

PPAC's Snapshot of India's Oil & Gas data

Abridged Ready Reckoner

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

July 2022



Analysis • Knowledge • Information



Cover Page - 2nd generation (2G) Ethanol Plant of Indian Oil Corporation Ltd at Panipat, Haryana dedicated to the nation by Hon'ble Prime Minister of India on 10th August, 2022.

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As on 17.08.2022

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

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

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

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Highlights for the month

- The consumption of petroleum products during April-July 2022 with a volume of 72.7 MMT reported a growth of 14.0% compared to the volume of 63.8 MMT during the same period of the previous year. This growth was led by 23.1% growth in MS, 17.4% in HSD & about 85.6% in ATF consumption during the quarter. The consumption of petroleum products during July 2022 recorded a growth of 6.1% with a volume of 17.6 MMT compared to the same period of the previous year.
- Indigenous crude oil and condensate production during July 2022 was down by 3.8 % than that of July 2021 as compared to a de-growth of 1.7 % during June 2022. OIL registered a growth of 4.1 % and ONGC registered a de-growth of 1.7 % during July 2022 as compared to July 2021. PSC registered de-growth of 12.3 % during July 2022 as compared to July 2021. De-growth of 0.5 % was registered in the total crude oil and condensate production during April - July 2022 over the corresponding period of the previous year.
- Total Natural Gas Consumption (including internal consumption) for the month of July 2022 was 5382 MMSCM which was 1.5% lower than the corresponding month of the previous year. The cumulative consumption of 21123 MMSCM for the current year till July 2022 was lower by 2.2% compared with the corresponding period of the previous year.
- Crude oil processed during July 2022 was 21.4 MMT, which was 10.5 % higher than July 2021. Growth of 13.8 % was registered in the total crude oil processing during April- July 2022 over the corresponding period of the previous year.
- Production of petroleum products saw a growth of 6.2 % during July 2022 over July 2021. Growth of 11.7 % was registered in the total POL production during April- July 2022 over the corresponding period of the previous year.
- Ethanol blending with Petrol was 10.33% during June 2022 and cumulative ethanol blending during December 2021- July 2022 was 10.16%.

<ul style="list-style-type: none"> Gross production of natural gas for the month of July 2022 was 2883 MMSCM which was lower by 0.4% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 11436 MMSCM for the current financial year till July 2022 was higher by 3.4% compared with the corresponding period of the previous year.
<ul style="list-style-type: none"> LNG import for the month of June 2022 (P) was 2571 MMSCM which was 2.7 % lower than the corresponding month of the previous year. The cumulative import of 9971 MMSCM for the current year till July 2022 was lower by 7.9% compared with the corresponding period of the previous year.
<ul style="list-style-type: none"> Crude oil imports increased by 35.4% and 21.3% during July 2022 and April-July 2022 respectively as compared to the corresponding period of the previous year. The net import bill for oil & gas was \$14.9 billion in July 2022 compared to \$8.0 billion in July 2021. In this the crude oil imports constitutes \$16.1 billion, LNG imports \$1.2 billion and the exports were \$4.9 billion during July 2022.
<ul style="list-style-type: none"> POL products imports increased by 5.3% and 15.0% during July 2022 and April-July 2022 respectively as compared to the corresponding period of the previous year. Increase in POL products imports during April-July 2022 were due to increase in imports of all products except naphtha, fuel oil and bitumen etc.
<ul style="list-style-type: none"> Exports of POL products decreased by 0.3% and increased by 6.8% during July 2022 and April-July 2022 respectively as compared to the corresponding period of the previous year. Increase in POL products exports during April-July 2022 (P) were due to increase in exports of all products except superior kerosene oil (SKO), fuel oil (FO) and vacuum gas oil (VGO) etc.
<ul style="list-style-type: none"> The price of Brent Crude averaged \$112.70/bbl during July 2022 as against \$123.70/bbl during June 2022 and \$75.03/bbl during July 2021. The Indian basket crude price averaged \$105.49/bbl during July 2022 as against \$116.01/bbl during June 2022 and \$73.54 /bbl during July 2021.



PART-A

Economic Indicators

GROSS DOMESTIC PRODUCT
GDP

1. Selected indicators of the Indian economy

Economic indicators		Unit/ Base	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
1	Population (Census 2011)	Billion	1.2	-	-	-	-	-
2	GDP at constant (2011-12 Prices)	Growth %	6.8 3rd RE	6.5 2nd RE	4.0 1st RE	-6.6 1st RE	8.7 PE (2021-22)	7.2 E (RBI)
3	Agricultural Production (Food grains)	MMT	285.0	285.2	297.5	310.7	315.7 4th AE	-
		Growth %	3.6	0.1	4.3	4.5	1.6	-
4	Gross Fiscal Deficit (as percent of GDP)	%	3.5	3.4	4.6	9.5 RE	6.8 BE	6.4 BE

Economic indicators		Unit/ Base	2020-21	2021-22 (P)	July		April-July	
					2021-22	2022-23 (P)	2021-22	2022-23 (P)
5	Index of Industrial Production (Base: 2011-12)	Growth %	-8.4	11.4	13.8*	12.3* QE	44.4#	12.7#
6	Imports [^]	\$ Billion	394.4	611.9	46.2	66.3	173.1	256.4
7	Exports [^]	\$ Billion	291.8	419.7	35.5	36.3	131.1	157.4
8	Trade Balance	\$ Billion	-102.6	-192.2	-10.6	-30.0	-42.1	-99.0
9	Foreign Exchange Reserves [@]	\$ Billion	579.3	617.6	620.6	573.9	-	-

IIP is for the month of *June and #April-June; [@]2020-21-as on March 26, 2021, 2021-22 - as on March 26, 2022, July 2021 as on July 30, 2021 and July 2022-as on July 29, 2022; [^]Imports & Exports are for Merchandise; E: Estimates; PE: Provisional Estimates; AE-Advanced Estimates; RE-Revised Estimates; QE-Quick Estimates.

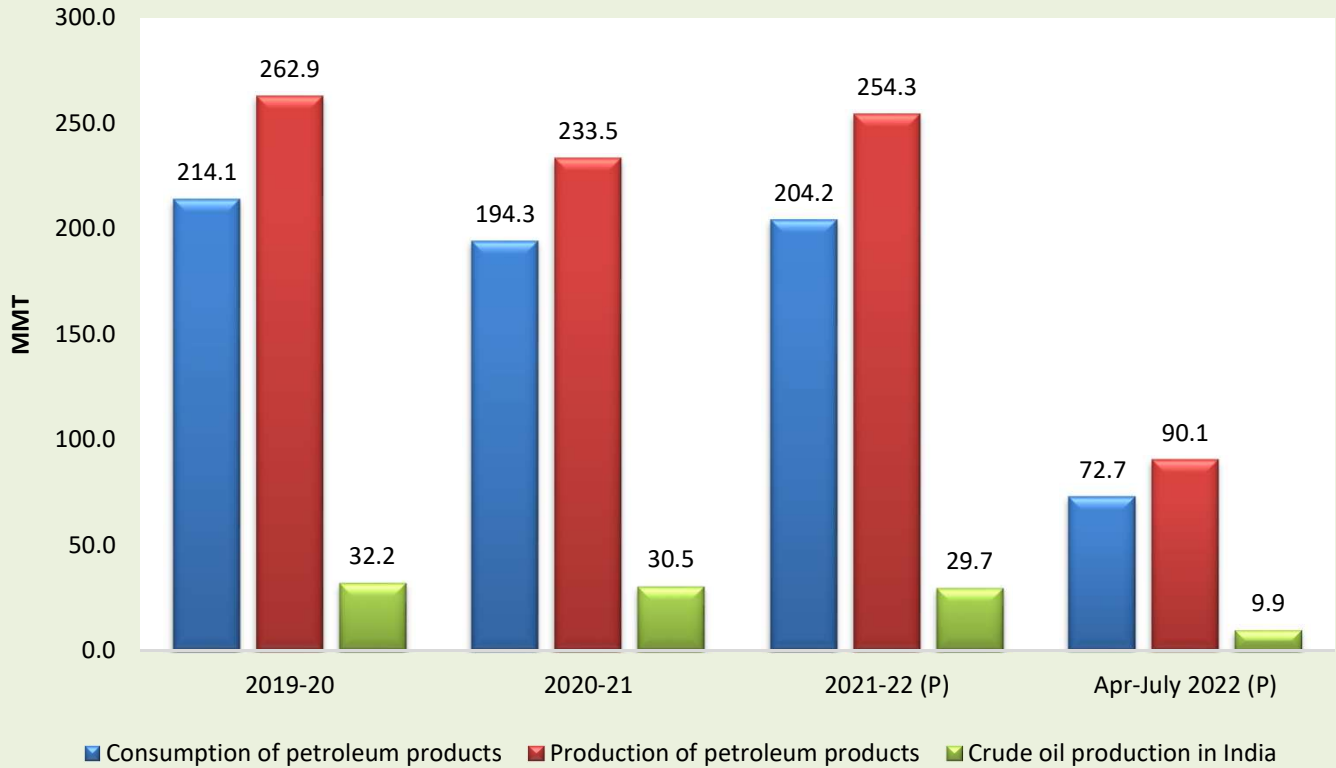
Source: Ministry of Commerce & Industry, Ministry of Statistics and Programme Implementation, Ministry of Agriculture & Farmer's Welfare, Ministry of Finance, Reserve Bank of India

