.36% VAT	5.23% VAT		
26	Nagaland	25% VAT or Rs. 16.04/litre whichever is higher +5% surcharge + Rs.2.00/Litre as road maintenance cess minus rebate of Rs.5.50/Litre	16.50% VAT or Rs. 10.51/litre whichever is higher +5% surcharge + Rs.2.00/Litre as road maintenance cess minus rebate of Rs.5.10/Litre		
27	Odisha	28% VAT	24% VAT		
28	Puducherry	14.55% VAT	8.65% VAT		
29	Punjab	Rs.2050/KL (cess)+ Rs.0.10 per Litre (Urban Transport Fund) + 0.25 per Litre (Special Infrastructure Development Fee)+15.74% VAT plus 10% additional tax or Rs.14.32/Litre whichever is higher	Rs.1050/KL (cess) + Rs.0.10 per Litre (Urban Transport Fund) +0.25 per Litre (Special Infrastructure Development Fee) + 12.00% VAT plus 10% additional tax and or Rs.10.02/Litre whichever is higher		
30	Rajasthan	29.04% VAT+Rs 1500/KL road development cess	17.30% VAT+ Rs.1750/KL road development cess		
31	Sikkim	20% VAT+ Rs.3000/KL cess	10% VAT + Rs.2500/KL cess		
32	Tamil Nadu	13% + Rs.11.52 per litre	11% + Rs.9.62 per litre		
33	Telangana	35.20% VAT	27% VAT		
34	Tripura	17.50% VAT+ 3% Tripura Road Development Cess	10.00% VAT+ 3% Tripura Road Development Cess		
35	Uttar Pradesh	19.36% or Rs 14.85/Litre whichever is higher	17.08% or Rs 10.41/Litre whichever is higher		
36	Uttarakhand	16.97% or Rs 13.14 Per Ltr whichever is greater	17.15% or Rs Rs 10.41 Per Ltr whichever is greater		
37	West Bengal	25% or Rs.13.12/litre whichever is higher as sales tax+ Rs.1000/KL cess – Rs 1000/KL sales tax rebate (20% Additional tax on VAT as irrecoverable tax)	17% or Rs.7.70/litre whichever is higher as sales tax + Rs 1000/KL cess – Rs 1000/KL sales tax rebate (20% Additional tax on VAT as irrecoverable tax)		

Source: IOCL

Note:

For Petrol & Diesel, VAT/Sales Tax at applicable rates is also levied on Dealer's commission in Delhi, Gujarat, Dadra & Nagar Haveli and Daman & Diu, Punjab, Haryana, Madhya Pradesh, Rajasthan, Chandigarh, Puducherry, Andaman & Nikobar, Meghalaya & Lakshadweep.

