





INDUSTRY CONSUMPTION REPORT-POL & NG, AUGUST 2023

CONTENTS

Industry CONSUMPTION Report-POL & NG, AUGUST 2023	1
Petrol/Motor Spirit (MS):	
Factors impacting consumption of MS:	9
High Speed Diesel (HSD):	
Factors impacting consumption of HSD:	
Kerosene:	14
Bitumen:	Error! Bookmark not defined.
LPG:	17
Naphtha:	
ATF:	
Furnace oil & Low sulphur heavy stock (FO/LSHS):	
Petcoke:	
Light Diesel Oil:	
Natural Gas:	Error! Bookmark not defined.
Conversion factors taken for MT to barrel conversion	23
Industry Consumption Trend Analysis 2022-23 (Provisional) in mbpd	24
Industry Consumption Trend Analysis 2022-23 (Provisional) in TMT	25

वितरण CIRCULATION:



संख्या : डी-12013/02/2023-I No. D-12013/02/2023-I विषय: पीपीएसी की उद्योग बिक्री समीक्षा रिपोर्ट – अगस्त 2022 Subject: Industry Consumption Review Report of PPAC: Augsut 2023

पेट्रोलियम योजना एवं विश्लेषण प्रकोष्ठ (PPAC) द्वारा अगस्त 2023 के महीने के लिए मासिक पेट्रोलियम उद्योग उपभोग की समीक्षा रिपोर्ट तैयार की गई है। रिपोर्ट में अगस्त 2023 के महीने के दौरान पी.ओ.एल उत्पादों और प्राकृतिक गैस की

खपत का विश्लेषण है। रिपोर्ट आपके सन्दर्भ के लिए सलंग्न है।

यदि इस रिपोर्ट पर आपका कोई प्रश्न है, तो कृपया श्री ऋत्विक कुमार हातियाल को ritwik.hatial@ppac.gov.in पर लिखें।

The monthly Petroleum Industry Consumption Review Report has been prepared by the Petroleum Planning and Analysis Cell (PPAC) for the month of August-2023. The report contains analysis of consumption of POL products and natural gas during the month of August-2023. The same is enclosed for kind reference.

If you have any question on this report, please write to Mr. Ritwik Kumar Hatial at ritwik.hatial@ppac.gov.in.

धन्यवाद, Thanking you,

19.09.2023

डॉ पंकज शर्मा अपर निदेशक (मांग एवं आर्थिक अध्ययन)-प्रभारी Dr Pankaj Sharma Additional Director (Demand & Economic Studies)-I/c



4 Page

Highlights of the month:



The Central Government brought down the domestic LPG cylinder (14.2 Kg) price by ₹ 200 for all the LPG consumers. The Central Government also approves 75 lakh additionalUjjwala connections.

₹1,59,069 crore gross GST revenue collected in August 2023; 11% Year-on-Year growth. Monthly GST revenues more than ₹1.5 lakh crore crossed for the 9th time since inception of GST.

The average FOB (Free on Board) price of Indian basket crude oil during the month August-2023 was USD 86.43/bbl.

The power demand in August 2023 registered 16% growth as compared to August 2022 and power deficit was reduced to 0.5% in the month of August 2023.

The average rainfall during the month was at 162.7 mm with 36% departures from Long Period Average (LPA). Traffic at major ports during the month of August 2023 recorded a YoY growth 4.4% of the volumes in the month of August 2022. The growth percentage in consumption of petroleum products, category-wise, for the month of August 2023 is given in Table-1.

SUMMARY OF PRODUCT WISE POL CONSUMPTION PROFILE FOR AUGUST-23

- 1. The consumption of petroleum products in August 2023 with a volume of 18.57 MMT registered 6.5% & 8.4% growth YoY basis over the volume of 17.44 MMT and 17.13 MMT in August 2022 & pre oandemic 2019 respectively.
- MS (Petrol) consumption during the month of August 2023 with a volume of 3.09 MMT (0.89 mbpd) recorded a growth of 2.9% on the volume of 3 MMT (0.86 mbpd) in August 2022.

The Sale of Passenger Vehicles in August-2023 with a volume of 3.14 lacs registered 11.6% growth over volume of 2.81 lacs during August-2022. Two-wheeler sales in August 2023 with a volume of 15.7 lacs registered 0.6% growth over volume of 15.6 lacs during August-2022. Three-

wheeler domestic passenger vehicles touched a sales volume of 0.65 lac in August-2023 registering 68.8% YoY growth rate over a volume of 0.38 lac in August-2022.

- 3. HSD (Diesel) consumption during the month of August 2023 with a volume of 6.67 MMT (1.64 mbpd) recorded a growth of 5.2% on the volume of 6.34 MMT (1.56 mbpd) MMT in the month of August-22
- 4. LPG consumption during the month of August 2023 with a volume of 2.46 MMT registered 3% growth over the volume of 2.39 MMT in August-2022. As usual, LPG consumption during the month had been largely driven by consumption in packed domestic category (89%).
- 5. ATF consumption during August 2023 with a volume of 0.68 MMT registered a growth of 14.3%, over a volume of 0.59 MMT during the month of August 2022.
- 6. Bitumen consumption during August 2023 with a volume of 0.55 MMT registered 75.1% growth over the volume of 0.32 MMT in the month of August 2022.
- Kerosene (SKO) consumption with a volume of 0.06 MMT registered a growth of 85.6% in August 2023 as compared to August 2022. SKO consumption during the month is largely constituted by PDS category 0.035MMT.
- Average percentage of ethanol blending in petrol (EBP) marked 11.3% in August-2023. Around 45.7 cr litre ethanol has been blended in petrol under EBP program during August-2023.
- 9. Total Natural Gas Consumption (including internal consumption) for the month of August 2023, with a volume of 5.3 BCM, registered 8.2% growth over the volume of 4.9 BCM, in corresponding month of the previous year.
- 10. As on 1st September-23, number of LPG domestic connections 3150 lacs, PMUY connections 9.585 crores, LPG distributors in gramin kshetriya 11755 and LPG distributors in durgam kshatriya 2019; the number of ROs equipped with CNG/ CBG is 5196, with EV charging facility 9346. In total more than 16.6% outlets have alternate fuel.