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

Details		Unit/ Base	2020-21	2021-22 (P)	July		April-July	
					2021-22 (P)	2022-23 (P)	2021-22 (P)	2022-23 (P)
1	Crude oil production in India [#]	MMT	30.5	29.7	2.5	2.5	10.0	9.9
2	Consumption of petroleum products*	MMT	194.3	204.2	16.6	17.6	63.8	72.7
3	Production of petroleum products	MMT	233.5	254.3	20.7	22.0	80.7	90.1
4	Gross natural gas production	MMSCM	28,672	34,024	2,894	2,883	11,062	11,436
5	Natural gas consumption	MMSCM	60,815	63,907	5,463	5,382	21,602	21,123
6	Imports & exports:							
	Crude oil imports	MMT	196.5	212.0	15.0	20.3	66.4	80.6
		\$ Billion	62.2	120.4	8.0	16.1	33.1	63.9
	Petroleum products (POL) imports*	MMT	43.2	42.1	3.5	3.7	12.4	14.2
		\$ Billion	14.8	25.2	1.9	2.5	6.4	10.1
	Gross petroleum imports (Crude + POL)	MMT	239.7	254.0	18.6	24.1	78.8	94.8
		\$ Billion	77.0	145.7	9.9	18.6	39.5	74.0
	Petroleum products (POL) export	MMT	56.8	62.7	4.7	4.7	19.9	21.2
		\$ Billion	21.4	44.4	2.9	4.9	11.8	23.6
	LNG imports*	MMSCM	33,031	30,776	2,644	2,571	10,825	9,971
		\$ Billion	7.9	13.4	1.0	1.2	3.3	4.5
	Net oil & gas imports	\$ Billion	63.5	114.7	8.0	14.9	31.0	54.9
7	Petroleum imports as percentage of India's gross imports (in value terms)	%	19.5	23.8	21.5	28.0	22.8	28.9
8	Petroleum exports as percentage of India's gross exports (in value terms)	%	7.3	10.6	8.2	13.4	9.0	15.0
9	Import dependency of crude oil (on POL consumption basis)	%	84.4	85.6	84.7	86.2	85.0	86.4

#Includes condensate; *Private direct imports are prorated for the period April'22 to July'22 for POL & Natural Gas. RIL Data prorated for month of July 2022; Total may not tally due to rounding off.

Crude Oil & Petroleum Products (MMT)





PART-B

Crude Oil, Refining & Production

3. Indigenous crude oil production (Million Metric Tonnes)

Details	2020-21	2021-22 (P)	July			April-July		
			2021-22 (P)	2022-23 Target*	2022-23 (P)	2021-22 (P)	2022-23 Target*	2022-23 (P)
ONGC	19.1	18.5	1.6	1.6	1.6	6.2	6.4	6.3
Oil India Limited (OIL)	2.9	3.0	0.3	0.3	0.3	1.0	1.1	1.0
Private / Joint Ventures (JVs)	7.1	7.0	0.6	0.8	0.5	2.4	2.6	2.2
Total Crude Oil	29.1	28.4	2.4	2.7	2.3	9.5	10.1	9.5
ONGC condensate	1.1	0.9	0.08	0.0	0.1	0.3	0.0	0.3
PSC condensate	0.3	0.30	0.03	0.0	0.03	0.10	0.0	0.09
Total condensate	1.4	1.2	0.11	0.0	0.1	0.4	0.0	0.4
Total (Crude + Condensate) (MMT)	30.5	29.7	2.5	2.7	2.5	10.0	10.1	9.9
Total (Crude + Condensate) (Million Bbl/Day)	0.61	0.60	0.60	0.65	0.58	0.60	0.61	0.60

*Provisional targets inclusive of condensate.

4. Domestic oil & gas production vis-à-vis overseas production

Details	2020-21	2021-22 (P)	July		April-July	
			2021-22 (P)	2022-23 (P)	2021-22 (P)	2022-23 (P)
Total domestic production (MMTOE)	59.2	63.7	5.4	5.3	21.0	21.3
Overseas production (MMTOE)	21.9	21.7	1.9	1.6	7.3	6.5
Overseas production as percentage of domestic production	37.0%	34.1%	34.4%	30.1%	34.8%	30.3%

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

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

Details		2020-21	2021-22 (P)	July		April-July	
				2021-22 (P)	2022-23 (P)	2021-22 (P)	2022-23 (P)
1	High Sulphur crude	161.4	185.0	14.7	17.1	57.4	68.2
2	Low Sulphur crude	60.3	56.7	4.7	4.3	19.2	19.0
Total crude processed (MMT)		221.8	241.7	19.4	21.4	76.6	87.2
Total crude processed (Million Bbl/Day)		4.45	4.85	4.58	5.07	4.60	5.24
Percentage share of HS crude in total crude oil processing		72.8%	76.5%	75.6%	79.8%	74.9%	78.2%

6. Quantity and value of crude oil imports

Year	Quantity (MMT)	\$ Million	Rs. Crore
2020-21	196.5	62,248	4,59,779
2021-22 (P)	212.0	120,445	8,99,312
April-July 2022(P)	80.6	63,925	4,96,100

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

Particulars		2020-21	2021-22 (P)	July		April-July	
				2021-22 (P)	2022-23 (P)	2021-22 (P)	2022-23 (P)
1	Indigenous crude oil processing	28.0	27.1	2.3	2.2	8.8	9.3
2	Products from indigenous crude (93.3% of crude oil processed)	26.1	25.3	2.2	2.1	8.2	8.7
3	Products from fractionators (Including LPG and Gas)	4.2	4.1	0.4	0.3	1.4	1.2
4	Total production from indigenous crude & condensate (2 + 3)	30.3	29.3	2.5	2.4	9.5	9.9
5	Total domestic consumption	194.3	204.2	16.6	17.6	63.8	72.7
% Self-sufficiency (4 / 5)		15.6%	14.4%	15.3%	13.8%	15.0%	13.6%

8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)