Table 8.18 : Contribution of petroleum sector to exchequer

(₹ Crore)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
1. Contribution to Central exchequer					
A. Tax/ duties on crude oil & petroleum products					
Cess on crude oil	14788.6	10676.3	19213.6	21444.7	19580.4
Royalty on crude oil / natural gas	5602.0	3589.8	5638.7	9821.9	9286.2
Customs duty	22927.2	13514.2	11423.4	14985.3	13133.7
NCCD on Crude Oil	1130.2	1016.4	1120.9	1192.4	1190.9
Excise duty	223057.3	372970.0	363305.0	287575.3	273683.9
Service tax	16.9	0.3	0.0	0.0	0.0
IGST	13098.6	11594.1	19726.3	22235.8	20929.7
CGST	6831.1	6157.7	10843.3	13011.6	12230.1
Others	88.3	365.2	337.6	59.5	51.5
Sub total (A)	287540.3	419884.0	431608.9	370326.5	350086.4
B. Dividend to Government/ income tax etc.					
Corporate/ income tax	23133.6	21908.9	29219.3	33291.8	57493.3
Dividend income to Central Government	12270.1	10392.7	22612.2	15672.7	19309.7
Dividend distribution tax	5461.9	0.0	0.0	0.0	0.0
Profit petroleum on exploration of oil/ gas*	5909.1	2883.5	8862.1	8776.1	5504.7
Sub total (B)	46774.6	35185.1	60693.6	57740.7	82307.7
Total contribution to Central exchequer (A+B)	334314.8	455069.0	492302.5	428067.1	432394.1
2. Contribution to State exchequer					
C. Tax/ duties on crude oil & petroleum products					
Royalty on crude oil / natural gas	11881.6	7178.6	13525.5	17914.3	12529.5
Sales tax/ VAT	200492.7	202937.1	256248.0	288086.2	292716.4
SGST/UTGST	7345.3	6120.9	11016.9	13187.6	12288.6
Octroi/ duties (incl. electricity duty)	715.9	705.9	826.8	829.9	687.3
Entry tax / others	405.1	328.7	354.5	293.0	301.5
Sub total (C)	220840.7	217271.2	281971.7	320310.9	318523.3
D. Dividend to Government/ direct tax etc.					
Dividend income to State Government	214.9	378.6	150.8	340.2	238.5
Sub total (D)	214.9	378.6	150.8	340.2	238.5
Total contribution to State exchequer (C+D)	221055.6	217649.7	282122.5	320651.1	318761.8
Total contribution of petroleum sector to exchequer (1+2)	555370.4	672718.8	774425.0	748718.3	751155.9

*as provided by MOP&NG.

(P)- Provisional

Source: Based on data provided by 15 oil & gas companies

Note: Totals may not tally due to round off

Table 8.19 : State/UT wise collection of sales tax/ VAT by petroleum sector

(₹ Crore)

Sr.No.	State/Union territory					
		2019-20	2020-21	2021-22	2022-23	2023-24 (P)
1	Andaman & Nicobar Islands	93.9	73.6	80.3	63.2	55.3
2	Andhra Pradesh	10167.6	11013.5	14724.2	16428.6	16688.0
3	Arunachal Pradesh	26.4	104.2	135.9	158.1	176.7
4	Assam	3641.0	3747.1	3901.2	5073.1	5669.5
5	Bihar	6238.1	5854.1	6866.9	9848.4	9359.9
6	Chandigarh	60.1	60.1	86.8	99.4	97.2
7	Chhattisgarh	3876.9	4107.1	5178.1	6163.9	6383.1
8	Dadra and Nagar Haveli and Daman & Diu	1.6	1.3	1.7	0.5	0.6
9	Delhi	3832.8	2652.6	3658.7	4398.1	4002.1
10	Goa	753.6	681.5	993.6	1278.1	1182.7
11	Gujarat	15337.1	15140.8	20697.0	24631.2	23604.9
12	Haryana	7648.1	7923.1	10066.7	10029.6	9922.0
13	Himachal Pradesh	440.4	882.5	1313.1	1222.4	1529.6
14	Jammu & Kashmir	1459.0	1443.5	1858.9	1542.6	1621.4
15	Jharkhand	3296.5	3619.4	4392.2	5532.5	5876.2
16	Karnataka	15380.9	15476.2	18310.2	18458.7	20030.0
17	Kerala	8074.2	6923.8	9264.8	11827.4	12240.5
18	Ladakh	14.2	49.4	81.4	67.7	77.3
19	Lakshadweep	0.0	0.0	0.0	3.3	19.1
20	Madhya Pradesh	10719.5	11907.8	14157.2	15573.2	15038.4
21	Maharashtra	26791.0	25430.1	34002.4	37619.0	36359.3
22	Manipur	192.3	264.6	318.6	330.7	263.6
23	Meghalaya	0.0	0.0	0.0	0.0	0.0
24	Mizoram	90.8	84.4	119.7	86.8	96.9
25	Nagaland	115.6	148.4	179.8	168.5	173.0
26	Odisha	5495.0	6224.2	7655.5	9328.3	9761.5
27	Puducherry	4.9	9.7	10.6	8.5	0.7
28	Punjab	5547.8	6291.4	7889.7	6900.0	7834.4
29	Rajasthan	13319.1	15118.6	17401.4	18573.7	19235.7
30	Sikkim	129.1	110.5	155.4	179.4	186.1
31	Tamil Nadu	18174.9	17063.2	20586.2	24309.2	24470.8
32	Telangana	10045.4	8690.8	13170.9	14928.9	15159.5
33	Tripura	384.0	444.6	473.9	624.5	578.4
34	Uttar Pradesh	20111.7	21955.8	26333.2	28170.2	30411.4
35	Uttarakhand	1494.6	1523.8	1846.5	2072.7	2390.2
36	West Bengal	7534.4	7915.7	10335.4	12385.9	12220.5
	TOTAL	200492.6	202937.1	256248.0	288086.1	292716.4