This report analyses the trend of consumption of petroleum products in the country during the month of August 2023. Data on product-wise monthly consumption of petroleum products for August 2023 is uploaded on the PPAC website (www.ppac.gov.in) and on the mobile app "PPAC". A small summary of Natural Gas consumption is also provided.

Detailed NG production and consumption reports are available at <u>www.ppac.gov.in</u>.

		A	ugust		A	April-Augus	st
Product	2022	2023	% share of July-23	Growth (%)	2022-23	2023-24	Growth (%)
(A) Sensitive Products							
LPG	2388	2461	13	3.0	11333	11584	2.2
SKO	32	59	0.3	85.6	240	236	-1.6
Sub Total	2420	2519	14	4.11	11573	11820	2.1
(B) Major Decontrolled P	roduct		•				
HSD	6343	6670	36	5.2	35136	37497	6.7
MS	3006	3093	17	2.9	14597	15454	5.9
Naphtha	1089	1127	6	3.5	4990	5528	10.8
ATF	592	676	4	14.3	2907	3308	13.8
Bitumen	316	554	3	75.1	2882	3578	24.1
FO/LSHS	617	527	3	-14.5	2795	2785	-0.3
Lubes+Greases	243	324	2	33.4	1464	1545	5.6
LDO	66	76	0.4	14.2	291	334	14.8
Sub Total	12271	13047	70	6.3	65061	70030	7.6
(C) Other Minor Decontrolled Products							
Pet.Coke	1230	1507	8	22.5	7395	7882	6.6
Others*	1516	1493	8	-1.5	6508	5818	-10.6
Sub Total	2747	3000	16	9.2	13903	13700	-1.5
Total	17438	18567	100	6.5	90537	95550	5.5

Table-1: Petroleum Products Consumption (Quantity in TMT)

*Others include sulfur, propylene, propane, reformat, L.A.B.F.S, CBFS, butane, MTO etc. NOTE :

i) All figures are provisional.

ii) The source of information includes Oil Companies, DGCIS & online SEZ data.

iii) The consumption estimates represent market demand and is aggregate of :

(a) actual sales by oil companies in domestic market,

(b) consumption through direct imports by private parties (Private direct imports prorated for July-August'23,

which may undergo change on receipt of actual data), and

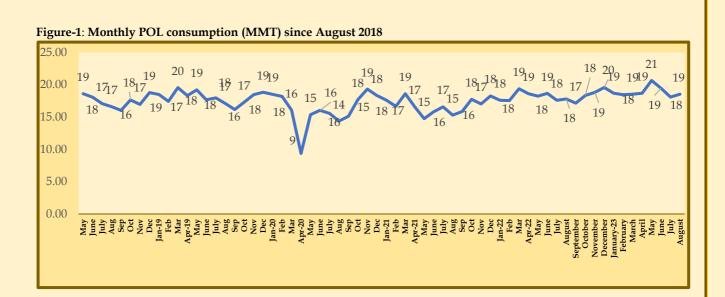
(c) sales by SEZ units in Domestic Tariff Area (DTA)

PPAC analyses the sales recorded by the industry and domestic sales by SEZ units based on available data. Data on direct private imports are received from DGCIS, which is added to the final sales reported by oil companies and domestic sales by SEZ units, for estimation of consumption figures.

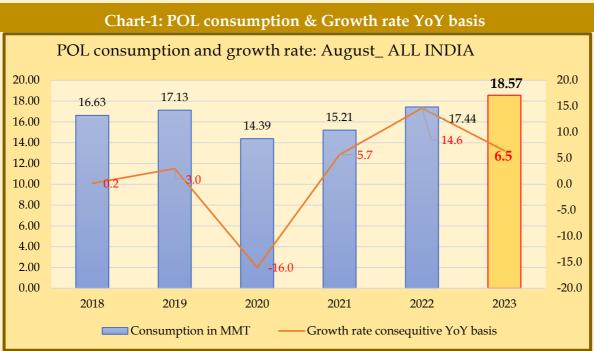
Overall consumption of all petroleum products in August 2023 with a volume of 18.57 MMT registered 6.5% growth over the volume of 17.44 MMT in August 2022. Growth was observed in LPG at 3%, Naphtha at 3.5%, MS at 2.9%, ATF at 14.3%,SKO 85.6%, HSD at 5.2%, LDO at 14.2%, Lubricants & Greases at 33.4%, Bitumen at 75.1% and Petroleum coke at 22.5%.

On cumulative basis, total POL consumption of 95.55MMT during April-August-23 registered 5.5% growth YoY basis.

Moreover product wise growth was observed in LPG 2.2%, Naphtha 10.8%, MS 5.9%, ATF 13.8%, HSD7 6.7%, LDO 14.8%, Lubricants & Greases 5.6%, Bitumen 24.1% and Petroleum coke at 6.6%. *Pan India based domestic POL monthly consumption trend since August-2018 is shown in Figure-1.*



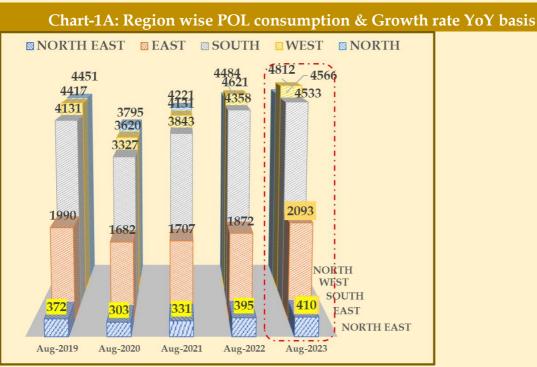
The overall POL domestic consumption profile of the month August & its pattern since 2018 with corresponding consequitive YoY growth rates were shwon in the Chart-1; it is found that August-23 consumption was quite promisiong and it is better that pre-covid era also, as shown in the chart.