Sl. no.	Refinery	Installed capacity (01.01.2022) MMTPA	Crude oil processing (MMT)							
			2020-21	2021-22 (P)	July			April-July		
					2021-22 (P)	2022-23 (Target)	2022-23 (P)	2021-22 (P)	2022-23 (Target)	2022-23 (P)
1	Barauni (1964)	6.0	5.5	5.6	0.6	0.6	0.6	2.0	2.0	2.3
2	Koyali (1965)	13.7	11.6	13.5	1.1	1.2	1.3	4.2	4.5	5.3
3	Haldia (1975)	8.0	6.8	7.3	0.6	0.7	0.7	2.6	2.8	2.8
4	Mathura (1982)	8.0	8.9	9.1	0.7	0.7	0.7	2.9	3.1	3.2
5	Panipat (1998)	15.0	13.2	14.8	1.3	0.9	1.2	5.0	4.8	4.8
6	Guwahati (1962)	1.0	0.8	0.7	0.00	0.1	0.1	0.06	0.3	0.4
7	Digboi (1901)	0.65	0.6	0.7	0.06	0.06	0.06	0.2	0.2	0.2
8	Bongaigaon(1979)	2.70	2.5	2.6	0.2	0.2	0.2	0.9	0.8	0.8
9	Paradip (2016)	15.0	12.5	13.2	1.1	0.0	1.3	4.5	3.9	5.3
	IOCL-TOTAL	70.1	62.4	67.7	5.7	4.4	6.2	22.4	22.5	25.1
10	Manali (1969)	10.5	8.2	9.0	0.8	0.9	1.0	2.9	3.4	3.9
11	CBR (1993)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CPCL-TOTAL	10.5	8.2	9.0	0.8	0.9	1.0	2.9	3.4	3.9
12	Mumbai (1955)	12.0	12.9	14.4	1.3	1.1	0.7	4.7	4.3	4.1
13	Kochi (1966)	15.5	13.3	15.4	1.1	1.4	1.4	4.4	5.5	5.5
14	Bina (2011)	7.8	6.2	7.4	0.6	0.6	0.6	2.2	2.7	2.6
	BPCL-TOTAL	35.3	32.4	37.2	3.0	3.1	2.7	11.3	12.5	12.3
15	Numaligarh (1999)	3.0	2.7	2.6	0.2	0.2	0.3	0.9	1.0	1.0

Sl. no.	Refinery	Installed capacity (1.01.2022) (MMTPA)	Crude oil processing (MMT)							
			2020-21	2021-22 (P)	July			April-July		
					2021-22 (P)	2022-23 (Target)	2022-23 (P)	2021-22 (P)	2022-23 (Target)	2022-23 (P)
16	Tatipaka (2001)	0.066	0.081	0.075	0.003	0.006	0.005	0.023	0.019	0.025
17	MRPL-Mangalore (1996)	15.0	11.5	14.9	1.1	1.3	1.4	4.2	5.1	5.8
	ONGC-TOTAL	15.1	11.6	14.9	1.1	1.3	1.4	4.2	5.1	5.8
18	Mumbai (1954)	9.5	7.4	5.6	0.3	0.8	0.9	0.8	3.0	3.3
19	Visakh (1957)	8.3	9.1	8.4	0.5	0.8	0.7	2.5	2.8	3.1
20	HMEL-Bathinda (2012)	11.3	10.1	13.0	1.1	1.0	1.1	4.3	3.8	4.3
	HPCL- TOTAL	29.1	26.5	27.0	1.9	2.5	2.7	7.6	9.6	10.7
21	RIL-Jamnagar (DTA) (1999)	33.0	34.1	34.8	2.7	2.7	2.9	11.0	11.0	12.0
22	RIL-Jamnagar (SEZ) (2008)	35.2	26.8	28.3	2.3	2.3	2.5	9.7	9.7	9.6
23	NEL-Vadinar (2006)	20.0	17.1	20.2	1.7	1.7	1.7	6.7	6.7	6.8
All India (MMT)		251.2	221.8	241.7	19.4	19.2	21.4	76.6	81.5	87.2
All India (Million Bbl/Day)		5.02	4.45	4.85	4.58	4.54	5.07	4.60	4.90	5.24

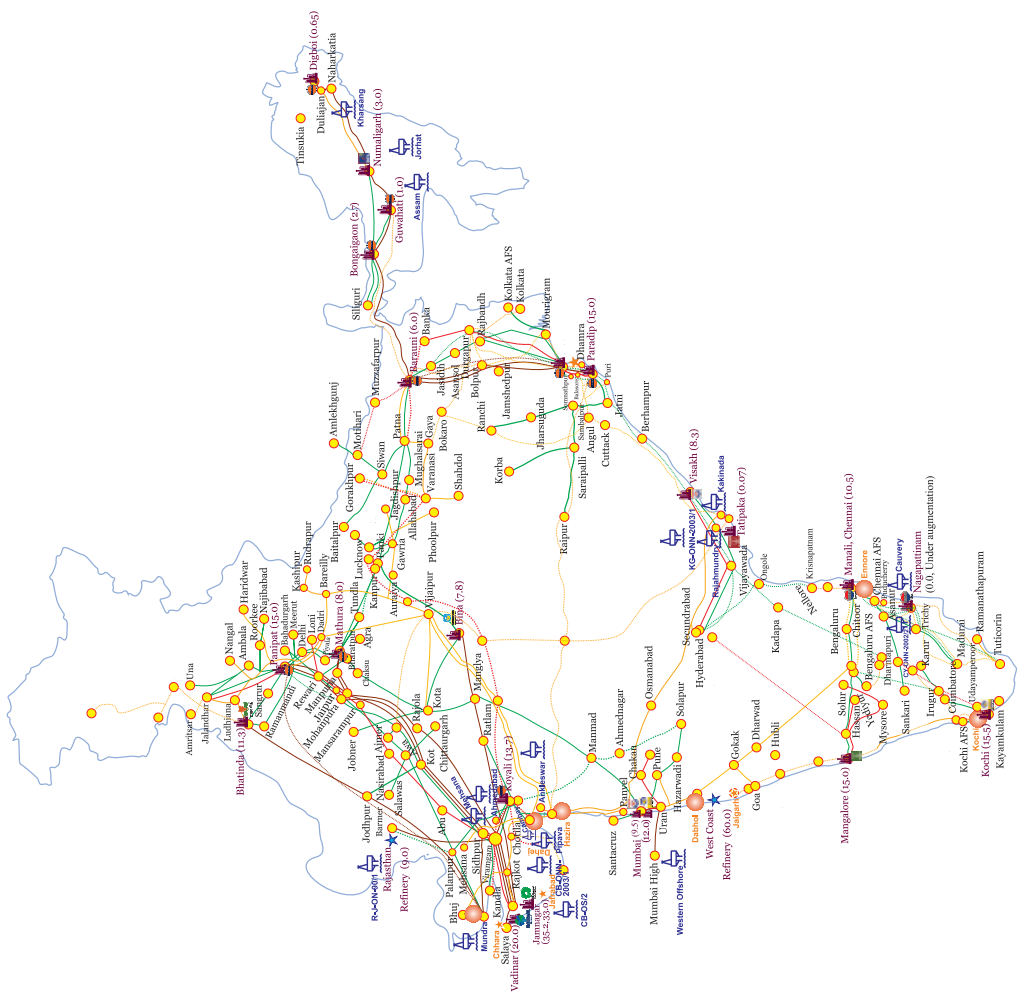
Note: Provisional Targets; Some sub-totals/ totals may not add up due to rounding off at individual levels.

9. Major crude oil and product pipeline network (as on 01.08.2022)

Details		ONGC	OIL	Cairn	HMEL	IOCL	BPCL	HPCL	Others*	Total
Crude Oil	Length (KM)	1,284	1,193	688	1,017	5,301	937			10,420
	Cap (MMTPA)	60.6	9.0	10.7	11.3	48.6	7.8			147.9
Products	Length (KM)		654			9,406	2,596	3,775	2,386	18,817
	Cap (MMTPA)		1.7			48.0	23.0	34.1	9.4	116.2

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

OIL & GAS MAP OF INDIA



LEGENDS

- Refineries
- Refineries (Capacity in MMTPA)
- Producing Fields
- Major Producing Fields
- LNG Terminals
- Dabhol, Daheji, Hazira, Kochi, Mundra, Ennore
- (Upcoming Terminals) Dharma, Jirafabad, Jaigarh, Chhara