(P)- Provisional

Source: Based on data provided by 15 oil & gas companies
Totals may not tally due to round off

Table 8.20 : State/UT wise collection of SGST/UTGST by petroleum sector

(₹ Crore)

Sl. no.	State/Union territory/Others	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
1	Andaman & Nicobar Islands	0.3	0.3	1.0	0.7	0.5
2	Andhra Pradesh	155.9	111.8	203.5	289.9	310.3
3	Arunachal Pradesh	0.1	0.3	0.3	0.6	0.8
4	Assam	475.3	331.8	414.0	445.0	364.2
5	Bihar	144.5	121.8	146.9	210.5	202.9
6	Chandigarh	1.0	1.0	1.2	1.9	1.3
7	Chhattisgarh	9.4	14.3	26.1	29.8	39.5
8	Dadra and Nagar Haveli and Daman & Diu	20.1	20.5	14.7	41.2	17.9
9	Delhi	51.0	36.7	53.8	56.2	71.6
10	Goa	9.2	10.6	14.6	9.6	18.1
11	Gujarat	1800.8	1566.2	3179.9	3921.9	3343.5
12	Haryana	684.8	528.8	1064.1	1118.6	1032.9
13	Himachal Pradesh	4.3	5.8	8.0	18.1	8.4
14	Jammu & Kashmir	16.7	39.5	35.2	24.1	26.5
15	Jharkhand	15.8	11.9	10.3	28.7	38.4
16	Karnataka	268.5	260.2	461.2	576.9	436.5
17	Kerala	170.9	136.5	254.7	332.7	314.7
18	Ladakh	0.8	0.7	1.0	5.6	1.1
19	Lakshadweep	0.2	0.0	0.7	0.0	0.0
20	Madhya Pradesh	98.4	67.6	116.9	173.6	174.8
21	Maharashtra	1126.4	932.5	1822.4	2101.5	1935.4
22	Manipur	1.5	1.6	1.8	2.1	2.3
23	Meghalaya	0.4	0.1	0.2	0.3	0.1
24	Mizoram	1.3	0.5	0.4	0.5	0.6
25	Nagaland	0.6	0.5	0.6	0.8	0.7
26	Odisha	192.4	195.0	420.7	578.9	587.3
27	Puducherry	1.0	1.2	1.3	4.0	4.5
28	Punjab	128.2	43.2	345.8	257.5	297.7
29	Rajasthan	175.6	144.5	196.3	259.7	423.6
30	Sikkim	0.4	0.3	0.5	0.4	0.5
31	Tamil Nadu	561.9	439.2	640.3	860.6	768.8
32	Telangana	20.6	22.4	44.8	32.8	58.7
33	Tripura	17.5	38.3	16.9	23.0	24.2
34	Uttar Pradesh	619.2	603.0	826.8	859.3	957.6
35	Uttarakhand	6.9	8.2	7.4	7.9	6.7
36	West Bengal	553.3	417.6	673.6	897.5	767.7
Others						
1	Other territory (Offshore areas of India beyond 12 Nautical Miles)	10.7	6.8	9.2	15.4	48.5
TOTAL		7345.3	6120.9	11016.9	13187.6	12288.6

(P)- Provisional

Source: Based on data provided by 15 oil & gas companies

Totals may not tally due to round off

Table 8.21: Profit After Tax (PAT) of oil companies

(₹ Crore)