So far as zone wise POL consumption is concerned, highest growth rate YoY basis observed in EASTERN zone 11.8% followed by West 4.1%,South 4.02%, North-East 3.99% and North 1.8%

Top three districts with respect to over all domestic POL sales were Jamnagar (452TMT), Baruch (327TMT) and Bangalore Urban (289 TMT). The following chart-1A shows Zone wise POL August-consumption trend for last FIVE years.





Source: PPAC Y2 data & OMCs sales Sales data in TMT

PETROL/MOTOR SPIRIT (MS): MS (Petrol) consumption during the month of August 2023 with a volume of 3.09 MMT registered a growth of 2.9% and 20.1% over the volume of 3MMT & 2.58MMT in August 2022 & pre-pandemic 2019 respectively.

Major factors contributing to MS consumption during the month are as follows:

- Economic momentum was well maintained at accelerated space during the month as shown in economic factors like e-way bill, GST collection, PMI index etc.
- Tourism dependent states saw a heavy influx of travelers giving a boost to economic activities;

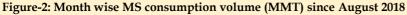
• In few states MS consumption was affected by excessive rainfall, floods etc.

However, recovery of retail MS consumption was very fast post flood period. Recovery and aiding programs to the affected areas increased mobility causing more MS consumption

Advanced winter upliftment by Indian Army increased MS consumption

Pan India based domestic MS monthly consumption trend since August-2018 is shown in Figure-2





OTHER FACTORS IMPACTING CONSUMPTION OF MS:

PASSENGER VEHICLE SALES:

The Sale of Passenger Cars in August 2023 at 3.14 lacs registered 11.6% growth YoY basis over sale of 2.81 lacs in the month of August 2022.

Utility vehicles recorded a growth of 34.2% during the current month as compared to the same period previous year. Vans recovered 96.9% YoY basis with respect to August-22, *as shown in the following Table-2*.

	August				
Vehicle Segment	2022	2023	Growth %age		
Passenger Cars	1,33,477	1,20,031	-10.1		
Utility Vehicles	1,35,497	1,81,825	34.2		
Vans	12,236	11,859	-3.1		
Total PV	2,81,210	3,13,715	11.6		

Source: SIAM (BMW, Mercedes, JLR, Tata Motors and Volvo Auto data not available)

TWO-WHEELER SALES:

Two-wheeler sales in August 2023 with a volume of 15.67 lacs registered 0.6% growth, YoY basis over volume of 15.57 lacs during August 2022, *as shown in the following table-3.*

THREE-WHEELER SALES

Three-wheeler domestic sales in August 2023 with a volume of 0.65 lac recorded a growth of 68.8%, YoY basis over the volume of 0.38 lac in August-2022, *as shown in the following table-3*.

Table-3: Two & Three Wheelers vehicle sales in the month of August 2023 & YoY comparison (Primary sales data)

	August			
Vehicle Segment	2022		2023	Growth %age
Scooters/Scotrette	5,04,146		5,49,290	9.0
Motor Cycles/Step-Throughs	10,16,794		9,80,809	-3.5
Mopeds	36,489		36,495	0.02
Total Two Wheelers	15	,57,429	15,66,594	0.6
Passenger Carrier-3 wheeler	29,105		52,316	79.7
Goods Carrier-3 wheeler	7,007		9,132	30.3
E-Rickshaw	2,095		3,116	48.7
E-cart	162		199	22.8
Total Three Wheelers		38,369	64,763	68.8

Source: SIAM

HIGH SPEED DIESEL (HSD):

HSD (Diesel) consumption during the month of August 2023 with a volume 6.67 MMT recorded a growth of 5.2% & 9.03% over a volume of 6.34MMT & 6.12MMT in the month of August 2022 & 2019 respectively.

Major factors contributing to HSD consumption during the month are as follows:

- The delayed sowing season of kharif crop in some parts of the country ramped up diesel consumption for in various agricultural activities.
- Full-fledged industrial and mining activities in various parts of India increased diesel consumption.
- Hot weather contributed to consumption for DG sets.
- However, in few states HSD consumption was affected by incessant rainfall, floods etc.
 Extended sawan season and no marriage dates in August-23 afftected HSD consumption.

The IHS Markit India Services PMI (Purchasing Managers' Index) for August-23 marked at 58.6 marking 26th straight month of growth in commercial activity..

PanIndiabaseddomesticHSDmonthlyconsumption since April-18 is shown in the Fig-3.HSD market share in direct and retail sales isshownintheFig-4.

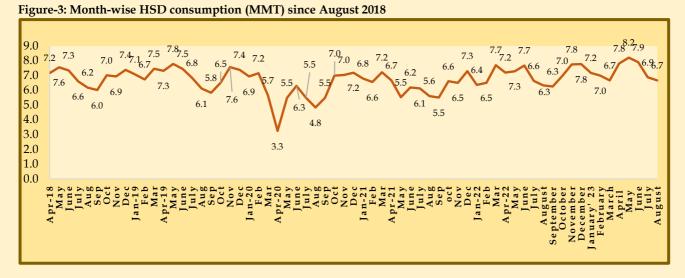
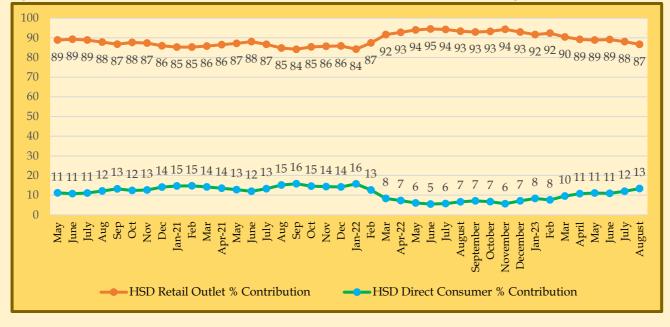


Figure-4: Share of Retail & Direct business (%) in Diesel consumption month-wise since August 2020

