

Snapshot of India's Oil & Gas data

Monthly Ready Reckoner December, 2022



Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

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

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

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

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Highlights for the month

- Indigenous crude oil and condensate production during December 2022 was down by 1.1 % than that of December 2021 as compared to a de-growth of 1.1 % during November 2022. OIL registered a growth of 7.0 % and ONGC registered a degrowth of 0.237 % during December 2022 as compared to December 2021. PSC registered de-growth of 7.1 % during December 2022 as compared to December 2021. De-growth of 1.3 % was registered in the total crude oil and condensate production during April December 2022 over the corresponding period of the previous year.
- Crude oil processed during December 2022 was 22.3 MMT, which was 3.7 % higher than December 2021 as compared to a de-growth of 8.9 % during November 2022. Growth of 6.4 % was registered in the total crude oil processing during April-December 2022 over the corresponding period of the previous year.
- Crude oil imports decreased by 3.0% and increased by 9.9% during December 2022 and April-December 2022 respectively as compared to the corresponding period of the previous year. The net import bill for Oil & Gas was \$11.2 billion in December 2022 compared to \$10.7 billion in December 2021. In this the crude oil imports constitutes \$11.9 billion, LNG imports \$1.6 billion and the exports were \$4.6 billion during December 2022.
- The price of Brent Crude averaged \$81.82/bbl during December 2022 as against \$91.67/bbl during November 2022 and \$74.10/bbl during December 2021. The Indian basket crude price averaged \$78.10/bbl during December 2022 as against \$87.55/bbl during November 2022 and \$73.30 /bbl during December 2021.
- Production of petroleum products saw a growth of 3.7 % during December 2022 over December 2021 as compared to a degrowth of 9.3 % during November 2022. Growth of 5.4 % was registered in the total POL production during April- December 2022 over the corresponding period of the previous year.

POL products imports decreased by 13.6% and increased by 5.6% during December 2022 and April-December 2022 respectively as compared to the corresponding period of the previous year. Increase in POL products imports during April-December 2022 were mainly due to increase in imports of all products except aviation turbine fuel (ATF), superior kerosene oil (SKO), lubes/LOBS and fuel oil (FO).

- Exports of POL products decreased by 17.2% and 2.8% during December 2022 and April- December 2022 respectively as compared to the corresponding period of the previous year. Decrease in POL products exports during April- December 2022 were mainly due to decrease in exports of motor spirit (MS), naphtha, superior kerosene oil (SKO), high speed diesel (HSD), light diesel oil (LDO) and bitumen.
- The consumption of petroleum products during April-Dec 2022 with a volume of 164.87 MMT reported a growth of 10.5% compared to the volume of 149.16 MMT during the same period of the previous year. This growth was led by 14.6% growth in MS, 14% in HSD & 50% in ATF consumption besides FO/LSHS, Petcoke, Bitument, Lubes & Greases, LPG and others during the period. The consumption of petroleum products during Dec 2022 recorded a growth of 3.1% with a volume of 19.6 MMT compared to the same period of the previous year.
- Ethanol Blending with Petrol during December 2022, the first month of the Ethanol Supply Year(ESY) 2022-23, achieved 10.43% as compared to 10.02% during the ESY December 2021- November 2022
- Total Natural Gas Consumption (including internal consumption) for the month of December 2022 was 5154 MMSCM which was 4.1% lower than the corresponding month of the previous year. The cumulative consumption of 45661 MMSCM for the current year till December 2022 was lower by 6.9 % compared with the corresponding period of the previous year.
- Gross production of natural gas for the month of December 2022 (P) was 2951 MMSCM which was higher by 1.9% compared
 with the corresponding month of the previous year. The cumulative gross production of natural gas of 25868 MMSCM for
 the current financial year till December 2022 was higher by 0.8% compared with the corresponding period of the previous
 year.
- LNG import for the month of December 2022 (P) was 2266 MMSCM which was 11.5% lower than the corresponding month of the previous year. The cumulative import of 20394 (P) MMSCM for the current year till December 2022 was lower by 15.1% compared with the corresponding period of the previous year.



	1. Selected indicators of the Indian economy											
	Economic indicators	Unit/ Base	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23				
1	Population (basis RGI projections)	Billion	1.309	1.323	1.337	1.351	1.365	1.377				
2	GDP at constant (2011-12 Prices)	Growth %	6.8	6.5	4.0	-6.6	8.7	7.0				
	at constant (2011-12 i nees)		3rd RE	2nd RE	1st RE	1st RE	PE (2021-22)	1st AE				
	A seise de una la Bura de setis es	MMT	285.0	285.2	297.5	310.7	315.7	149.9				
3	Agricultural Production						4th AE	1st AE (Kharif)				
	(Food grains)	Growth %	3.6	0.1	4.3	4.5	1.6	-				
1	Gross Fiscal Deficit	%	3.5	3.4	4.6	9.5	6.8	6.4				
4	(as percent of GDP)					RE	BE	BE				

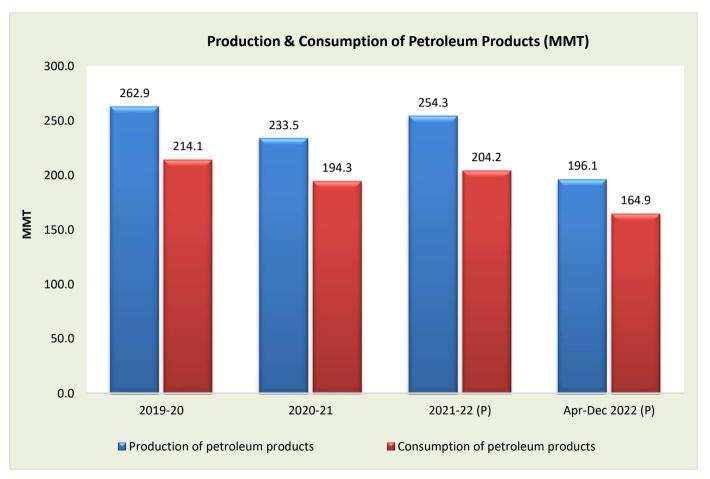
	Economic indicators	Unit/ Base	2020-21	2021-22	Dec		April-Dec	
				(P)	2021-22	2022-23 (P)	2021-22	2022-23 (P)
5	Index of Industrial Production	Growth %	-8.4	11.4	1.0*	7.1*	17.6#	5.5#
<u> </u>	(Base: 2011-12)	Growth 70				QE		
6	Imports^	\$ Billion	394.4	611.9	53.0	55.9	381.2	493.6
7	Exports^	\$ Billion	291.8	419.7	31.8	32.0	265.8	295.3
8	Trade Balance	\$ Billion	-102.6	-192.2	-21.2	-23.9	-115.4	-198.4
9	Foreign Exchange Reserves [@]	\$ Billion	579.3	617.6	633.6	562.9	i	-

Population projection by RGI is taken as on 1st July for the year. IIP is for the month of *Nov and #April-Nov; @2020-21-as on March 26, 2021, 2021-22 - as on March 26, 2022, Dec 2021 as on Dec 31, 2021 and Dec 2022-as on Dec 30, 2022; ^Imports & Exports are for Merchandise for the month of November 22; E: Estimates; PE: Provisional Estimates; AE-Advanced Estimates; RE-Revised Estimates; QE-Quick Estimates.