LEGENDS

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



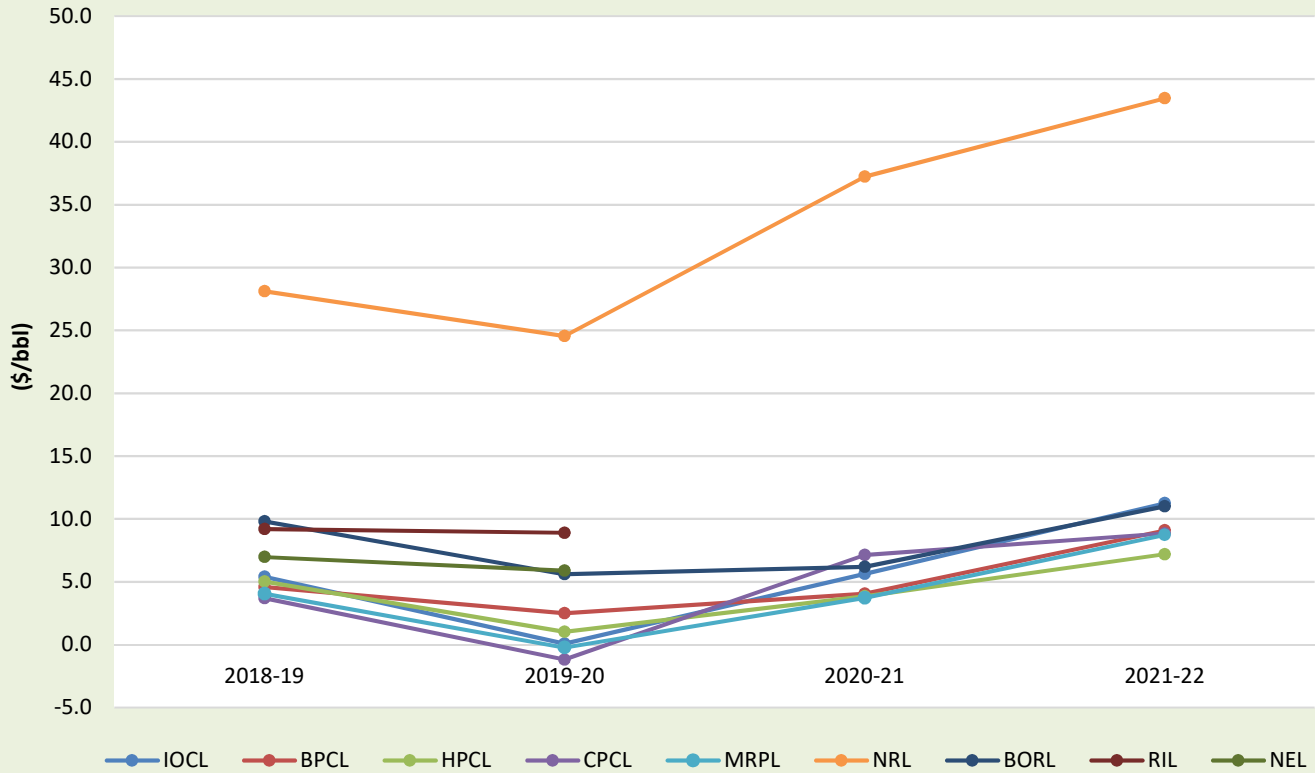
10. Gross Refining Margins (GRM) of refineries (\$/bbl)

Company	2018-19	2019-20	2020-21	2021-22
IOCL [#]	5.41	0.08	5.64	11.25
BPCL	4.58	2.50	4.06	9.09
HPCL	5.01	1.02	3.86	7.19
CPCL	3.70	-1.18	7.14	8.85
MRPL	4.06	-0.23	3.71	8.72
NRL [#]	28.11	24.55	37.23	43.46
BORL	9.80	5.60	6.20	11.00
RIL	9.20	8.90	*	*
NEL	6.97	5.88	*	*

GRM of North Eastern refineries are including excise duty benefit

*Not available

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



GRM of North Eastern refineries are including excise duty benefit



PART-C

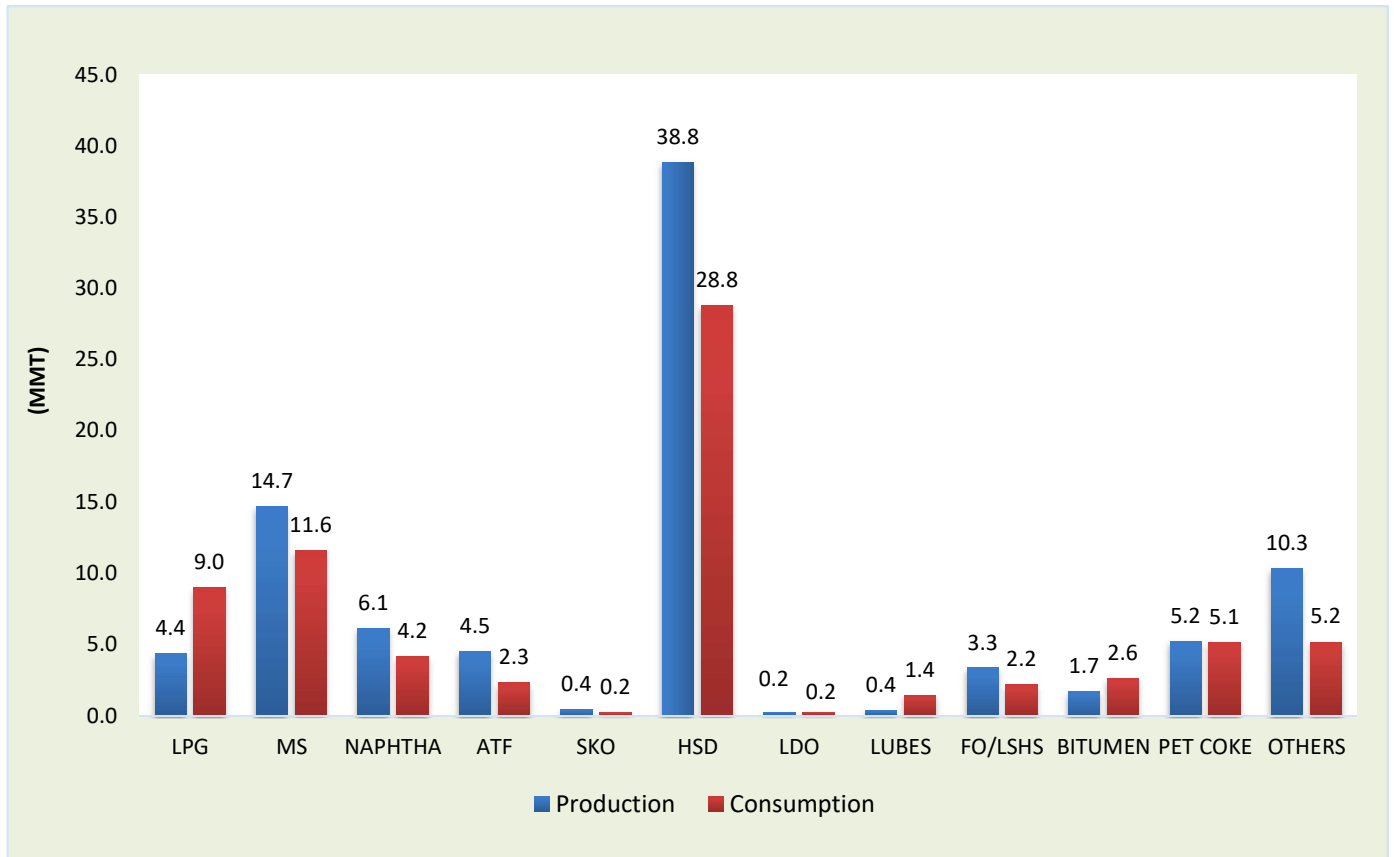
Consumption

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

Products	2020-21		2021-22 (P)		July 2021		July 2022 (P)		Apr-July 2021		Apr-July 2022 (P)	
	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons
LPG	12.1	27.6	12.2	28.3	1.0	2.4	1.1	2.4	4.0	8.9	4.4	9.0
MS	35.8	28.0	40.2	30.8	3.2	2.6	3.6	2.8	12.3	9.4	14.7	11.6
NAPHTHA	19.4	14.1	19.9	14.3	1.7	1.2	1.4	1.1	6.6	4.9	6.1	4.2
ATF	7.1	3.7	10.3	5.0	0.6	0.3	1.2	0.6	2.8	1.3	4.5	2.3
SKO	2.4	1.8	1.9	1.5	0.2	0.1	0.1	0.0	0.6	0.5	0.4	0.2
HSD	100.4	72.7	107.1	76.7	8.9	6.1	9.3	6.6	34.3	24.5	38.8	28.8
LDO	0.7	0.9	0.8	1.0	0.05	0.08	0.08	0.06	0.3	0.3	0.2	0.2
LUBES	1.1	4.1	1.2	4.6	0.1	0.3	0.1	0.3	0.3	1.3	0.4	1.4
FO/LSHS	7.4	5.6	8.9	6.3	0.7	0.5	0.9	0.6	2.7	1.9	3.3	2.2
BITUMEN	4.9	7.5	4.7	7.9	0.3	0.4	0.2	0.4	1.7	2.5	1.7	2.6
PET COKE	12.0	15.6	14.7	15.8	1.3	1.3	1.3	1.3	4.7	4.4	5.2	5.1
OTHERS	30.2	12.8	32.2	12.1	2.7	1.2	2.6	1.3	10.4	3.8	10.3	5.2
ALL INDIA	233.5	194.3	254.3	204.2	20.7	16.6	22.0	17.6	80.7	63.8	90.1	72.7
Growth (%)	-11.0%	-8.9%	8.9%	5.1%	6.7%	6.5%	6.2%	6.1%	13.1%	13.1%	11.7%	14.0%