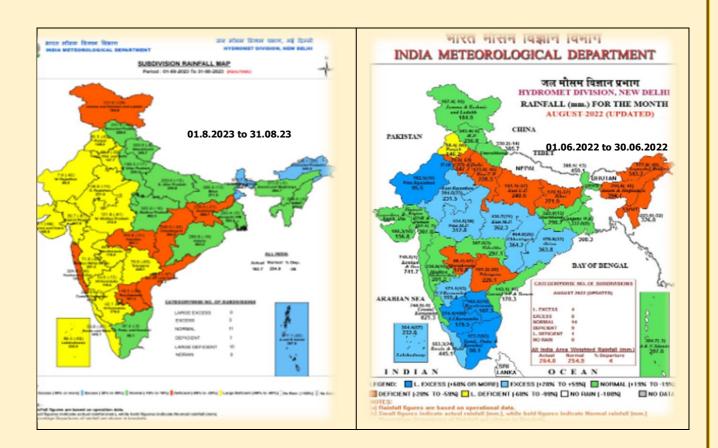


OTHER FACTORS IMPACTING CONSUMPTION OF HSD:

Seasonal rainfall scenario: The rainfall in the country during August 2023 was 36% below normal precipitation. A rainfall of 162.7 mm was recorded in the month of August 2023 as against a normal reading of 254.9 mm. Out of total 36 subdivisions,

Source: India Meteorological Department (IMD)

3 division received excess to large excess rainfall, 11 divisions received deficient rainfall whereas 22 division received normal rainfall.



E-Way Bill

The electronic bill is mandatory document for transportation of goods of value higher than Rs 50,000. This Electronic document is used to track goods being moved around between cities and states. Economic activity driven by domestic trade is reflected from e-way bill generation. The number of E-way bills reflect quantum of transport activities directly influencing Diesel sales.

The IHS Markit India Services PMI (Purchasing Managers' Index) for August-23 marked at 58.6 marking 26th straight month of growth in commercial activity.

COMMERCIAL VEHICLE

Based on data from FADA Research, Indian domestic sales of commercial vehicles registered 3.2% growth as compared to August 2022 as shown in Table-4.

TRACTOR SALE:

Tractor domestic sales in August 2023 with a volume of 73,849 registered 13.6% growth over the volume of 65,018 lacs in August 2022. Delayed sowing & Cultivation of Kharif crop with heavy rainfall increased the growth in tractor sales for agricultural activities during the month August-2023 as shown in the table.

Table-4: Domestic commercial vehicles & tractors sales with YoY comparison (Secondary sales data)

	es ualaj	ataj				
	mercial	August				
	les &	2022 2023 Growt				
tracto	ors			% age		
	LCV	45403	43929	-3.2		
C	MCV	5119	5895	15.2		
U U	HCV	20713	22137	6.9		
	Others	1705 3333		95.5		
Tota	l CVs	72940 75294		3.2		
Trac	tors	65018 73849		13.6		

Source: FADA research

"Disclaimer:

1- Vehicle Retail Data has been collated as on 02.05.23 in collaboration with Ministry of Road Transport & Highways

2- Commercia Vehicle is subdivided in the following manner

a. LCV – Light Commercial Vehicle (incl. Passenger & Goods Vehicle)

b. MCV – Medium Commercial Vehicle (incl. Passenger & Goods Vehicle)

c. HCV – Heavy Commercial Vehicle (incl. Passenger & Goods Vehicle)

d. Others – Construction Equipment Vehicles and others

PORT TRAFFIC:

The cargo traffic handled at major ports in India with a volume of 65.3 MMT in August 2023 recorded a growth of 4.4% on YoY basis over the volume of 62.6 MMT in August-22.

Growth was observed in cargo handled during the month of August 2023 in all the major ports like Kolkata & Haldia 3.2%, Paradip 10.3%,Visakhapatnam 4.6%, Kamarajar (Ennore) 6.6%, Chennai 9.7%, V.O. Chidambaranar 0.03%, Cochin 3.7%, Mormugao 11%, Mumbai 27.7% and JNPT 14% with respect to August-2022.

During 'April-August-FY2023-24', sector wise growth was registered in 'coking & others' coal 9.9%, Finished & Raw Fertilizers 28.9%, Iron ore 31.2% and POL including crude 2.7% with respect to 'April-August-FY2022-23'. The Percentage tonnage share in August-23 was maximum in CPOL 31.5% followed by Coal (thermal, steam and coking) 21.7% and container-tonnage & TEUs 26.6%, Iron ore 5.6% & other miscellaneous cargo 9.8% and fertilizer (finished & dry) 2.1%.



Growth pattern of cargo operation in percentage in all Indian ports and August-23 port wise cargo handled in MMT are depicted in the following Figure-5 and Table-5 respectively.

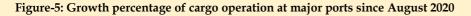




Table-5: Cargo handled at major ports in August 2023(Qty in TMT)

Ports	August 2022	August 2023	Growth (%)
Kolkata & Haldia	26340	25604	2.87
Paradip	58758	54380	8.05
Visakhapatnam	33141	32320	2.54
Kamarajar (Ennore)	19049	19278	-1.19
Chennai	20926	20009	4.58

V.O. Chidambaranar	16405	16244	0.99
Cochin	14469	14432	0.26
New Mangalore	17377	16351	6.27
Mormugao	7407	7066	4.83
Mumbai	27546	24967	10.33
JNPT	35249	33705	4.58
Deendayal	55162	58621	-5.90
Total:	331829	322977	2.74

Source: ipa.nic.in

Power situation:

The position of power supply for the month of August 2023 is given in Table-6. As per the data reported, power deficit position was 0.5% in August-2023 whereas it was 0.4% in August-2022. The requirement of power in August 2023 was 1,51,794 MU and has recorded a growth of 16% over requirement of power at 1,30,855 MU in the month of August 2022.