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

	2. Crude oil, LNG and petroleum products at a glance											
	Details	Unit/ Base	2020-21	2021-22	D	ес	Apri	-Dec				
				(P)	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	22.4	22.1				
2	Consumption of petroleum products*	MMT	194.3	204.2	19.0	19.6	149.2	164.9				
3	Production of petroleum products	MMT	233.5	254.3	22.8	23.6	186.0	196.1				
4	Gross natural gas production	MMSCM	28,672	34,024	2,897	2,951	25,674	25,868				
5	Natural gas consumption	MMSCM	60,815	63,907	5,375	5,154	49,069	45,661				
6	Imports & exports:											
	Crude oil imports	MMT	196.5	212.4	19.6	19.1	156.5	171.9				
	Crude on imports	\$ Billion	62.2	120.7	10.9	11.9	82.6	125.5				
	Petroleum products (POL)	MMT	43.2	42.1	4.4	3.8	30.9	32.6				
	imports*	\$ Billion	14.8	25.2	2.5	2.4	18.0	20.9				
	Gross petroleum imports	MMT	239.7	254.4	24.1	22.9	187.4	204.5				
	(Crude + POL)	\$ Billion	77.0	145.9	13.4	14.3	100.7	146.5				
	Petroleum products (POL)	MMT	56.8	62.8	6.0	5.0	46.1	44.8				
	export	\$ Billion	21.4	44.4	4.1	4.6	29.6	45.3				
	LNG imports*	MMSCM	33,031	30,776	2,561	2,266	24,033	20,394				
	LING IIIIports	\$ Billion	7.9	13.4	1.3	1.6	9.5	14.3				
	Net oil & gas imports	\$ Billion	63.5	114.9	10.7	11.2	80.6	115.5				
7	Petroleum imports as percentage of India's gross imports (in value terms)	%	19.5	23.8	25.3	25.6	26.4	29.7				
8	Petroleum exports as percentage of India's gross exports (in value terms)	%	7.3	10.6	12.8	14.5	11.1	15.3				
9	Import dependency of crude oil (on POL consumption basis)	%	84.4	85.7	86.9	87.2	85.2	87.0				

#Includes condensate; *RIL data prorated for Dec'22. Private direct imports are prorated for the period April'22 to Dec'22 for POL. LNG Imports figures from DGCIS are prorated for Oct-Dec 2022. Total may not tally due to rounding off.





Crude Oil, Refining & Production

3. Indige	3. Indigenous crude oil production (Million Metric Tonnes)												
Details	2020-21 2021-22 Dec												
			2021-22	2022-23 Target*	2022-23 (P)	2021-22	2022-23 Target*	2022-23 (P)					
ONGC	19.1	18.5	1.6	1.6	1.6	13.9	14.4	14.0					
Oil India Limited (OIL)	2.9	3.0	0.3	0.3	0.3	2.2	2.6	2.4					
Private / Joint Ventures (JVs)	7.1	7.0	0.6	0.8	0.5	5.3	6.7	4.8					
Total Crude Oil	29.1	28.4	2.4	2.7	2.4	21.4	23.6	21.1					
ONGC condensate	1.1	0.9	0.08	0.0	0.1	0.7	0.0	0.8					
PSC condensate	0.3	0.30	0.02	0.0	0.03	0.23	0.0	0.22					
Total condensate	1.4	1.2	0.10	0.0	0.1	0.9	0.0	1.0					
Total (Crude + Condensate) (MMT)	30.5	29.7	2.5	2.7	2.5	22.4	23.6	22.1					
Total (Crude + Condensate) (Million Bbl/Day)	0.61	0.60	0.59	0.64	0.59	0.60	0.63	0.59					

^{*}Provisional targets inclusive of condensate.

4. Domestic and overseas oil & gas production (by Indian Companies)										
Details 2020-21 2021-22 Dec April-Dec										
		(P)	2021-22 (P)	2022-23 (P)	2021-22 (P)	2022-23 (P)				
Total domestic production (MMTOE)	59.2	63.7	5.4	5.4	48.1	47.9				
Overseas production (MMTOE)	21.9	21.8	1.9	1.5	16.5	14.2				

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

	5. High Sulphur (HS) & Low Sulphur (LS) crude oil processing (MMT)											
	Details	2020-21	2021-22	D	ec	April-Dec						
				2021-22	2022-23 (P)	2021-22	2022-23 (P)					
1	High Sulphur crude	161.4	185.0	17.1	17.0	134.8	145.7					
2	Low Sulphur crude	60.3	56.7	4.4	5.3	42.4	42.9					
Total cru	ide processed (MMT)	221.8	241.7	21.5	22.3	177.2	188.6					
Total cru	ide processed (Million Bbl/Day)	4.45	4.85	5.08	5.27	4.72	5.03					
Percenta	age share of HS crude in total crude oil processing	72.8%	76.6%	79.5%	76.4%	76.1%	77.3%					

6. Qua	6. Quantity and value of crude oil imports										
Year	Quantity (MMT)	\$ Million	Rs. Crore								
2020-21	196.5	62,248	4,59,779								
2021-22 (P)	212.4	120,675	9,01,262								
April-Dec 2022(P)	171.9	125,524	9,96,799								

	7. Self-sufficiency in petroleum products (Million Metric Tonnes)											
	Particulars	2020-21	2021-22	D	ec	April	l-Dec					
	Faiticulais		(P)	2021-22 (P)	2022-23 (P)	2021-22 (P)	2022-23 (P)					
1	Indigenous crude oil processing	28.0	27.0	2.3	2.4	20.3	20.2					
2	Products from indigenous crude (93.3% of crude oil processed)	26.1	25.2	2.2	2.2	19.0	18.8					
3	Products from fractionators (Including LPG and Gas)	4.2	4.1	0.3	0.3	3.1	2.7					
4	Total production from indigenous crude & condensate (2 + 3)	30.3	29.3	2.5	2.5	22.1	21.5					
5	Total domestic consumption	194.3	204.2	19.0	19.6	149.2	164.9					
% Self	-sufficiency (4 / 5)	15.6%	14.3%	13.1%	12.8%	14.8%	13.0%					