Companies	2019-20	2020-21	2021-22	2022-23	2023-24
PSU upstream/midstream companies					
ONGC	13464	11246	40306	38829	40526
OIL	2584	1742	3887	6810	5552
GAIL	6621	4890	10364	5302	8836
Total	22668	17878	54557	50941	54914
PSU downstream Oil Marketing Companies (OMCs)					
IOCL	1313	21836	24184	8242	39619
BPCL *	2683	19042	11363	1870	26674
HPCL	2637	10664	6383	-8974	14694
Total	6634	51542	41930	1138	80986
PSU stand alone refineries					
MRPL	-2740	-240	2955	2638	3596
CPCL	-2078	238	1342	3534	2711
NRL	1381	3036	3562	3703	2163
Total	-3437	3033	7859	9875	8470
PSU consultancy company					
EIL	430	260	344	342	357
Total	430	260	344	342	357
Private sector companies					
RIL **	30903	31944	39084	44190	42042
NEL	2518	467	1030	9592	#NA
Total	33421	32411	40114	53782	42042

Source: Published results/ information provided by oil companies.

Note: Financials are on standalone basis

** BPCL figures for 2022-23 includes BORL & BGRL also after its merger with BPCL. BPCL Figures for 2021-22 have been reinstated here after merger.

** RIL Figures for 2022-23 have been reinstated here after demerger.

#NA - Not Available



Table 8.22 : Financial details of major Oil & Gas Companies

(₹ in Crore)

2022-23										
Particulars	IOCL	BPCL	HPCL	ONGC	OIL	GAIL	MRPL	CPCL	NRL	RIL
(₹ Crore)										
Sales turnover	919649	532105	464684	154754	22369	143976	124686	90801	29785	578088
Profit Before Interest and Tax (PBIT)	16628	5433	(9783)	53095	9581	6896	5524	5139	4966	66751
Interest	6930	3216	2132	2700	724	312	1285	330	12	12633
Tax	1456	347	(2941)	11566	2047	1282	1600	1275	1250	11116
Profit After Tax (PAT)	8242	1870	(8974)	38829	6810	5302	2638	3534	3703	44190
Net worth	134758	51996	27713	257846	34365	55654	9835	6281	11427	479078
Borrowings (loan fund)	132495	35855	64517	7219	11161	14309	16707	4235	3262	215823
Ratios										
PAT as % of turnover (net sales)	0.90%	0.35%	-1.93%	25.09%	30.45%	3.68%	2.12%	3.89%	12.43%	7.64%
Debt (loan fund) to equity ratio	0.98	0.69	2.33	0.03	0.32	0.26	1.70	0.67	0.29	0.45
Earnings Per Share (EPS)	5.98	8.78	(63.26)	30.86	62.80	8.04	15.05	237.31	25.17	63.56

* RIL Figures for 2022-23 have been reinstated here after demerger.

(₹ in Crore)

2023-24										
Particulars	IOCL	BPCL	HPCL	ONGC	OIL	GAIL	MRPL	CPCL	NRL	RIL
(₹ Crore)										
Sales turnover	862099	505476	459815	137774	21596	130284	105190	79207	23731	574956
Profit Before Interest and Tax (PBIT)	59672	38021	21669	57098	7505	12252	6635	3883	2963	68703
Interest	7328	2473	2516	4081	760	697	1114	223	48	13430
Tax	12725	8875	4459	12490	1194	2718	1925	949	752	13231
Profit After Tax (PAT)	39619	26674	14694	40526	5552	8836	3596	2711	2163	42042
Net worth	176715	74675	41030	305977	44122	64179	13251	8593	13926	515096
Borrowings (loan fund)	116496	18767	60254	6109	11341	16413	12452	2762	8111	211790
Ratios										
PAT as % of turnover (net sales)	4.60%	5.28%	3.20%	29.41%	25.71%	6.78%	3.42%	3.42%	9.11%	7.31%
Debt (loan fund) to equity ratio	0.66	0.25	1.47	0.02	0.26	0.26	0.94	0.32	0.58	0.41
Earnings Per Share (EPS)	28.77	125.21	103.58	32.22	51.20	13.44	20.52	182.07	13.97	62.14