Note: Prod - Production; Cons - Consumption

Petroleum Products: April-July 2022 (P) (MMT)



12. Kerosene allocation vs upliftment (Kilo Litres)								
Product	2019-20		2020-21		2021-22		2022-23 (P)*	
	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment	Allocation	Upliftment
PDS Kerosene	31,21,328	27,93,217	23,15,008	20,38,790	17,83,344	16,59,906	7,45,224	1,87,457

* Allocation is for Q1 & Q2, 2022-23 and upliftment is for Apr-July 2022

13. Ethanol blending programme					
Particulars	Ethanol Supply Year *				
	2018-19	2019-20	2020-21	2021-22 (P)	
				July-22	Dec'21-July'22
Ethanol received by PSU OMCs under EBP Program (in Cr. Litrs)	188.6	173.0	296.1	36.4	299.1
Ethanol blended under EBP Program (in Cr. Litrs)	191.2	170.5	302.3	38.4	293.0
Average Percentage of Blending Sales (EBP%)	5.0%	5.0%	8.1%	10.3%	10.2%

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

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

14. Industry marketing infrastructure (as on 01.08.2022) (Provisional)								
Particulars	IOCL	BPCL	HPCL	RIL/RBML/RSIL	NEL	SHELL	Others	Total
POL Terminal/ Depots (Nos.) ^S	122	82	81	18	3		6	312
Aviation Fuel Stations (Nos.) [@]	128	61	52	30			2	273
Retail Outlets (total) (Nos.) ^A	34,904	20,259	20,252	1,470	6,640	327	36	83,888
out of which Rural ROs	11,188	4,945	4,991	130	2,167	85	10	23,516
SKO/LDO agencies (Nos.)	3,871	927	1,638					6,436
LPG Distributors (total) (Nos.) (PSUs only)	12,831	6,227	6,250					25,308
LPG Bottling plants (Nos.) (PSUs only) [#]	93	54	53				3	203
LPG Bottling capacity (TMTPA) (PSUs only) ^{&}	10,418	4,950	6,170				203	21,741
LPG active domestic consumers (Nos. crore) (PSUs only)	14.5	8.0	8.6					31.1

^S(Others=4 MRPL & 2 NRL); [@](Others=ShellMRPL); ^A(Others=36 MRPL); [#](Others=NRL-1, OIL-1, CPCL-1); [&](Others=NRL-60, OIL-23, CPCL-120); RBML- Reliance BP Mobility Limited; RSIL- RBML Solutions India Ltd.

Industry Alternate fuel infrastructure at Retail outlets (Nos. of ROs as on 01.08.2022) (Provisional)			
Alternate fuel	PSU	Private	Total
CNG_LNG	3886	38	3924
EV Charging	3632	17	3649
Auto LPG	571	123	694
Compressed Bio-Gas (standalone CBG outlets CBG)	48	0	48
Total	8089	178	8267



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PART-D

LPG

15. LPG consumption (Thousand Metric Tonne)								
LPG category	2020-21	2021-22	July			April-July		
			2021-22	2022-23 (P)	Growth (%)	2021-22	2022-23 (P)	Growth (%)
1. PSU Sales :								
LPG-Packed Domestic	25,128.1	25,501.6	2,115.9	2,157.1	1.9%	8,121.6	8,087.5	-0.4%
LPG-Packed Non-Domestic	1,886.0	2,238.8	195.7	202.0	3.2%	592.3	703.6	18.8%
LPG-Bulk	361.9	390.9	33.6	35.3	4.8%	119.2	117.0	-1.8%
Auto LPG	118.4	122.0	11.6	9.2	-20.3%	33.6	37.2	10.7%
Sub-Total (PSU Sales)	27,494.3	28,253.3	2,356.8	2,403.6	2.0%	8,866.7	8,945.3	0.9%
2. Direct Private Imports*	64.2	82.0	12.83	6.4	-50.4%	30.2	25.4	-15.9%
Total (1+2)	27,558.4	28,335.3	2,369.6	2,410.0	1.7%	8,896.9	8,970.7	0.8%

*Apr -June 2022 DGCIS data is prorated

16. LPG marketing at a glance														
Particulars (As on 1st of April)	Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	1.08.22 (P)
LPG Active Domestic Customers	(Lakh)					1486	1663	1988	2243	2654	2787	2895	3053	3109
	Growth						11.9%	19.6%	12.8%	18.3%	5.0%	3.9%	5.5%	6.7%
LPG Coverage (Estimated)	(Percent)					56.2	61.9	72.8	80.9	94.3	97.5	99.8	-	-
	Growth						10.1%	17.6%	11.1%	16.5%	3.4%	2.3%	-	-
PMUY Beneficiaries	(Lakh)							200	356	719	802	800.4	899.0	944.2
	Growth								77.7%	101.9%	11.5%	-0.2%	12.2%	17.8%
LPG Distributors	(No.)	10541	11489	12610	13896	15930	17916	18786	20146	23737	24670	25083	25269	25308
	Growth	8.8%	9.0%	9.8%	10.2%	14.6%	12.5%	4.9%	7.2%	17.8%	3.9%	1.7%	0.7%	0.7%
Auto LPG Dispensing Stations	(No.)	604	652	667	678	681	676	675	672	661	657	651	601	571
	Growth	12.7%	7.9%	2.3%	1.6%	0.4%	-0.7%	-0.1%	-0.4%	-1.6%	-0.6%	-0.9%	-8.5%	-13.1%
Bottling Plants	(No.)	183	184	185	187	187	188	189	190	192	196	200	202	203
	Growth	0.5%	0.5%	0.5%	1.1%	0.0%	0.5%	0.5%	0.5%	1.1%	2.1%	2.0%	1.0%	2.0%

Source: PSU OMCs (IOCL, BPCL and HPCL)

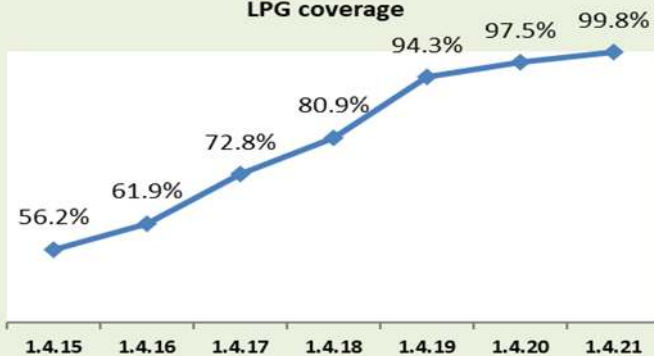
1. Growth rates as on 01.08.2022 are with respect to figs as on 01.08.2021. Growth rates as on 1 April of any year are with respect to figs as on 1 April of previous year.