	8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)												
Sl. no.	Refinery	Installed			Cru	ıde oil prod	essing (MN	/IT)					
		capacity	2020-21	2021-22		Dec			April-Dec				
		(01.01.2022) MMTPA			2021-22	2022-23	2022-23	2021-22	2022-23	2022-23			
1	Barauni (1964)	6.0	5.5	5.6	0.6	(Target) 0.6	(P) 0.5	3.9	(Target) 4.8	(P) 5.1			
	· · · · ·												
2	Koyali (1965)	13.7	11.6	13.5	1.3	1.2	1.3	9.7	10.7	11.7			
3	Haldia (1975)	8.0	6.8	7.3	0.3	0.7	0.7	5.6	6.3	6.4			
4	Mathura (1982)	8.0	8.9	9.1	0.8	0.8	0.9	6.7	6.9	7.1			
5	Panipat (1998)	15.0	13.2	14.8	1.3	1.4	0.9	11.2	10.6	10.0			
6	Guwahati (1962)	1.0	0.8	0.7	0.08	0.1	0.1	0.46	0.8	0.8			
7	Digboi (1901)	0.65	0.6	0.7	0.06	0.06	0.06	0.5	0.5	0.5			
8	Bongaigaon(1979)	2.70	2.5	2.6	0.2	0.2	0.3	2.0	1.9	2.0			
9	Paradip (2016)	15.0	12.5	13.2	1.3	1.3	1.417	9.3	9.8	9.6			
	IOCL-TOTAL	70.1	62.4	67.7	5.9	6.4	6.2	49.4	52.2	53.2			
10	Manali (1969)	10.5	8.2	9.0	0.8	0.9	1.0	6.1	7.6	8.4			
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	6.1	7.6	8.4			
12	Mumbai (1955)	12.0	12.9	14.4	1.3	1.3	1.3	10.6	10.3	10.5			
13	Kochi (1966)	15.5	13.3	15.4	1.4	1.4	1.5	11.0	11.4	11.5			
14	Bina (2011)	7.8	6.2	7.4	0.7	0.7	0.7	5.4	5.6	5.8			
	BPCL-TOTAL	35.3	32.4	37.2	3.3	3.3	3.6	27.1	27.4	27.8			
15	Numaligarh (1999)	3.0	2.7	2.6	0.1	0.2	0.3	1.9	2.2	2.4			

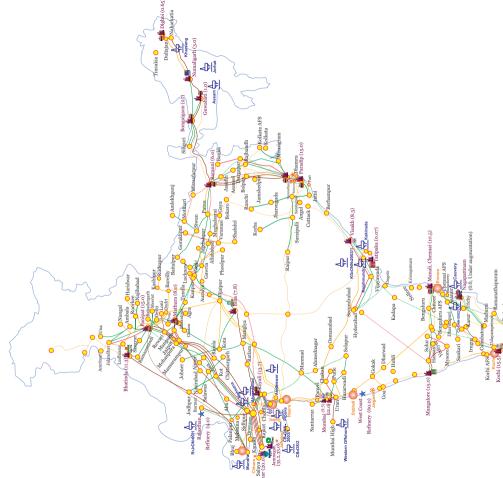
Sl. no.	Refinery	Installed			Cruc	le oil proce	essing (MM	IT)			
		capacity	2020-21	2021-22		Dec			April-Dec		
		(1.01.2022) (MMTPA)			2021-22	2022-23	2022-23	2021-22	2022-23	2022-23	
		(IVIIVITPA)				(Target)	(P)		(Target)	(P)	
16	Tatipaka (2001)	0.066	0.081	0.075	0.007	0.006	0.006	0.055	0.047	0.056	
17	MRPL-Mangalore (1996)	15.0	11.5	14.9	1.4	1.5	1.5	10.5	11.7	12.7	
	ONGC-TOTAL	15.1	11.6	14.9	1.4	1.5	1.5	10.6	11.7	12.8	
18	Mumbai (1954)	9.5	7.4	5.6	0.7	0.6	0.9	3.2	6.3	7.3	
19	Visakh (1957)	8.3	9.1	8.4	0.8	1.1	0.8	6.0	7.1	6.8	
20	HMEL-Bathinda (2012)	11.3	10.1	13.0	1.1	1.0	1.1	9.8	8.6	9.5	
	HPCL- TOTAL	29.1	26.5	27.0	2.6	2.6	2.8	19.1	22.0	23.6	
21	RIL-Jamnagar (DTA) (1999)	33.0	34.1	34.8	3.0	3.0	2.8	25.9	25.9	26.2	
22	RIL-Jamnagar (SEZ) (2008)	35.2	26.8	28.3	2.5	2.5	2.5	21.9	21.9	20.5	
23	NEL-Vadinar (2006)	20.0	17.1	20.2	1.7	1.7	1.7	15.2	15.2	13.7	
All India (All India (MMT) 251.2 221.8 241.7			241.7	21.5	22.2	22.3	177.2	186.1	188.6	
All India (Million Bbl/Day) 5.02 4.45				4.85	5.08	5.25	5.27	4.72	4.96	5.03	

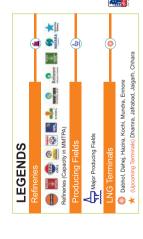
Note: Provisional Targets; Some sub-totals/ totals may not add up due to rounding off at individual levels.

	9. Major crude oil and product pipeline network (as on 01.01.2023)												
Det	Details ONGC OIL Cairn HMEL IOCL BPCL HPCL O									Total			
Crude Oil	Length (KM)	1,284	1,193	688	1,017	5,301	937			10,420			
	Cap (MMTPA)	60.6	9.0	10.7	11.3	48.6	7.8			147.9			
Products	Length (KM)		654			11,214	2,596	3,775	2,386	20,625			
	Cap (MMTPA)		1.7			59.4	23.0	34.1	9.4	127.6			