Source: Published results/ information provided by oil companies

Table 8.23 : Total subsidy on Petroleum Products & Natural Gas

(₹ in Crore)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24 (P)
PDS kerosene	1833	0	0	0	0
Domestic LPG	0	0	0	22000	0
Total under-recoveries (A)	1833	0	0	22000	0
Direct Benefit Transfer for LPG (DBTL) subsidy	22635	3559	0	823	1143
Project Management Expenditure (PME)*	91	99	242	32	84
Total DBTL related subsidies (B)	22726	3658	242	855	1227
Pradhan Mantri Ujjwala Yojana (PMUY) claims	1403	(34)	1569	6110	10217
Project Management Expenditure (PME) & Information Education and Communication (IEC) expenditure under PMUY*	43	110	0	0	0
Total PMUY related subsidy (C)	1446	76	1569	6110	10217
Direct Benefit Transfer of Kerosene (DBTK) subsidy (D)	42	0	0	0	
PMGKY (E)	0	8162	0	0	
Natural gas subsidy for North East	574	336	405	1354	1174
Scheme for Promotion of Flagging of Merchant Ships in India	0	0	22	76	78
Other subsidies (F)	574	336	427	1431	1253
Total subsidy/ under-recovery on petroleum products & natural gas (A+B+C+D+E+F)	26621	12231	2237	30396	12696

(P)- Provisional. Totals may not tally due to round off
*on payment basis.

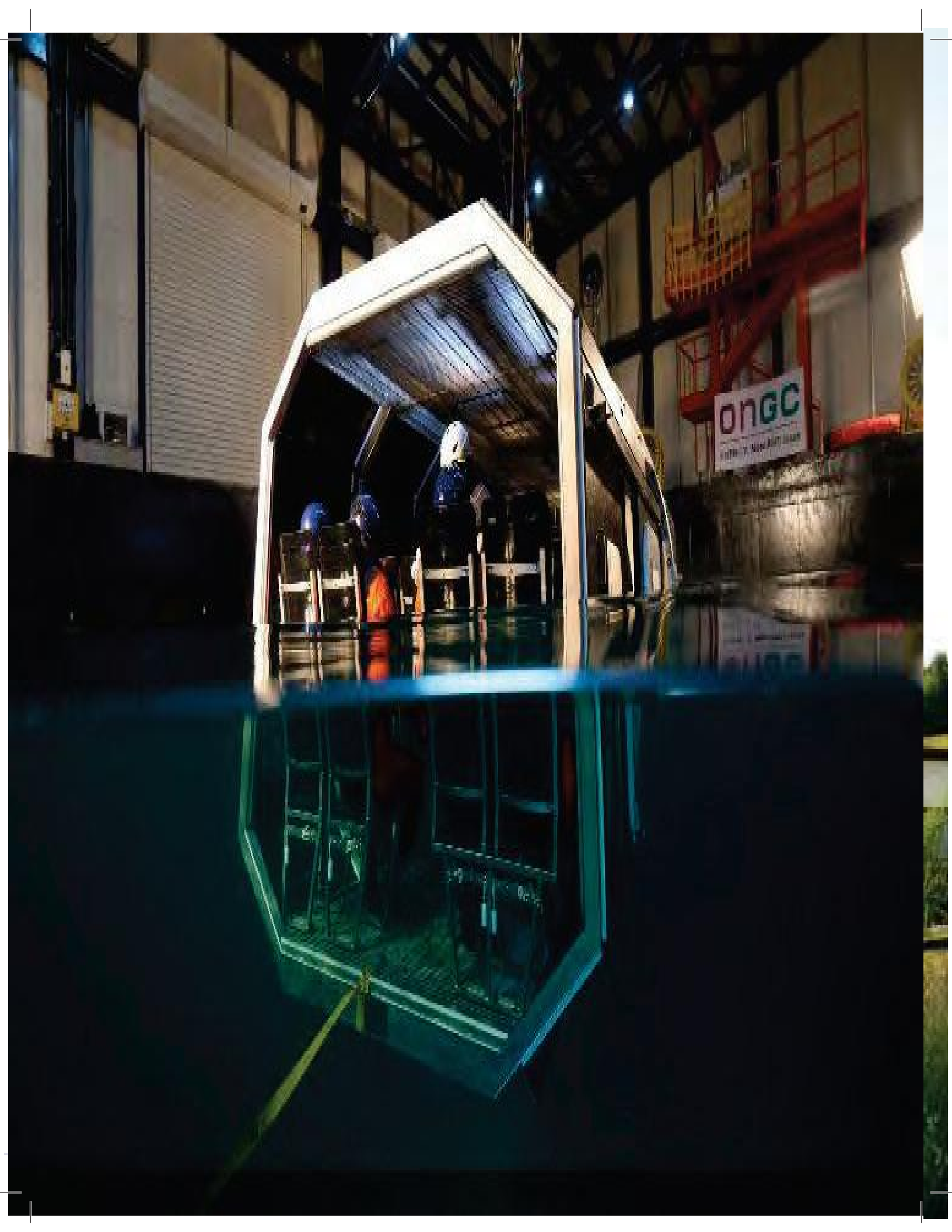
Note: 1. DBTK subsidy for 2019-20 is till Oct'19. The subsidy excludes cash incentive/assistance for establishment of institutional mechanism for direct transfer of subsidy paid to States/UTs.