Table-6: Region wise Power supplied vs requirement for August 2023

	August-2022			August-2023		
	Requirement	Supplied	Deficit %	Requirement	Supplied (MU)	Deficit %
		(MU)				
North	46,060	45,855	-0.4%	51,949	51,583	-0.7%
West	35,746	35,742	0.0%	42,971	42,843	-0.3%
South	29,829	29,813	-0.1%	37,185	37,072	-0.3%
East	17,329	17,098	-1.3%	17,692	17,578	-0.6%
North-East	1,891	1,883	-0.4%	1,998	1,951	-2.4%
Total	1,30,855	1,30,390	-0.4%	1,51,794	1,51,028	-0.5%

Source: Central Electricity Authority (CEA)

Sectoral consumption of HSD:

During 'April-August-FY2023-24', HSD total consumption with a volume of 37.497 MMT registered 6.7%growth Year-on Year basis over the volume of 35.14 MMT in 'April-August-FY2022-23'.

88% of cumulative HSD consumption during 'April-August-FY2023-24', was constituted by retail sales. Balance 12% falls under direct sales category as shown in 5A/B chart. Whereas the bifurcation was 94:6 in 'April-August-FY2022-23'. In direct sales category, the sectoral consumption break up is shown in 5B chart; i.e., for April-August-FY2023-24 'Road Transport' 38% followed

by 'Miscellaneous usage' share was 22% Railways share was 12%, Mining 10%, Manufacturing 9%, Shipping 5%, Agriculture 2% and Power Generation 2%. Most of the retail sales are consumed in road transport.

Sectoral consumption in Railways decreased by 17 percentage points due to electrification of railway-tracks; further shipping sector showed 6 percentage points less where as Road Transport is increased by 20 percentage points YoY basis. Details comparisons are pictorially presented in the following charts.



Chart-5A/B: Sector-wise HSD consumption in April-August FY-2023-24 (P) and its comparison with April-August-FY2022-23 (P)

*Miscellaneous Usage (22%) includes 'Bulk applications' (22.2%), Universities (0.02%), Catering & hotels (0.03%), Posts & telegraphs (0.002%), State electricity boards (0.02%). ** Manifacturing (9%) includes chemicals (0.6%), Civil engineering (6.3%), 'Electricals/electronics' (0.1%),

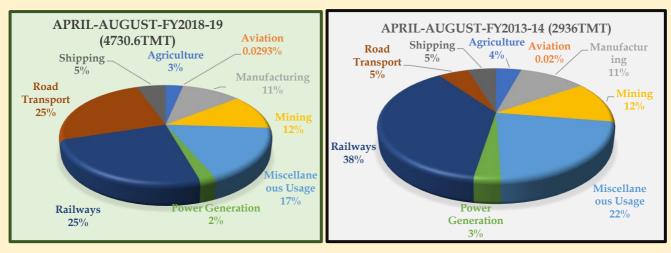
Mechanical/Metallurgy (1.5%), Bulk use(0.8%) and 'Textiles' (0.1%)



*Miscellaneous Usage (17%) includes 'Bulk applications' (16.28%), Universities (0.04%), Catering & hotels (0.05%), Posts & telegraphs (0.003%), State electricity boards (0.05%).

** Manifacturing (5%) includes chemicals (1.12%), Civil engineering (1.45%), 'Electricals/electronics' (0.14%), Mechanical/Metallurgy (2.26%), Bulk use(0.29%) and 'Textiles' (0.05%)

During FY2022-23, it was oblivious that HSD direct sales volume was shifted towards retail segment. Therefore, for better comparison we have made the direct sales volume bifurcation during April-August for FY2018-19 (pre-covid era) and FY2013-14, to get the decadal paradigm change over.



HSD consumption in railway sector has been reduced at a decadal CAGR of 5% and CAGR of 6% with respect to prepandemic period as shown from the chart.

KEROSENE:

Kerosene consumption during August-2023 with a volume 0.059 MMT registered growth of 85.6% over the volume of 0.032 MMT in Jube-2022, however, it showed de-growth of 74.7% over the volume of 0.231 MMT in August-19.

Nil non-subsidized PDSSKO sales have been registered during the month.

In PDSSKO upliftment, West Bengal (29225 KL) was the biggest consumer followed by Bihar (3232KL) and Tamil Nadu (2712KL) There are twelve states/UTs who have voluntarily surrendered the PDS kerosene quota as on date namely, except the UT of J&K, Ladakh and Lakshadweep, all UTs and the states of Andhra Pradesh, Delhi, Haryana, Punjab, Uttar Pradesh, Rajasthan, Gujrat and Goa.

The market share of subsidized-PDS and other SKOwas 60% & 40% respectively for the month August-23asshowninthefollowingfigure.

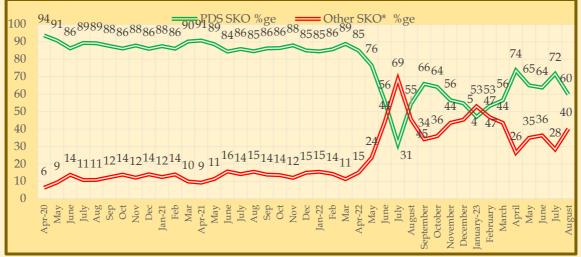


Figure-6: M onth-wise PDS & other-SKO consumption in share (%) since August 2020

*Other SKO: non-subsidized PDS SKO +non-PDS kerosene

Sectoral consumption of SKO:

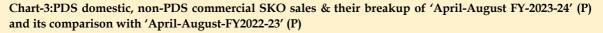
During 'April-August-FY2023-24', SKO total consumption with a volume of 0.236 MMT registered 1.6% degrowth Year-on Year basis over the volume of 0.240 MMT in 'April-August-FY2022-23'.

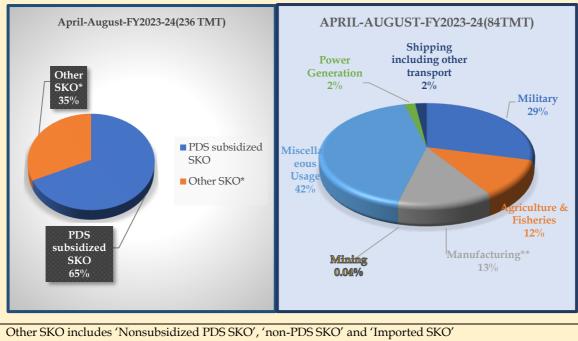
Out of total SKO sales during 'April-August-FY2023-24' 'PDS subsidized SKO' upliftment constituted to 65%. So far as sales in 'Other SKO' is concerned,' 42% accounted to Industrial applications followed by Military 29%, manufacturing 13%, agriculture & fisheries 12%.