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

OIL & GAS MAP OF INDIA





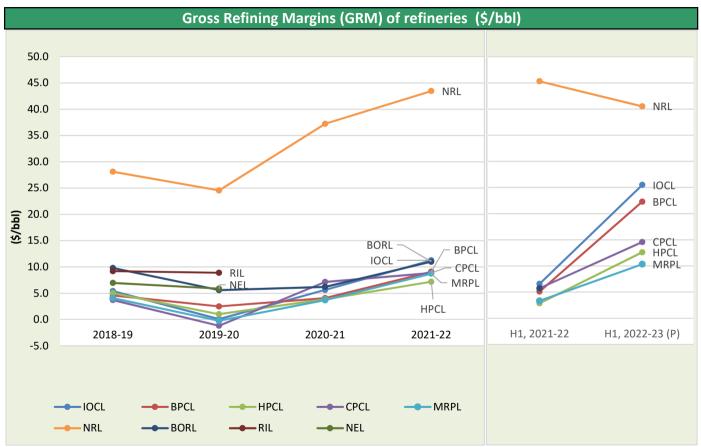


	10. Gross	Refining Margins	(GRM) of refineri	es (\$/bbl)	
Company	2019-20	2020-21	2021-22	Apr -	Sept
Company	2013 20	2020 21	2021 22	2021-22	2022-23 (P)
IOCL	0.08	5.64	11.25	6.57	25.49
BPCL	2.50	4.06	9.09	5.11	22.30
HPCL	1.02	3.86	7.19	2.87	12.62
CPCL	-1.18	7.14	8.85	5.75	14.58
MRPL	-0.23	3.71	8.72	3.33	10.33
NRL	24.55	37.23	43.46	45.31	40.51
BORL	5.60	6.20	11.00	5.70	#
RIL	8.90	*	*	*	*
NEL	5.88	*	*	*	*

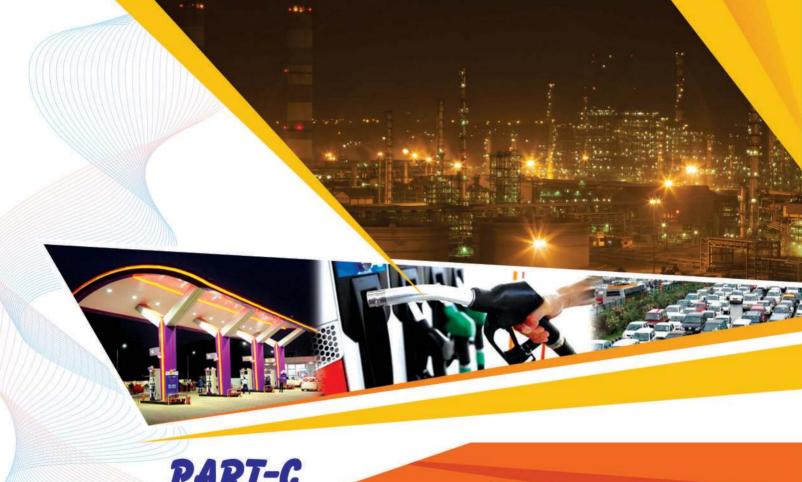
GRM of North Eastern refineries are including excise duty benefit

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

^{*}Not available



GRM of North Eastern refineries are including excise duty benefit



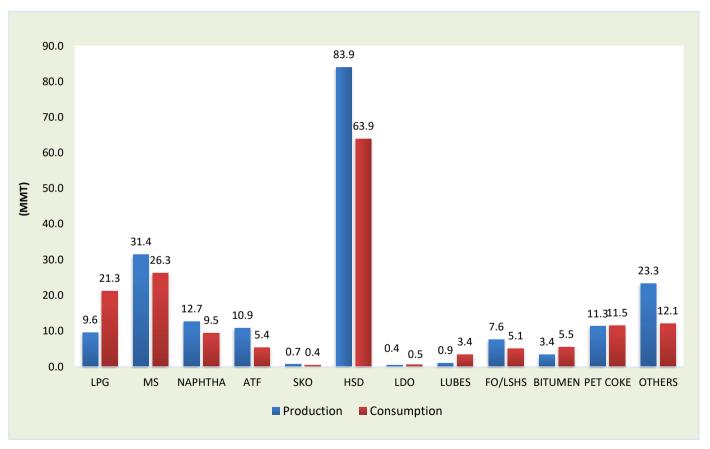
PART-C

Consumption

	11. Pro	duction	and cor	sumption	on of pe	troleun	n produ	ıcts (Mil	lion Me	tric Ton	nes)	
Decelerate	202	0-21	2021-	·22 (P)	Dec 2	2021 Dec 20		022 (P)	Apr-Dec 2021		Apr-Dec 2022 (P)	
Products	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons	Prod	Cons
LPG	12.1	27.6	12.2	28.3	1.1	2.5	1.1	2.6	9.0	20.9	9.6	21.3
MS	35.8	28.0	40.2	30.8	3.7	2.8	3.7	3.0	29.4	22.9	31.4	26.3
NAPHTHA	19.4	14.1	20.0	14.3	1.7	1.1	1.4	1.1	14.9	10.6	12.7	9.5
ATF	7.1	3.7	10.3	5.0	1.1	0.6	1.3	0.7	7.3	3.6	10.9	5.4
SKO	2.4	1.8	1.9	1.5	0.2	0.1	0.0	0.0	1.4	1.1	0.7	0.4
HSD	100.4	72.7	107.2	76.7	9.4	7.3	10.0	7.8	78.4	56.1	83.9	63.9
LDO	0.7	0.9	0.8	1.0	0.06	0.09	0.04	0.07	0.6	0.8	0.4	0.5
LUBES	1.1	4.1	1.2	4.6	0.1	0.5	0.1	0.4	0.8	3.3	0.9	3.4
FO/LSHS	7.4	5.6	8.9	6.3	0.9	0.6	0.7	0.6	6.6	4.6	7.6	5.1
BITUMEN	4.9	7.5	5.1	7.9	0.5	0.8	0.4	0.7	3.4	5.2	3.4	5.5
PET COKE	12.0	15.6	15.5	15.8	1.5	1.7	1.4	1.3	11.2	10.6	11.3	11.5
OTHERS	30.2	12.8	30.9	12.1	2.6	1.0	3.4	1.4	23.0	9.4	23.3	12.1
ALL INDIA	233.5	194.3	254.3	204.2	22.8	19.0	23.6	19.6	186.0	149.2	196.1	164.9
Growth (%)	-11.0%	-8.9%	8.9%	5.1%	5.9%	3.5%	3.7%	3.1%	9.4%	5.5%	5.4%	10.5%

Note: Prod - Production; Cons - Consumption

Petroleum Products: April-Nov 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	PDS Kerosene 31,21,328 27,93,217 23,15,008 20,38,790 17,83,344 16,59,906 10,31,604 3,31,381									

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

	13. Ethanol	13. Ethanol blending programme											
	Ethanol Supply Year *												
Particulars	2019-20	2020-21	2021-22	2022-23 (P)									
	2013-20	2020-21	2021-22	Dec-22	Dec'22-Dec'22								
Ethanol received by PSU OMCs under EBP Program (in Cr. Litrs)	173.0	296.1	408.1	38.3	38.3								
Ethanol blended under EBP Program (in Cr. Litrs)	170.5	302.3	433.6	39.5	39.5								
Average Percentage of Blending Sales (EBP%)	5.0%	8.1%	10.0%	10.4%	10.4%								