Table 8.24 : Quantity and value of Indian crude oil imports

Year	Quantity (MMT)	Quantity (Million Bbl)	\$ Million	Rs. Crore	\$/bbl (approx)
2018-19	226.5	1660.2	1,11,915	7,83,183	67.4
2019-20	227.0	1663.6	1,01,376	7,17,001	60.9
2020-21	196.5	1440.1	62,248	4,59,779	43.2
2021-22	212.4	1556.8	1,20,675	9,01,262	77.5
2022-23	232.7	1705.7	1,57,531	12,60,372	92.4
2023-24 (P)	233.1	1708.8	1,32,838	11,00,589	77.7

“(P) Provisional
Conversion factor taken 1 MT = 7.33 bbl”





Chapter-9

Miscellaneous



Table 9.1 : Average international Calorific Values of different fuels

A.	Oil products	M Cals/tonne or K Cal/Kg
	NGL	12135
	Kerosene	10638
	Motor Gasoline	11135
	Fuel Oil	10440
B.	Natural gas production (average) - India	8000-9480 K cal/SCM
C.	India	M Cals/tonne or K Cal/Kg
	Charcoal	6900
	Hard coal	5000
	Firewood	4750
	Lignite-Brown coal	2310

Source: Indian Petroleum & Natural Gas Statistics, MOP&NG

Conversion factor: 1 K Cal = 4.19 K Joules

Conversion factors
Table 9.2 : Weight to volume conversion

Product	"Weight (MT)"	"Volume (KL)"	BBL	To convert volume at 29.5 °C to volume at 15 °C multiply by
Petrol	1	1.4110	8.88	0.9830
Diesel	1	1.2100	7.61	0.9879
Kerosene	1	1.2850	8.08	0.9864
ATF	1	1.2880	8.10	0.9862
Light Diesel Oil	1	1.1720	7.37	0.9877
Furnace Oil	1	1.0424	6.74	0.9899
Crude Oil	1	1.1700	7.33	

Note: Petrol and Diesel are as per BS-IV norms

Table 9.3 : Volume conversion

1 US Bbl.	159 Litres
1 US Gallon	3.78 Litres
1 Kilo Litre (KL)	6.29 Bbl.
1 US Bbl.	42 Gallons
1 MBD (million barrels per day)	50 MMTPA

Table 9.4 : Contents of LPG & Natural Gas

Natural Gas	Contains 60-95 % Methane
LPG	Contains Propane (40%) & Butane (60%)