Sectoral consumption in agriculture & fisheries increased by 3 percentage points and manufacturing decreased by 1 percentage points YoY basis. Details comparisons are pictorially presented in the next page of chart-3.

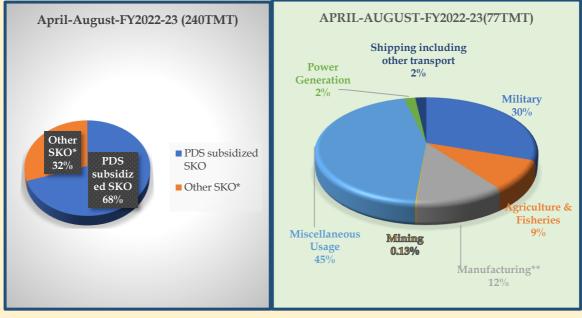


15 | Page





**Manufacturing (13%) includes 'Chemicals' (3.6%), 'Civil engineering' (4.4%), 'Electrical/electronics' (0.1%), Mechanical/ Metallurgy (2.8%), 'Textiles (NIL%) and 'Bulk applications'(1.7%)



Other SKO includes 'Nonsubsidized PDS SKO', 'non-PDS SKO' and 'Imported SKO' **Manufacturing (11.5%) includes 'Chemicals' (2.94%), 'Civil engineering' (2.91%), 'Electrical/electronics' (NIL%), 'Iron, steel & metallurgy' (2%),'Textiles (0.05%) and 'Bulk applications'(2.96%)

16 | Page

Bitumen:

Bitumen consumption during August 2023 with a volume of 0.554 MMT registered 75.1% growth

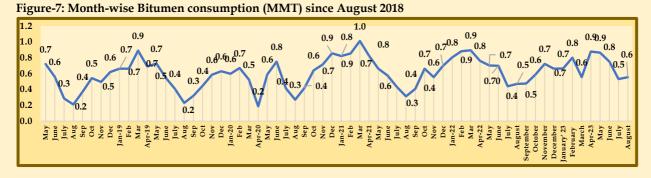
Industry POL & NG con Report, August 2023

over a volume of 0.316 MMT in the month of August 2022;

Major factors contributing to Bitumen consumption during the month are as follows:

- Road construction activity was run at a faster rate at the middle of second quarter
- Relaying of ORR in Hyderabad NH works of Khammam-Devarapalli & Suryapet-Khammam project and Delhi Amritsar Katra Road project activities increased bitumen consumption.
- Appreciable amount of Packed Bitumen demand from Border Roads Organizations(BRO) was observed for J&K and Ladakh area.
- Low base of last year also led to higher growth rate
- However, in few sates road construction activity was affected by heavy rainfall

Pan India based domestic Bitumen monthly consumption since April-18 is shown in the Fig-7.



Sectoral consumption of Bitumen:

During 'April-August-FY2023-24', total bitumen consumption with a volume of 3.58 MMT registered 24.1% growth Year-on Year basis over the volume of 2.88 MMT in 'April-August-FY2022-23'.

98% of cumulative bitumen sales during 'April-August-FY2023-24', was constituted to Road construction, balance 2% was consumed by miscellaneous industries.

LPG:

LPG consumption during the month of August 2023 with a volume of 2.46 MMT registered 3% & 2.5% growth over the volume of 2.39 MMT & 2.4 MMT in August-2022 and prepandemaic August-2019 respectively.

Domestic LPG is supplied in 14.2 kg and 5 kg cylinders to domestic consumers for use as kitchen fuel. Packed Non-Domestic LPG is sold to commercial or industrial consumers in cylinders having water capacity less than 1000 liter. Bulk LPG is primarily sold to Industries in large containers with water capacity greater than 1000 liter for industrial applications. Auto LPG is an automotive fuel used by three and four-wheeler vehicles.

The subsidized prices in domestic LPG and price cut in commercial LPG category contributed to growth rate in LPG consumption.

Moreover, the anticipated price revision in commercial LPG category in August-2023, affected increased LPG consumption in that category as found in the sectoral share chart.

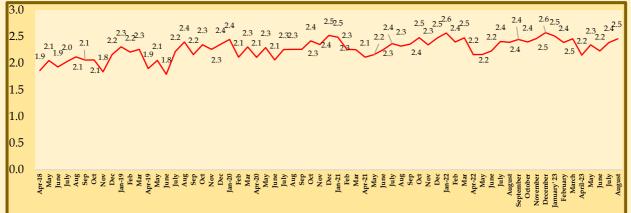
Moreover, LPG consumption might be affected by domestic PNG penetration. CGDs are coming up facilatating domestic PNG network (D-PNG) strongly in recent time.

Major factors contributing to LPG consumption during the month are as follows:

- Some of the customers Like Foam industries etc. who were earlier using imported Propane and Butane have shifted to indegeneous LPG because of favorable pricing and *Antmanirvar Bharat* centiment.
- States like Rajasthan (92.7), Punjab (44%) and UK(36.9%) have shown very good growth in Auto LPG. Rate reduction in Auto LPG has helped in Revival.

Pan India based domestic LPG monthly consumption since April-18 is shown in the Fig-8.

Figure-8: Month-wise LPG consumption (MMT) since August 2018

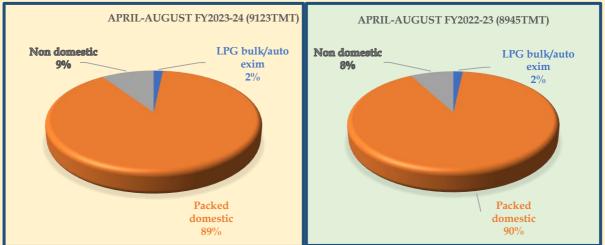


Sectoral consumption of LPG:

During 'April-August-FY2023-24', total LPG domestic consumption with a volume of 11.58 MMT registered 2.2% growth Year-on Year basis over the volume of 11.33MMT in 'April-August-FY2022-23'.