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

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

14. Indust	ry marketi	ng infrastr	ucture (as	on 01.01.	.2023) (Pr	ovisional)		
Particulars	IOCL	BPCL	HPCL	RIL/RBML/RSIL	NEL	SHELL	Others	Total
POL Terminal/ Depots (Nos.) ^{\$}	120	82	82	18	3		6	311
Aviation Fuel Stations (Nos.) [@]	130	62	52	30			2	276
Retail Outlets (total) (Nos.),	35,591	20,729	20,791	1,523	6,497	351	47	85,529
out of which Rural ROs	11,469	5,108	5,137	130	2,131	86	15	24,076
SKO/LDO agencies (Nos.)	3,871	927	1,638					6,436
LPG Distributors (total) (Nos.) (PSUs only)	12,841	6,235	6,265					25,341
LPG Bottling plants (Nos.) (PSUs only)#	96	54	53				3	206
LPG Bottling capacity (TMTPA) (PSUs only)	10,658	4,890	6,170			·	203	21,921
LPG active domestic consumers (Nos. crore) (PSUs only)	14.6	8.1	8.7					31.4

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

Industry Alternate fuel in	nfrastructure at Retail outlets (Nos. of ROs as on 01.12.2022) (Provisional)
Alternate fuel	PSU	Private	Total
CNG_LNG	4210	37	4247
EV Charging	4937	28	4965
Auto LPG	542	127	669
Compressed Bio-Gas outlets	77	0	77
Total Retail outlets with at least one Alternate fuel	8975	187	9162



PART-D

LPG

		15. LPG cons	sumption (The	ousand Metr	ric Tonne)			
LPG category	2020-21	2021-22		Dec			April-Dec	
			2021-22	2022-23 (P)	Growth (%)	2021-22	2022-23 (P)	Growth (%)
1. PSU Sales :								
LPG-Packed Domestic	25,128.1	25,501.6	2,235.3	2,253.9	0.8%	18,839.5	18,891.4	0.3%
LPG-Packed Non-Domestic	1,886.0	2,238.8	196.6	266.4	35.5%	1,624.1	1,922.2	18.4%
LPG-Bulk	361.9	390.9	26.4	40.3	52.7%	270.6	302.9	11.9%
Auto LPG	118.4	122.0	11.1	9.0	-18.5%	91.2	82.4	-9.7%
Sub-Total (PSU Sales)	27,494.3	28,253.3	2,469.3	2,569.6	4.1%	20,825.4	21,198.9	1.8%
2. Direct Private Imports*	64.2	82.0	9.99	6.4	-36.4%	65.0	57.2	-12.0%
Total (1+2)	27,558.4	28,335.3	2,479.3	2,575.9	3.9%	20,890.4	21,256.1	1.8%

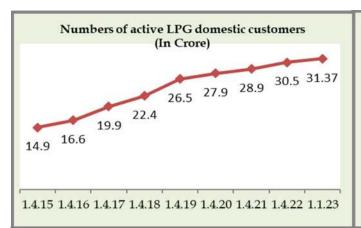
*Apr -Dec 2022 DGCIS data is prorated

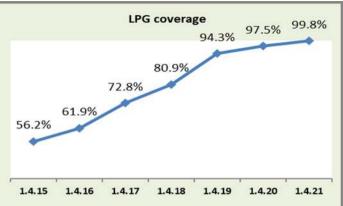
				16. I	LPG ma	arketin	g at a	glance						
Particulars	Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	1.01.23
(As on 1st of April)														(P)
LPG Active Domestic	(Lakh)					1486	1663	1988	2243	2654	2787	2895	3053	3137
Customers	Growth						11.9%	19.6%	12.8%	18.3%	5.0%	3.9%	5.5%	2.8%
LPG Coverage (Estimated)	(Percent)					56.2	61.9	72.8	80.9	94.3	97.5	99.8	-	-
Li d coverage (Estimated)	Growth						10.1%	17.6%	11.1%	16.5%	3.4%	2.3%	-	-
PMUY Beneficiaries	(Lakh)							200	356	719	802	800.4	899.0	958.7
PIVIOT Belleficiaries	Growth								77.7%	101.9%	11.5%	-0.2%	12.2%	7.0%
LPG Distributors	(No.)	10541	11489	12610	13896	15930	17916	18786	20146	23737	24670	25083	25269	25341
LI O DISTINUTOIS	Growth	8.8%	9.0%	9.8%	10.2%	14.6%	12.5%	4.9%	7.2%	17.8%	3.9%	1.7%	0.7%	0.6%
Auto LPG Dispensing	(No.)	604	652	667	678	681	676	675	672	661	657	651	601	567
Stations	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%	-10.6%
Dattina Dlanta	(No.)	183	184	185	187	187	188	189	190	192	196	200	202	206
Bottling Plants	Growth	0.5%	0.5%	0.5%	1.1%	0.0%	0.5%	0.5%	0.5%	1.1%	2.1%	2.0%	1.0%	3.5%

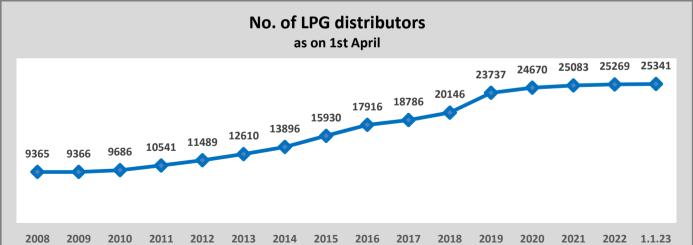
Source: PSU OMCs (IOCL, BPCL and HPCL)

^{1.} Growth rates as on 01.01.2023 are with respect to figs as on 01.01.2022. Growth rates as on 1 April of any year are with respect to figs as on 1 April of previous year.