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

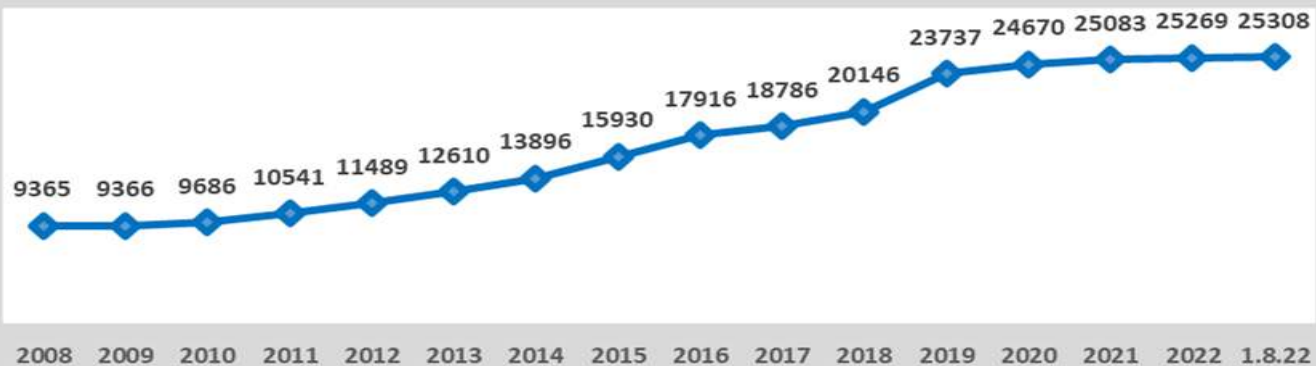
No. of active LPG domestic customers (In Crore)



LPG coverage



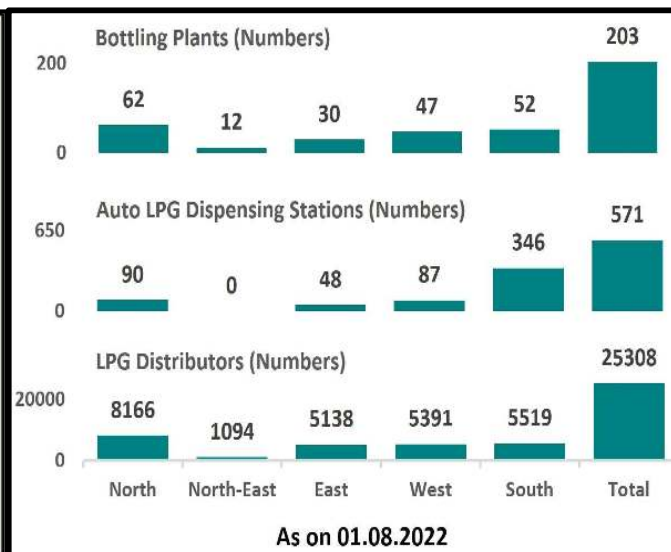
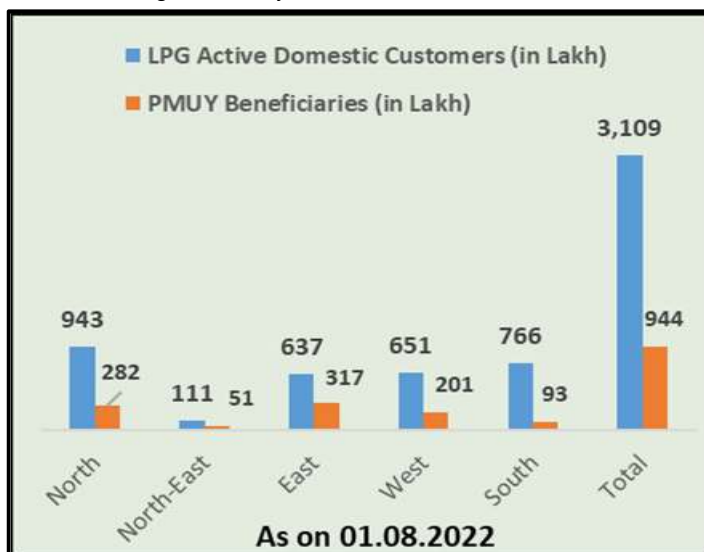
Growth trend in LPG distributors



17-Region-wise data on LPG marketing (As on 01.08.2022)

Particulars	North	North-East	East	West	South	Total
LPG Active Domestic Customers (in Lakh)	943.5	111.1	636.6	651.5	766.1	3108.8
PMUY Beneficiaries (in Lakh)	282.0	51.0	317.2	201.4	92.6	944.2
LPG Distributors (Numbers)	8166	1094	5138	5391	5519	25308
Auto LPG Dispensing Stations (Numbers)	90	0	48	87	346	571
Bottling Plants* (Numbers)	62	12	30	47	52	203

*Includes Numaligarh BP, Duliajan BP and CPCL BP.





PART-E

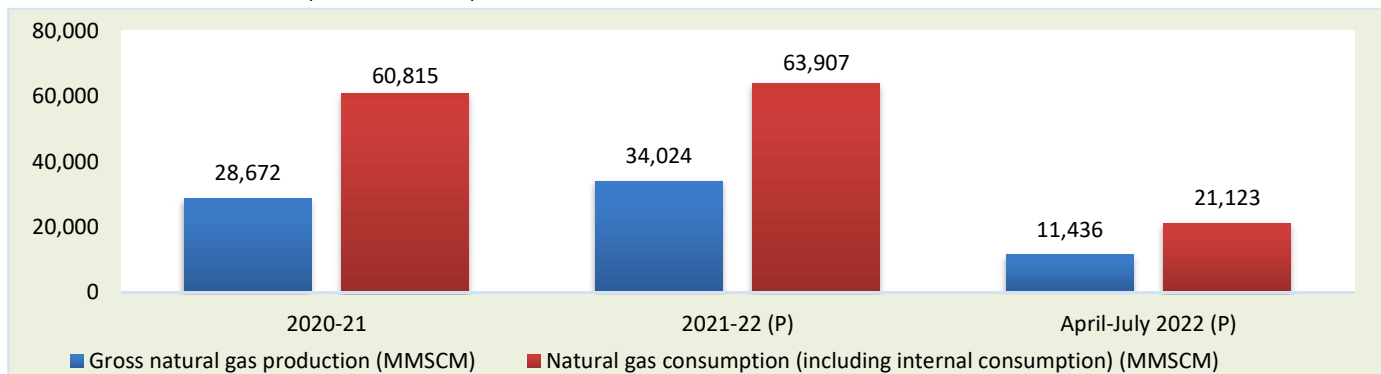
Natural Gas

18. Natural gas at a glance

(MMSCM)

Details	2020-21 (P)	2021-22 (P)	July			April-July		
			2021-22 (P)	2022-23 (Target)	2022-23 (P)	2021-22 (P)	2022-23 (Target)	2022-23 (P)
(a) Gross production	28,672	34,024	2,894	2,982	2,883	11,062	11,766	11,436
- ONGC	21,872	20,629	1,731	1,697	1,663	6,783	6,774	6,749
- Oil India Limited (OIL)	2,480	2,893	248	316	263	924	1,241	1,005
- Private / Joint Ventures (JVs)	4,321	10,502	915	968	957	3,356	3,751	3,681
(b) Net production (excluding flare gas and loss)	27,784	33,131	2,819		2,811	10,776		11,152
(c) LNG import [#]	33,031	30,776	2,644		2,571	10,825		9,971
(d) Total consumption including internal consumption (b+c)	60,815	63,907	5,463		5,382	21,602		21,123
(e) Total consumption (in BCM)	60.8	63.9	5.5		5.4	21.6		21.1
(f) Import dependency based on consumption (%), {c/d*100}	54.3	48.2	48.4		47.8	50.1		47.2

Jul-2020 - June 2022 DGCI data prorated. RIL data prorated



19. Coal Bed Methane (CBM) gas development in India (July 2022)

Prognosticated CBM resources		91.8	TCF
Established CBM resources		10.4	TCF
CBM Resources (33 Blocks)		62.8	TCF
Total available coal bearing areas (India)		32760	Sq. KM
Total available coal bearing areas with MoPNG/DGH		17886**	Sq. KM
Area awarded		16598	Sq. KM
Blocks awarded*		32	Nos.
Exploration initiated (Area considered if any boreholes were drilled in the awarded block)		10669.55**	Sq. KM
Production of CBM gas	April-July 2022 (P)	227.98	MMSCM
Production of CBM gas	July 2022 (P)	58.78	MMSCM

*ST CBM Block awarded & relinquished twice- in CBM Round II and Round IV -Area considered if any boreholes were drilled in the awarded block.

** MoPNG offered 8458 sq.km. area for 15 CBM Blocks under Special CBM Bid Round-2021. The award of the Blocks is under progress.