Table 9.5 : Natural Gas Conversions

1 SCM (Standard Cubic Meter)	= 1 cubic metre @ 1 atmosphere pressure and 15.56 °C	
1 Cubic Metre	Station Heat Rate (SHR);~1720 Kcal/Kwh-NCV (50% Thermal Efficiency); Natural Gas GCV-@10000Kcal/SCM	
1 BCM(Billion Cubic Metre) / Year of gas (consumption or production)	= 2.74 MMSCMD	365 days a year
1 TCF (Trillion Cubic Feet) of Gas Reserve	= 3.88 MMSCMD	100% recoverable for 20 years @ 365 days / annum)
1 MMTPA of LNG	= 3.60 MMSCMD	Molecular weight of 18 @ 365 days/annum)
1 MT of LNG	= 1314 SCM	Molecular weight of 18
Gross Calorific Value (GCV)	= 10000 Kcal/ SCM	
Net Calorific Value (NCV)	= 90% of GCV	
1 Million BTU (MMBTU)	= 25.2 SCM	@10000 Kcal/SCM; 1 MMBTU= 252,000 Kcal)
Specific Gravity of Gas	= 0.62	Molecular weight of dry air=28.964 gm/mole)
Density of Gas	= 0.76 Kg/SCM	Molecular weight of gas 18 gm/mol
Gas required for 1 MW of Power generation	= 4541 SCM per day	Station Heat Rate (SHR);~1720 Kcal/Kwh-NCV (50% Thermal Efficiency); Natural Gas GCV-@10000Kcal/SCM
Power Generation from 1 MMSCMD Gas	= 220 MWH	Station Heat Rate (SHR);~1720 Kcal/Kwh-NCV (50% Thermal Efficiency); Natural Gas GCV-@10000Kcal/SCM

Source : GAIL (India) Ltd.

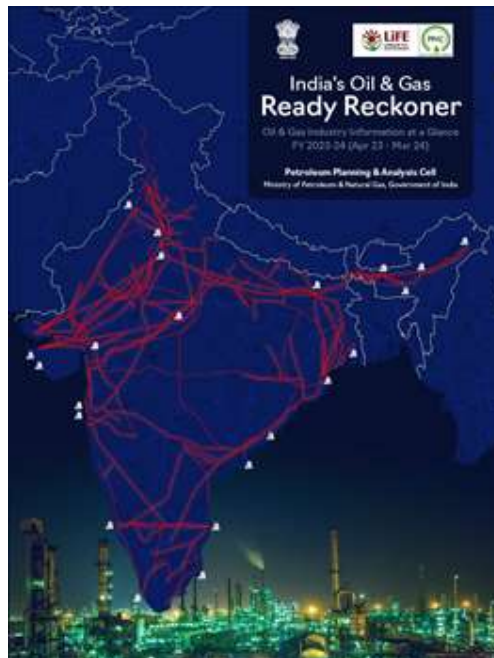
Table 9.6 : Major end use of petroleum products

Product	Major end use
LPG	Domestic and auto fuel. Also for industrial application where technically essential. Now permitted as auto fuel.
Naphtha	Feedstock/fuel for fertiliser units, feedstock for petrochemical sector and fuel for power plants.
MS	Fuel for passenger cars, taxis, two & three wheelers.
ATF	Fuel for aircrafts.
SKO	Fuel for cooking & lighting.
HSD	Fuel for transport sector (railways/road), agriculture (tractors, pumpsets, threshers, etc.) and captive power generation.
LDO	Fuel for agricultural pumpsets, small industrial units, start up fuel for power generation.
FO/LSHS	Secondary fuel for thermal power plants, fuel/feedstock for fertiliser plants, industrial units.
Bitumen	Surfacing of roads.
Lubes	Lubrication for automotive and industrial applications.
Petroleum coke	Fuel grade petcoke is used as fuel for cement kilns and electric power plants. Calcined petcoke is used to manufacture energy as well as in the aluminium, graphite electrode, steel, titanium dioxide and other carbon consuming industries.
Other products (Benzene, Toluene, MTO, LABFS, CBFS, Paraffin wax etc.)	Feedstock for value added products.