The Sectoral LPG consumption during 'April-August-FY2023-24', was driven by packed domestic category 89%, followed by 'nondomestic/industry/commercial sector 9% & 'LPG Bulk, Auto & Exim '2%. With respect to 'April-August-FY2022-23', sectoral LPG consumption profile in commercial LPG category during'April-August-FY2023-24' increased by 1 percentage points.

Chart-4: Sector wise LPG consumption of April-August-FY2023-24 (P) and its comparison with 'April-August-FY2022-23 (P)'



NAPHTHA:

Naphtha consumption during the month of August 2023 with a volume of 1.13 MMT registered 3.5% growth over the volume of 1.09 MMT in August-2022; however it recovered 82.4% over the volume of 1.37 MMT in prepandemaic August-2019.

Petrochemical industries remain the main consumers of naphtha.

Based on the market survey, Naphtha consumption during the month may be attributed due to the following reasons:-

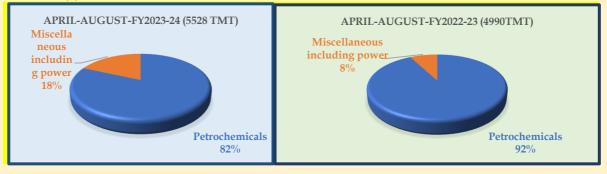
- Some of the consumers increased their inventory by primay sales of naphtha due to abticipated supply disruption for scheduled shut down of some of the refineries during Q2FY2023-24.
- Some petrochemical companies increased naphtha consumption to optimize the feed based on the NG pricing

Sectoral consumption of Naphtha:

During 'April-August-FY2023-24', total Naphtha domestic consumption with a volume of 5.53 MMT registered 10.8% growth Year-on Year basis over the volume of 4.99 MMT in 'April-August-FY2022-23'. Consumption of naphtha during 'April-August-FY2023-24' was driven by petrochemicals sector 82%, whereas 18% naphtha consumption fell in 'miscellaneous industries including power'. On YoY basis, sectoral naphtha consumption in petrochemicals sector decreased by 10 percentage points. Detailed comparisons are pictorially presented in the following charts.



Chart-5: Sector wise naphtha consumption of 'April-August-FY2023-24' (P) and its comparison to 'April-August-FY2022-23' (P)



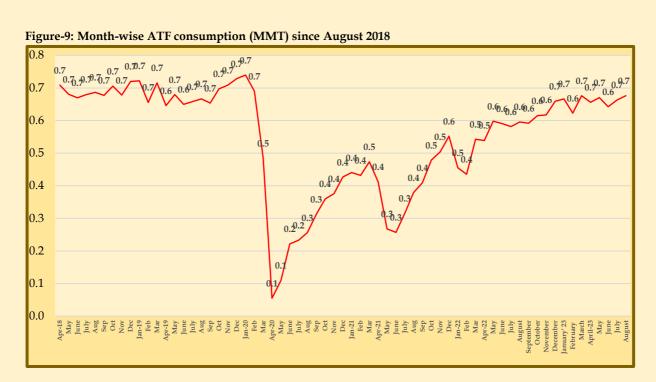
ATF:

ATF consumption during August 2023 with a volume of 0.676 MMT registered a growth of 14.3% & 1.5% over the volume of 0.592 MMT & 0.666 MMT in August 2022 and prepandemic August-2019 respectively.

The domestic footfall is back to be comparable with pre-Covid levels, however, international traffic footfall is lagging because of restricted entry in few countries. Various local factors attributed to ATF consumption pattern are listed here:-

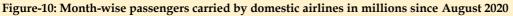
- Bihar & Tamil nadu (25%), Delhi & West Bengal (25%), Assam (23.66%) are maintaining high VAT rate
- Domestic footfall increased due to favourable tourism time
- ATF VAT made less in Pune and Mumbai (18% since April-23)area attributed to higher growth in WESTERN region
- India's dometic passengers foot fal during the month was remarkable

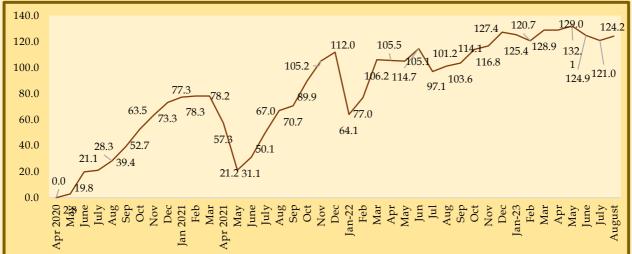
Pan India based domestic ATF monthly consumption since April-18 is shown in the Fig-9.



Passengers carried by domestic airlines during the month of August 2023 stood at 124.2 lakhs as against 101.2 lakhs during August 2022. Total

domestic footfall trend for last few months are quite promising as folund in the following chart.





Sectoral consumption of ATF:

During 'April-August-FY2023-24', total ATF domestic consumption with a volume of 3.31 MMT registered 13.8% growth Year-on Year basis over the volume of 2.91 MMT in 'April-August-FY2022-23'. Almost entire ATF consumption during 'April-August-FY2023-24' was attributed to aviation ; 74% domestic aviation, 24% international aviation & 2% Military aviation.

On YoY basis, sectoral consumption international aviation increased by 1 percentage points. Details comparisons are pictorially presented in the following charts.

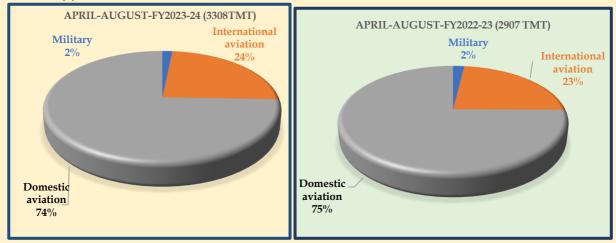


Chart-6: Sector wise ATF consumption of April-August-FY2023-24 (P) and its comparison to 'Apri-August-FY2022-23 (P)

FURNACE OIL & LOW SULPHUR HEAVY STOCK (FO/LSHS):

FO/LSHS consumption during August 2023 with a volume of 0.53 MMT recovered 85.5% over the volume of 0.62 MMT in August-2022.