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

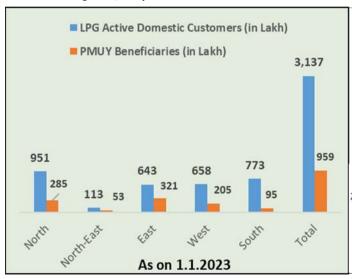


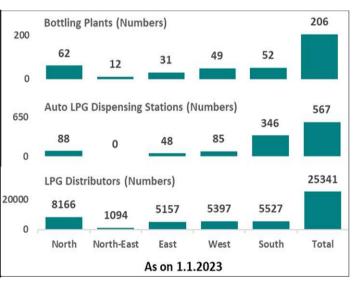




17-Region-wi	17-Region-wise data on LPG marketing (As on 01.01.2023)										
ParticularsNorthNorth-EastEastWestSouthTotal											
LPG Active Domestic Customers (in Lakh)	950.6	113.4	643.0	657.6	772.5	3137.1					
PMUY Beneficiaries (in Lakh)	285.3	52.9	320.9	204.7	94.9	958.7					
LPG Distributors (Numbers)	8166	1094	5157	5397	5527	25341					
Auto LPG Dispensing Stations (Numbers)	88	0	48	85	346	567					
Bottling Plants* (Numbers)	62	12	31	49	52	206					

^{*}Includes Numaligarh BP, Duliajan BP and CPCL BP.

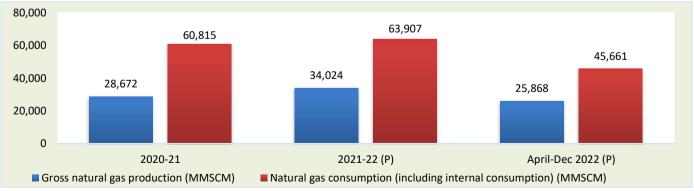






		18. Natura	al gas at a	glance				
								(MMSCM)
Details	2020-21	2021-22		Dec			April-Dec	
	(P)	(P)	2021-22	2022-23	2022-23	2021-22	2022-23	2022-23 (P)
			(P)	(Target)	(P)	(P)	(Target)	
(a) Gross production	28,672	34,024	2,897	3,032	2,951	25,674	26,724	25,868
- ONGC	21,872	20,629	1,757	1,693	1,680	15,542	15,305	15,057
- Oil India Limited (OIL)	2,480	2,893	240	315	257	2,190	2,799	2,295
- Private / Joint Ventures (JVs)	4,321	10,502	899	1,024	1,014	7,942	8,620	8,516
(b) Net production (excluding flare gas and loss)	27,784	33,131	2,814		2,888	25,036		25,267
(c) LNG import [#]	33,031	30,776	2,561		2,266	24,033		20,394
(d) Total consumption including internal consumption (b+c)	60,815	63,907	5,375		5,154	49,069		45,661
(e) Total consumption (in BCM)	60.8	63.9	5.4		5.2	49.1		45.7
(f) Import dependency based on consumption (%), {c/d*100}	54.3	48.2	47.6		44.0	49.0		44.7

Oct - Dec 2022 DGCIS data prorated.



19. Coal Bed	Methane (CBM) gas development	in India	
Prognosticated CBM resources		91.8	TCF
Established CBM resources		10.4	TCF
CBM Resources (33 Blocks)		62.8	TCF
Total available coal bearing areas (India)		32760	Sq. KM
Total available coal bearing areas with MoPNG/DGH		17652	Sg. KM
Area awarded		20460	Sg. KM
Blocks awarded*		36	Nos.
Exploration initiated (Area considered if any boreholes were drilled	in the awarded block)	10670***	Sg. KM
Production of CBM gas	April-Dec 2022 (P)	511.50	MMSCM
Production of CBM gas	56.18	MMSCM	

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

under Special CBM Bid Round 2021 in September 2022. ***Area considered if any boreholes were drilled in the awarded block.

19a. Status of Compressed Bio Gas (CBG) project	ts under SATAT	Γ (as on	01.01.	2023) (I	Provisio:	nal)	
Particulars	Units	IOCL	HPCL	BPCL	GAIL	IGL	Total
LOIs issued	No. of plants	2756	474	318	275	50	3823
Expected CBG production against LOI issued	Tons per day	19414	2575	1412	1567	247	24968
No. of CBG plants commissioned/ Sale initiated	No. of plants	18	4	1	8	2	31
Start of CBG sale from retail outlet(s)	Nos.	39*	20**	37***	1	1	98
Injection/Supply of CBG in CGD network	GA Nos.	-	-	-	11	1	12
Total Sale of CBG (since Sep'2019)	Tons	9472*	1349**	1617***	2923****	468	468

*All 39 IOCL ROs. Sales include sale through RO & Industrial consumers. *2 HPCL ROs sourcing CBG from HPCL LOI holder plants, 18 HPCL ROs sourcing CBG from other than HPCL LOI holder plants. ** BPCL CBG sales from 37 ROS. Out of 37 ROS, for 1 RO sourcing CBG from own LOI holder & other ROs CBG is being sourced from other OMC's LOI holder(s). ***Sale of CBG by GAIL includes sales through its own

hannels as well as through other CGDs for CBG sourced under synchronization scheme from other Oil & Gas Company's LOI holders.														
20. Common Carrier Natural Gas pipeline network as on 30.09.2022														
Nature of pipeline GAIL GSPL PIL IOCL AGCL RGPL GGL DFPCL ONGC GIGL GITL Others* Total														
Operational	Length	9,577	2,695	1,459	143	107	304	73	42	24				14,424
•	Capacity	167.2	43.0	85.0	20.0	2.4	3.5	5.1	0.7	6.0				-
Partially	Length	4,777			282						1,254	365		6,678
commissioned [#]	Capacity										-	-		-
Total operational lens	gth	14,354	2,695	1,459	425	107	304	73	42	24	1,254	365	0	21,102
Under construction	Length	5,097	100		1,149						1,078	1,666	2,915	12,005
	Capacity	-	3.0								-	-	-	-
Total lengt	h	19,451	2,795	1,459	1,574	107	304	73	42	24	2,332	2,031	2,915	33,107

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

& STPL is 35335 Kms (P	& STPI	is 35335	Kms (P
------------------------	--------	----------	--------

21. Existing LNG terminals						
Location	Promoters	Capacity as on 01.01.2023	% Capacity utilisation (April-Nov 2022)			
Dahej	Petronet LNG Ltd (PLL)	17.5 MMTPA	79.3			
Hazira	Shell Energy India Pvt. Ltd.	5.2 MMTPA	43.9			
Dabhol	Konkan LNG Limited	*5 MMTPA	27.2			
Kochi	Petronet LNG Ltd (PLL)	5 MMTPA	17.5			
Ennore	Indian Oil LNG Pvt Ltd	5 MMTPA	13.0			
Mundra	GSPC LNG Limited	5 MMTPA	17.7			
	Total Capacity	42.7 MMTPA				