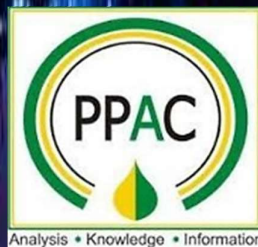


List of Abbreviations

BBL	Barrel	MMTPA	Million Metric Tonne Per Annum
BCM	Billion Cubic Meter	MoA	Ministry of Agriculture
BPCL	Bharat Petroleum Corporation Limited	MoC&I	Ministry of Commerce & Industry
BPRL	Bharat Petro Resources Limited	MoF	Ministry of Finance
CBM	Coal Bed Methane	MoP&NG	Ministry of Petroleum & Natural Gas
CBR	Cauvery Basin Refinery	MoSPI	Ministry of Statistics and Programme Implementation
CGD	City Gas Distribution	MRPL	Mangalore Refinery and Petrochemicals Limited
CNG	Compressed Natural Gas	Mtoe	Million tonnes of oil equivalent,
DBTL	Direct Benefit Transfer for LPG	NELP	New Exploration Licensing Policy
DGCIS	Directorate General of Commercial Intelligence and Statistics	NGLs	Natural Gas Liquids
DGH	Directorate General of Hydrocarbons	NRL	Numaligarh Refinery Limited
DSF	Discovered Small Field	OALP	Open Acreage Licensing Policy
EBP	Ethanol Blending Programme	OECD	Organisation for Economic Co-operation and Development
FBIL	Financial Benchmark India Private Limited	OIL	Oil India Limited
GA	Geographical Areas	OMCs	Oil Marketing Companies
GAIL	Gas Authority of India Limited	ONGC	Oil and Natural Gas Corporation Limited
GREP	Gas Rehabilitation and Expansion Project	OPEC	Organization of the Petroleum Exporting Countries
GRM	Gross Refining Margins	PDS	Public Distribution System
GSPL	Gujarat State Petronet Limited	PMUY	Pradhan Mantri Ujjwala Yojana
GST	Goods & Service Tax	PNG	Piped Natural Gas
HELP	Hydrocarbon Exploration and Licensing Policy	POL	Petroleum, Oil and Lubricants
HPCL	Hindustan Petroleum Corporation Limited	PPAC	Petroleum Planning & Analysis Cell
IEA	International Energy Agency	PSC	Production Sharing Contracts
IOCL	Indian Oil Corporation Limited	PSU	Public Sector Undertaking
KL	Kilo Litre	R/P ratio	Reserves-to-production ratio
LNG	Liquefied Natural Gas	RBI	Reserve Bank of India
LPG	Liquefied Petroleum Gas	SEZ	Special Economic Zone
MBN	MBTU/Bbl/NRGF	TCF	Trillion cubic feet
MBTU	Thousand British Thermal Unit	Toe	Tonnes of oil equivalent
MMBTU	Metric Million British Thermal Unit	WPI	Wholesale Price Index
MMSCMD	Million Standard Cubic Meter Per Day		
MMT	Million Metric Tonne		



The Cover of this edition designed by Kirti Vardhan Rathore, PR&CC, HPCL features a detailed map of India, highlighting the intricate network of pipelines and refineries that form the backbone of the country's energy infrastructure. The map is rendered in a striking dark blue, symbolizing the depth and importance of the energy sector, with red pipelines crisscrossing the landscape, visually representing the vital arteries that distribute fuel across the nation. At the bottom of the map, an overlay of a refinery signifies the critical role these facilities play in processing and delivering energy to various regions. This visual metaphor of the heart and arteries underscores the essential nature of oil and gas in powering the country's growth and development.



For any Information, please contact.

Director General

Petroleum Planning & Analysis Cell (PPAC)
(Ministry of Petroleum & Natural Gas, Govt. of India)

SCOPE Complex, 2nd Floor, Core 8,
Lodhi Road, New Delhi-110003

Tel.: 011-24306191/92, 011-24361314, www.ppac.gov.in