20. Common Carrier Natural Gas pipeline network as on 30.06.2022

Nature of pipeline		GAIL	GSPL	PIL	IOCL	AGCL	RGPL	GGL	DFPCL	ONGC	GIGL	GITL	Others*	Total
Operational	Length	9,602	2,695	1,459	143	107	304	73	42	24				14,449
	Capacity	167.2	43.0	85.0	20.0	2.4	3.5	5.1	0.7	6.0				333
Partially commissioned [#]	Length	4,519			166						1,131	365		6,180
	Capacity				-						-	-		-
Total operational length		14,121	2,695	1,459	309	107	304	73	42	24	1,131	365	0	20,629
Under construction	Length	5,404	100		1,265						1,201	1,666	3,550	13,186
	Capacity	-	3.0		-						-	-	149.0	-
Total length		19,524	2,795	1,459	1,574	107	304	73	42	24	2,332	2,031	3,550	33,815

Source: PNGRB; Length in KMs ; Authorized Capacity in MMSCMD; *Others-APGDC, HEPL, IGGL, IMC, Consortium of H-Energy

Total authorized Natural Gas pipelines including Tie-in connectivity, dedicated & STPL is 34135 Kms

21. Existing LNG terminals

Location	Promoters	Capacity as on 01.07.2022	% Capacity utilisation (April-Jun 2022)
Dahej	Petronet LNG Ltd (PLL)	17.5 MMTPA	86.7
Hazira	Shell Energy India Pvt. Ltd.	5.2 MMTPA	43.1
Dabhol	Konkan LNG Limited	*5 MMTPA	29.9
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	17.8
Ennore	Indian Oil LNG Pvt Ltd	5 MMTPA	13.0
Mundra	GSPC LNG Limited	5 MMTPA	18.1
Total Capacity		42.7 MMTPA	

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

22. Status of PNG connections and CNG stations across India (Nos.), as on 30.06.2022(P)

State/UT (State/UTs are clubbed based on the GAs authorised by PNGRB)	CNG Stations	PNG connections		
		Domestic	Commercial	Industrial
Andhra Pradesh	137	236,063	378	28
Andhra Pradesh, Karnataka & Tamil Nadu	23	339	0	2
Assam	1	44,156	1,289	430
Bihar	56	78,916	40	1
Bihar & Jharkhand	0	5,339	0	0
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	23	22,966	95	18
Dadra & Nagar Haveli (UT)	7	9,314	52	53
Daman & Diu (UT)	4	5,081	40	37
Daman and Diu & Gujarat	13	549	1	0
Goa	10	10,080	13	22
Gujarat	952	2,738,906	21,434	5,710
Haryana	271	262,400	706	1,226
Haryana & Himachal Pradesh	9	0	0	0
Haryana & Punjab	16	0	0	0
Himachal Pradesh	7	2,710	0	0
Jharkhand	50	87,382	2	0
Karnataka	208	347,120	435	247
Kerala	86	19,987	16	12
Kerala & Puducherry	9	0	0	0
Madhya Pradesh	184	163,070	258	368
Madhya Pradesh and Chhattisgarh	3	0	0	0
Madhya Pradesh and Rajasthan	21	19	0	0
Madhya Pradesh and Uttar Pradesh	15	0	0	0
Maharashtra	579	2,404,696	4,740	517
Maharashtra & Gujarat	48	127,164	2	10
National Capital Territory of Delhi (UT)	458	1,283,407	3,213	1,723
Odisha	46	69,679	3	0
Puducherry & Tamil Nadu	7	14	0	0
Punjab	163	40,713	163	158
Rajasthan	182	160,051	29	176
Tamil Nadu	132	0	0	4
Telangana	122	167,880	62	87
Tripura	18	55,557	501	62
Uttar Pradesh	650	1,202,641	1,907	2,268
Uttar Pradesh & Rajasthan	36	18,958	34	340
Uttar Pradesh and Uttrakhand	16	6,263	0	0
Uttrakhand	27	63,184	43	70
West Bengal	40	0	0	0
Total	4,629	9,634,604	35,456	13,569

Source: PNGRB

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

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

Period	Domestic Natural Gas price in US\$/MMBTU	Gas price ceiling in US\$/MMBTU
November 2014 - March 2015	5.05	-
April 2015 - September 2015	4.66	-
October 2015 - March 2016	3.82	-
April 2016 - September 2016	3.06	6.61
October 2016 - March 2017	2.5	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

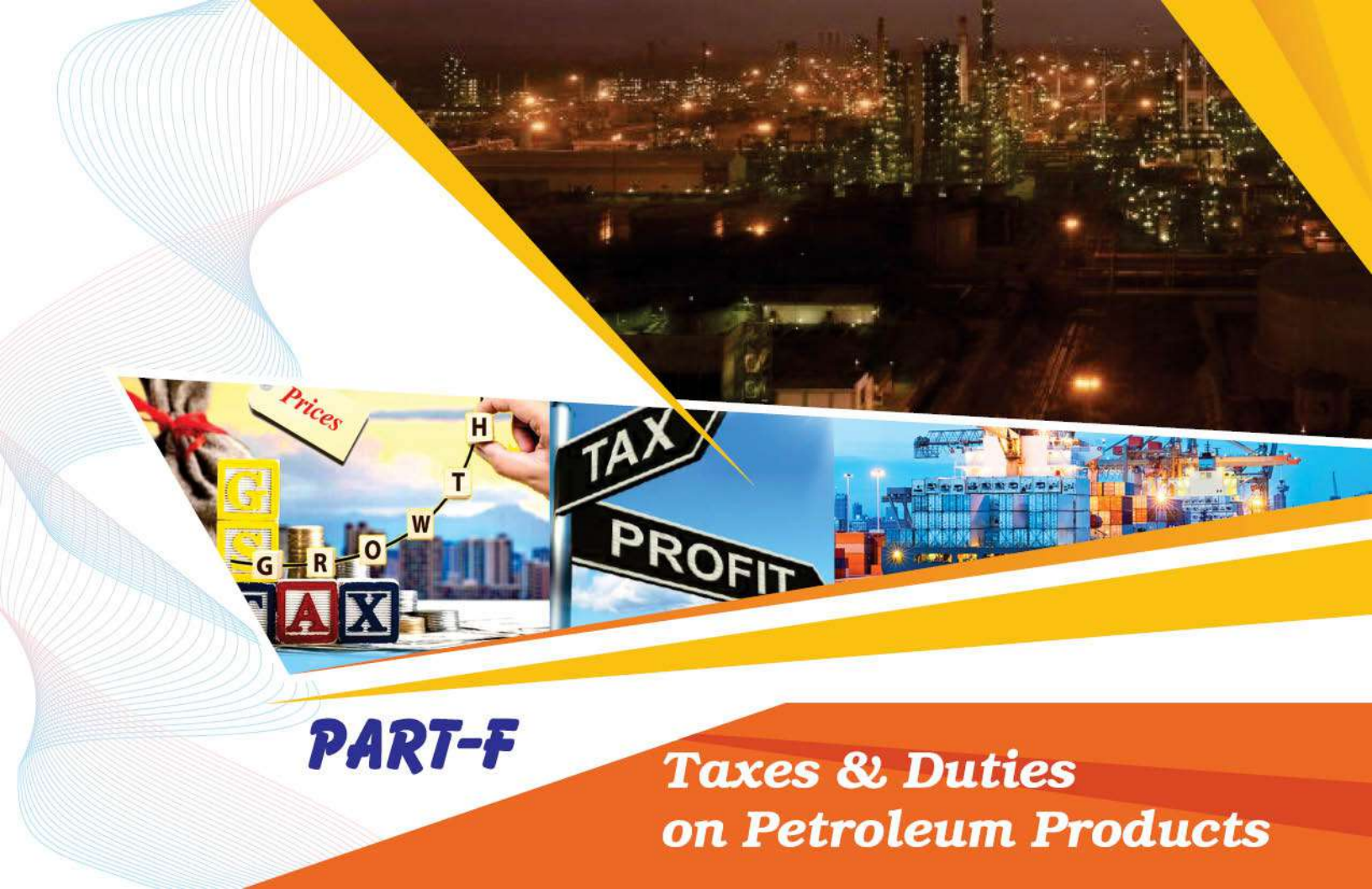
24. CNG/PNG prices

City	CNG (Rs/Kg)	PNG (Rs/SCM)	Source
Delhi	75.61	50.59	IGL website (18.08.2022)
Mumbai	80.00	48.50	MGL website (18.08.2022)