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

State/UT		os.), as on 31.10.2022(P)			
(State/UTs are clubbed based on the GAs authorised by PNGRB)	CNG Stations	Domestic	Commercial	Industrial	
Andhra Pradesh	151	241,884	411	32	
Andhra Pradesh, Karnataka & Tamil Nadu	29	170	0	2	
Assam	1	47.193	1.319	439	
Bihar	70	85,153	56	2	
Bihar & Jharkhand	1	5.560	0	0	
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	24	24.471	109	19	
Dadra & Nagar Haveli (UT)	7	9.992	54	54	
Daman & Diu (UT)	4	5.134	46	42	
Daman and Diu & Guiarat	14	1.580	3	0	
Goa	11	10.367	15	27	
Gujarat	969	2,858,013	21,899	5,742	
Harvana	291	285.652	765	1.399	
Haryana & Himachal Pradesh	9	0	0	0	
Harvana & Puniab	17	0	0	0	
Himachal Pradesh	7	3.677	0	0	
harkhand	64	94.675	2	0	
Karnataka	236	362.470	485	272	
Kerala	94	28.948	19	14	
Kerala & Puducherry	9	118	0	0	
Madhya Pradesh	194	183,656	309	398	
Madhya Pradesh and Chhattisgrah	3	0	0	0	
Madhya Pradesh and Rajasthan	24	152	0	0	
Madhya Pradesh and Uttar Pradesh	16	0	0	0	
Maharashtra	620	2.582.816	4.548	808	
Maharashtra & Gujarat	52	131.181	3	13	
National Capital Territory of Delhi (UT)	466	1.329.722	3,353	1.774	
Odisha	44	75.905	5	0	
Puducherry & Tamil Nadu	8	107	0	0	
Puniab	177	55,928	252	220	
Raiasthan	195	173.377	61	219	
Famil Nadu	152	18	0	6	
elangana	134	180.820	71	90	
elangana and Karnataka	134	0	0	0	
ripura	18	57.598	506	62	
Ittar Pradesh	681	1.278.299	2.089	2.451	
Jttar Pradesh & Raiasthan	38	18.958	36	340	
Ittar Pradesh and Uttrakhand	16	6,263	0	0	
Ittrakhand	29	63,922	51	<u>0</u> 78	
	42	03,922	0		
Nest Bengal			•		
[otal	4.918	10.203.779	36.467	14.503	

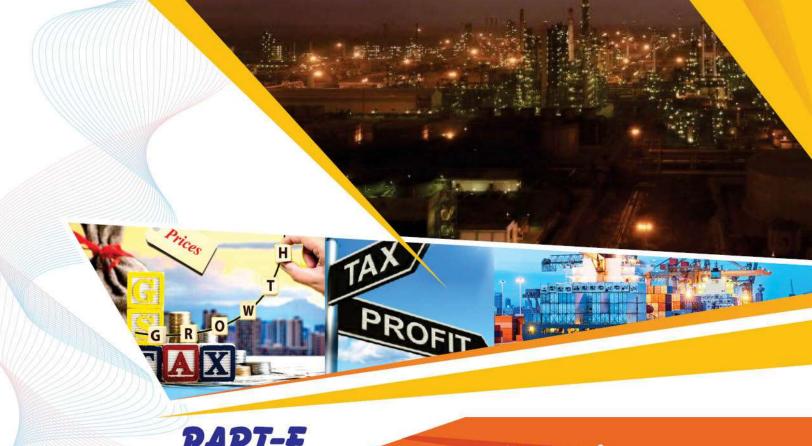
Source: PNGRB

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

23. Domestic natural gas price and gas price ceiling (GCV basis)						
Period	Domestic Natural Gas price in US\$/MMBTU	Gas price ceiling in US\$/MMBTU				
November 2014 - March 2015	5.05	-				
April 2015 - September 2015	4.66	-				
October 2015 - March 2016	3.82	-				
April 2016 - September 2016	3.06	6.61				
October 2016 - March 2017	2.50	5.30				
April 2017 - September 2017	2.48	5.56				
October 2017 - March 2018	2.89	6.30				
April 2018 - September 2018	3.06	6.78				
October 2018 - March 2019	3.36	7.67				
April 2019 - September 2019	3.69	9.32				
October 2019 - March 2020	3.23	8.43				
April 2020 - September 2020	2.39	5.61				
October 2020 - March 2021	1.79	4.06				
April 2021 - September 2021	1.79	3.62				
October 2021 - March 2022	2.90	6.13				
April 2022 - September 2022	6.10	9.92				
October 2022 - March 2023	8.57	12.46				

24. CNG/PNG prices						
City	CNG (Rs/Kg)	PNG (Rs/SCM)	Source			
Delhi	79.56	53.59	IGL website (13.01.2023)			
Mumbai	89.50	54.00	MGL website (13.01.2023)			
Indian Natural Gas Spot Price for Physical Delivery						
IGX Price Index Month	Avg.	Price	Volume	Source		
IGA FIICE IIIdex Month	INR/MMBtu	\$/MMBtu	(MMSCM)	Source		
Dec 2022	1294	15.69	87.80	As per IGX website: www.igxindia.com		

^{*}Prices are weighted average prices | \$1=INR 82.46| 1 MMBtu=25.2 SCM



PART-F

Taxes & Duties on Petroleum Products

	25. ln	formation or	n Prices. T	axes and Under-recoveries/Subsidi	es
Internationa		Exchange rates (\$		Price buildup of petroleum products	
Particulars	2020-21	2021-22	Dec 2022	Particulars	
Crude oil (Indian Basket)	44.82	79.18	78.10	Price charged to dealers (excluding Excise Duty and VAT)	
Petrol	47.68	89.66	85.45	Excise Duty	
Diesel	47.86	88.45	107.17	Dealers' Commission (Average)	
Kerosene	43.60	85.31	104.08	VAT (incl VAT on dealers' commission)	
LPG (\$/MT)	415.17	692.67	650.00	Retail Selling Price	
FO (\$/MT)	259.30	445.25	336.37		
Naphtha (\$/MT)	378.93	698.25	543.97	Pauliania na	
Exchange (Rs./\$)	74.20	74.51	82.46	Particulars	
Custo	ms, excise du	ity & GST rates		Price before taxes and dealers'/distributors' commission	
Product	Basic customs	Excise duty	GST rates	Dealers'/distributors' commission	
	duty #	-		GST (incl GST on dealers'/distributors' commission)	
Petrol	2.50%	Rs 19.90/Ltr	**	Retail Selling Price	
Diesel	2.50%	Rs 15.80/Ltr	**	*Petrol and Diesel at Delhi as per IOCL are a	s on
PDS SKO	5.00%		5.00%	SKO at Mumbai as on 1st January 2023 and	Sub
Non-PDS SKO	5.00%		18.00%	Delhi as on 1st January 2023.	0 0.10
Domestic LPG	Nil***	Not Applicable	5.00%	Defin as on 1st January 2025.	
Non Domestic LPG	5.00%	Not Applicable	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. 2100/ MT SAED	**		

^{*2%} for scheduled commuter airlines from regional connectivity scheme airports ** GST Council shall recommend the date on which GST shall be levied on petroleum crude , HSD, MS, natural gas and ATF; # Social welfare surcharge @ 10% is levied on aggregate duties of Customs excluding CVD in lieu of IGST.*** Customs duty is Nil for import of Domestic LPG sold to household consumers (including NDEC) by PSU OMCs. Customs duty rate is 5% for other importers of domestic LPG, ^^ Effective 03.01.2023 SAED on crude oil.

Acs and Shaci recoveries, sabstates					
Price buildup of petroleum products (Rs./litre/Cylinder) *					
Particulars	Petrol	Diesel			
Price charged to dealers (excluding Excise Duty and VAT)	57.36	58.16			
Excise Duty	19.90	15.80			
Dealers' Commission (Average)	3.75	2.55			
VAT (incl VAT on dealers' commission)	15.71	13.11			
Retail Selling Price	96.72	89.62			

Particulars	PDS SKO	Subsidised Domestic LPG
Price before taxes and dealers'/distributors' commission	65.23	938.01
Dealers'/distributors' commission	2.67	64.84
GST (incl GST on dealers'/distributors' commission)	3.40	50.15
Retail Selling Price	71.30	1053.00

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

25. Information on Prices, Taxes and Under-recoveries/Subsidies PDS Kerosene / DBTL Subsidy **PDS Kerosene** 2019-20 2020-21 **Product** 2018-19 Rs./Crore 1,833 Under recovery 5,950 0 Subsidy under DBTK # 0 98 42 Total 6,048 1,875 0

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

Domestic LPG under DBTL (Direct benefit transfer for LPG)						
Particulars	2018-19	2019-20	2020-21			
raiticulais	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	202	1-22	H1-2022-23 (P)				
	Turnover	PAT	Turnover	PAT			
Upstream/midstream	245 625	F4 FF7	167.641	25.760			
Companies (PSU)	215,625	54,557	167,641	35,760			
Downstream Companies (PSU)	15,29,502	39,355	9,68,108	-21,201			
Standalone Refineries (PSU)	169,984	7,859	130,942	5,439			
Private-RIL	466,425	39,084	304,026	22,011			
Borrowings of OMCs (Rs. Crores), As on							
	0 100						

Borrowings of Owics (Ns. Crores), As on						
Company	Mar`21	Mar'22	Sept`22 (P)			
IOCL	102,327	110,799	140,322			
BPCL	26,315	24,123	48,237			
HPCL	40,009	43,193	68,546			

Petroleum sector contribution to Central/State Govt.			
Particulars	2020-21	2021-22	H1-2022-23 (P)
Central Government	4,55,069	492,303	197,055
% of total revenue receipts	28%	24%	
State Governments	2,17,650	282,122	160,242
% of total revenue receipts	8%	8%	
Total (Rs. Crores)	6,72,719	7,74,425	357,296

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

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

^{**}Totals may not tally due to roundoff.



26. Capital expenditure of PSU oil companies (Rs in crores) Company 2019-20 2020-21 2021-22 (P) 2022-23 (P) **Target** April -Dec 22 (Annual) ONGC Ltd 30,115 26,441 26,621 29,950 19,153 ONGC Videsh Ltd (OVL) 5,351 5,363 4.836 8.180 1.970 Oil India Ltd (OIL) 3.724 12.802 4.239 4.302 2.902 GAIL (India) Ltd 4,381 5,560 6,970 7.500 6.188 Indian Oil Corp. Ltd. (IOCL) 28,316 27,195 29,604 28,549 24,495 Hindustan Petroleum Corp. Ltd (HPCL) 13,773 14,036 16,205 14,500 8,849 Bharat Petroleum Corp. Ltd (BPCL) 10,255 10,697 11,449 10,000 8,930 Mangalore Refinery & Petrochem Ltd (MRPL) 1.318 604 815 339 2,218 Chennai Petroleum Corp. Ltd (CPCL) 969 592 575 584 461 Numaligarh Refinery Ltd (NRL) 536 981 3.403 6.774 4.273 Balmer Lawrie Co. Ltd (BL) 40 42 23 40 30 Engineers India Ltd (EIL) 164.43 67 730 160 40

Includes expenditure on investment in JV/subsidiaries.

(P) Provisional

Total

Totals may not tally due to roundoff.

111,354

77,631

104,596

106,642

98,955

	27. Conversion factor		
Weight to	Weight to volume conversion		
Product	Weight (MT)	Volume (KL)	Barrel (bbl)
LPG	1	1.844	11.60
Petrol (MS)	1	1.411	8.88
Diesel (HSD)	1	1.210	7.61
Kerosene (SKO)	1	1.285	8.08
Aviation Turbine Fuel (ATF)	1	1.288	8.10
Light Diesel Oil (LDO)	1	1.172	7.37
Furnace Oil (FO)	1	1.0424	6.74
Crude Oil	1	1.170	7.33
Exclusive Economic Zone			
200 Nautical Miles	370.4 Kilo	meters	

to	tors and volume conversion			
	Volume conversion			
	From	То		
]	1 US Barrel (bbl)	159 litres		
]	1 US Barrel (bbl)	42 US Gallons		
	1 US Gallon	3.78 litres		
╛	1 Kilo litre (KL)	6.29 bbl		
	1 Million barrels per day	49.8 MMTPA		
	Energy conversion			
	1 Kilocalorie (kcal)	4.187 kJ		
	1 Kilocalorie (kcal)	3.968 Btu		
	1 Kilowatt-hour (kWh)	860 kcal		
	1 Kilowatt-hour (kWh)	3,412 Btu		

	Natural
1 Standard Cubic Metre (SCM)	35.31 Cubic Feet
1 Billion Cubic Metres (BCM)/year of Gas	2.74 MMSCMD
1 Trillion Cubic Feet (TCF) of Gas Reserve	3.88 MMSCMD
1 Million Metric Tonne Per Annum (MMTPA) of LNG	3.60 MMSCMD
1 MT of LNG	1,325 SCM

I	gas conversions			
	1 MMBTU	25.2 SCM @10000 kcal/SCM		
1	GCV (Gross Calorific Value)	10,000 kcal/SCM		
1	NCV (Net Calorific Value)	90% of GCV		
	Gas required for 1 MW power generation	4,541 SCM/day		
	Power generation from 1 MMSC of gas	220 MW		







MINISTRY OF PETROLEUM
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Petroleum Planning & Analysis Cell

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