Indian Natural Gas Spot Price for Physical Delivery

IGX Price Index Month	Avg. Price		Volume (MMSCM)	Source
	INR/MMBtu	\$/MMBtu		
July 2022	1690	21.23	41.29	As per IGX website: www.igxindia.com

*Prices are weighted average prices | \$1=INR79.60 | 1 MMBtu=25.2 SCM



PART-F

Taxes & Duties on Petroleum Products

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

International FOB prices/ Exchange rates (\$/bbl)				Price buildup of petroleum products (Rs./litre/Cylinder) *		
Particulars	2020-21	2021-22	July 2022	Particulars	Petrol	Diesel
Crude oil (Indian Basket)	44.82	79.18	105.49	Price charged to dealers (excluding Excise Duty and VAT)	57.35	58.16
Petrol	47.68	89.66	116.53	Excise Duty	19.90	15.80
Diesel	47.86	88.45	139.93	Dealers' Commission (Average)	3.76	2.55
Kerosene	43.60	85.31	129.80	VAT (incl VAT on dealers' commission)	15.71	13.11
LPG (\$/MT)	415.17	692.67	725.00	Retail Selling Price	96.72	89.62
FO (\$/MT)	259.30	445.25	478.45			
Naphtha (\$/MT)	378.93	698.25	710.05			
Exchange (Rs./\$)	74.20	74.51	79.60			
Customs, excise duty & GST rates						
Product	Basic customs duty #	Excise duty	GST rates	Particulars	PDS SKO	Subsidised Domestic LPG
Petrol	2.50%	Rs 19.90/Ltr	**	Price before taxes and dealers'/distributors' commission	77.99	938.02
Diesel	2.50%	Rs 15.80/Ltr	**	Dealers'/distributors' commission	2.67	64.84
PDS SKO	5.00%	Not Applicable	5.00%	GST (incl GST on dealers'/distributors' commission)	4.03	50.14
Non-PDS SKO	5.00%		18.00%	Retail Selling Price	84.69	1053.00
Domestic LPG	Nil***		5.00%			
Non Domestic LPG	5.00%		18.00%			
Furnace Oil (Non-Fert)	2.50%		18.00%			
Naphtha (Non-Fert)	1.00%		18.00%			
ATF	5.00%	11% *	**			
Crude Oil	Rs.1/MT+ Rs.50/-MT as NCCD	Rs.1/MT+ Cess@20% + Rs.50 /-MT NCCD + Rs. 13000/ MT SAED ^^	**			

*Petrol and Diesel at Delhi as per IOCL are as on 01st August 2022. PDS SKO at Mumbai as on 1st August 2022 and Subsidised Domestic LPG at Delhi as on 1st August 2022.

*2% for scheduled commuter airlines from regional connectivity scheme airports **
 GST Council shall recommend the date on which GST shall be levied on petroleum crude , HSD, MS, natural gas and ATF; # Social welfare surcharge @ 10% is levied on aggregate duties of Customs excluding CVD in lieu of IGST.*** Customs duty is Nil for import of Domestic LPG sold to household consumers (including NDEC) by PSU OMCs. Customs duty rate is 5% for other importers of domestic LPG, ^^ Effective 19.08.2022 SAED on crude oil.

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

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

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

Domestic LPG under DBTL (Direct benefit transfer for LPG)			
Particulars	2018-19	2019-20	2020-21
	Rs./Crore		
DBTL subsidy	31,447	22,635	3,559
PME & IEC^	92	91	99
Total	31,539	22,726	3,658

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

Sales & profit of petroleum sector (Rs. Crores)				
Particulars	2020-21		2021-22	
	Turnover	PAT	Turnover	PAT
Upstream/midstream Companies (PSU)	132,830	17,878	215,625	54,557
Downstream Companies (PSU)	1,080,618	51,542	15,29,502	39,355
Standalone Refineries (PSU)	111,330	3,033	169,984	7,859
Private-RIL	278,940	31,944	466,425	39,084

Borrowings of OMCs (Rs. Crores), As on			
Company	Mar`20	Mar`21	Mar`22
IOCL	116,545	102,327	110,799
BPCL	41,875	26,315	24,123
HPCL	43,021	40,009	43,193

Petroleum sector contribution to Central/State Govt.			
Particulars	2019-20	2020-21	2021-22
Central Government	3,34,315	455,069	492,303
% of total revenue receipts	20%	29%	
State Governments	2,21,056	217,650	282,122
% of total revenue receipts	8%	7%	
Total (Rs. Crores)	5,55,370	6,72,719	774,425

Total Subsidy as a percentage of GDP (at current prices)			
Particulars	2018-19	2019-20	2020-21
Petroleum subsidy	0.23	0.13	0.06

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

**Totals may not tally due to roundoff.



PART-G

Miscellaneous

26. Capital expenditure of PSU oil companies

(Rs in crores)

Company	2019-20	2020-21	2021-22 (P)	2022-23 (P)	
				Target (Annual)	April - July 22
ONGC Ltd	30,115	26,441	26,621	29,950	7,949
ONGC Videsh Ltd (OVL)	5,363	5,351	4,836	8,180	923
Oil India Ltd (OIL)	3,724	12,802	4,239	4,302	1,403
GAIL (India) Ltd	4,381	5,560	6,970	7,500	2,154
Indian Oil Corp. Ltd. (IOCL)	28,316	27,195	29,604	28,549	8,420
Hindustan Petroleum Corp. Ltd (HPCL)	13,773	14,036	16,205	14,500	3,154
Bharat Petroleum Corp. Ltd (BPCL)	10,255	10,697	11,449	10,000	5,027
Mangalore Refinery & Petrochem Ltd (MRPL)	1,318	2,218	604	815	141
Chennai Petroleum Corp. Ltd (CPCL)	969	592	575	584	128
Numaligarh Refinery Ltd (NRL)	536	981	3,403	6,774	1,363
Balmer Lawrie Co. Ltd (BL)	40	42	23	40	5
Engineers India Ltd (EIL)	164.43	730	67	160	10
Total	98,955	106,642	104,596	111,354	30,676

Includes expenditure on investment in JV/subsidiaries.

(P) Provisional

Totals may not tally due to roundoff.

27. Conversion factors and volume conversion

Weight to volume conversion				Volume conversion	
Product	Weight (MT)	Volume (KL)	Barrel (bbl)	From	To
LPG	1	1.844	11.60	1 US Barrel (bbl)	159 litres
Petrol (MS)	1	1.411	8.88	1 US Barrel (bbl)	42 US Gallons
Diesel (HSD)	1	1.210	7.61	1 US Gallon	3.78 litres
Kerosene (SKO)	1	1.285	8.08	1 Kilo litre (KL)	6.29 bbl
Aviation Turbine Fuel (ATF)	1	1.288	8.10	1 Million barrels per day	49.8 MMTPA
Light Diesel Oil (LDO)	1	1.172	7.37	Energy conversion	
Furnace Oil (FO)	1	1.0424	6.74	1 Kilocalorie (kcal)	4.187 kJ
Crude Oil	1	1.170	7.33	1 Kilocalorie (kcal)	3.968 Btu
Exclusive Economic Zone				1 Kilowatt-hour (kWh)	860 kcal
200 Nautical Miles	370.4 Kilometers			1 Kilowatt-hour (kWh)	3,412 Btu

Natural gas conversions				
1 Standard Cubic Metre (SCM)	35.31 Cubic Feet		1 MMBTU	25.2 SCM @10000 kcal/SCM
1 Billion Cubic Metres (BCM)/year of Gas	2.74 MMSCMD		GCV (Gross Calorific Value)	10,000 kcal/SCM
1 Trillion Cubic Feet (TCF) of Gas Reserve	3.88 MMSCMD		NCV (Net Calorific Value)	90% of GCV
1 Million Metric Tonne Per Annum (MMTPA) of LNG	3.60 MMSCMD		Gas required for 1 MW power generation	4,541 SCM/day
1 MT of LNG	1,325 SCM		Power generation from 1 MMSCMD of gas	220 MW

Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas, Government of India)

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

Tel.: 011-24306191/92, 011-24361314, Fax : 011-24361253 www.ppac.gov.in