The growth pattern is attributed to consumption shift to LSHS from Natural gas in glass sector. Some companies shifted their internal fueling consumption from FO to CNG due to environmental obligations and to coal to ensure sustainability. Some mining companies reduced FO intake for the month due to inventory limitations. Bunkering FO consumption in Chennai and Tuticorin was less during the month. Some aluminum industries started taking FO as their burning fuel.

Sectoral consumption of FO/LSHS:

During 'April-August-FY2023-24', total FO/LSHS monthly domestic consumption with a volume of 2.79 MMT recovered 99.7% Year-on Year basis over the volume of 2.795 MMT in 'April-August-FY2022-23'.

Cumulative consumption of FO/LSHS during 'April-August-FY2023-24'was mainly driven by

Some local factors attributing FO/LSHS consumption pattern are listed here:-

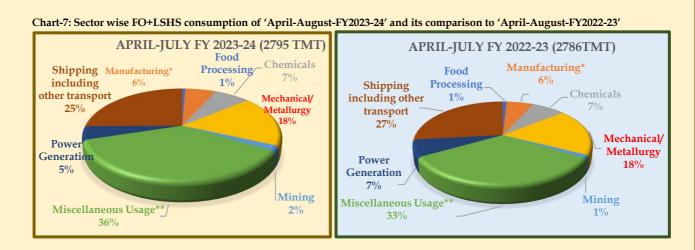
- Power sector in Southern region consumed less Fuel oil during last couple of months
- In some states, glass industries, which consume FO as internal fuel, consumed more FO to mitigate the demand of real-estate industries with robust growth during the month.
- Fuel Oil sales in J&k was stopped effective from mid August. In Punjab a cheaper substitute of FO namely CBFS, is being sold by on of the refiners.
 Ban on FO by Punjab Government is expected soon.

'Miscellaneous industries' 36%, followed by Manufacturing 31%, 'shipping including other transport' 25%, 'Power generation 5%.

On YoY basis, sectoral consumption in 'shipping including other transport' decreased by 2 percentage points. Details comparisons are pictorially presented in the following charts.



21 | Page



*Miscellaneous Usage (36%) includes 'Bulk applications'	*Miscellaneous Usage (33%) includes 'Bulk applications'
(35.3%), Universities (0.01%), Catering & hotels (0.02%), &	(31.66%), Universities (0.01%), Catering & hotels (0.01%)
& State electricity boards (0.19%).	& State electricity boards (1.33%).
** Manfacturing (6%) includes Civil engineering (0.89%),	** Manfacturing (6%) includes Civil engineering (1.09%)
'Electricals/electronics' (0.05%), Bulk use(4.76%) and	'Electricals/electronics' (0.06%), Bulk use(4.42%) and
'Textiles' (0.42%)	'Textiles' (0.34%)

PETCOKE:

Petcoke consumption during the month of August 2023 with a volume of 1.51 MMT reegistered 22.5% growth over the volume of 1.23MMT in August-2022.

Directorate General of Foreign Trade (DGFT) under Ministry of Commerce and Industry has banned import of petcoke for use as fuel but has allowed its import only for use as feedstock in some select industries such as cement, lime kiln, calcium carbide and gasification industries.

Various local factors attributing to Petcoke consumption trend are listed here:-

- Petcoke was consumed in one of the Iron and Steel company due to its capacity expansion
- Last month balance petcoke sales due to unavailability of rakes, was evacuated during the month.

However, Oversupply in domestic & global markets, lower price of feedstock coal & crude & sluggish demand from downstream construction affected the pet coke consumption that its anticipated amount.

Sectoral consumption of Petcoke:

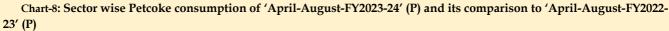
During 'April-August-FY2023-24', total petcoke monthly domestic consumption with a volume of 7.88 MMT registered 6.6% growth Year-on Year basis over the volume of 7.395 MMT in 'April-August-FY2022-23'.

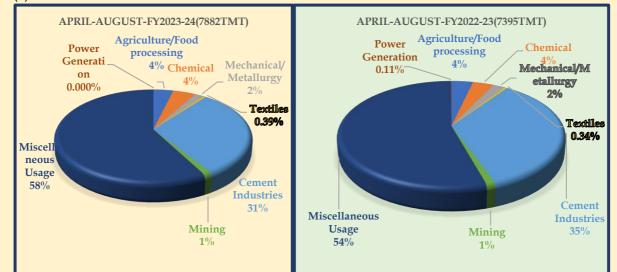
The domestic sales in 'April-August-FY2023-24' (P) is driven Miscellaneous industry 58% followed by 'cement industries' 31%%, Agriculture & Food processing 4%.

On YoY basis, sectoral consumption in cement industries decreased by 4 percentage points. as presented in the following charts. During April-August Fy 2022-23, in power sector petcoke cosnmution was nil.



22 | Page





LIGHT DIESEL OIL:

LDO consumption during the month August-2023 with a volume of 0.076 MMT registered 14.2% & 19.8% growth rate on year-on-year basis over a volume of 0.066MMT& 0.063 MMT in the month of August 2022 & 2019 respectively.

August-23 LDO consumption growth was attributed to following reasons:-

- LDO use as a fuel for industrial boilers (other than power sector) increased due to ease of PM emission standard.
- In some parts especially in southern region LDO consumption in power sector got increased due to increased power demand (25% YoY)
- LDO consumption was largely affected by available alternate fuels like FO&LSHS, LPG/CNG/ Fuel gas etc. and strategy taken by state governments to decrease emission. LDO consumption is banned in Delhi NCR, Haryana, Gujrat etc.

Sectoral consumption of Light Diesel Oil:

During 'April-August-FY2023-24', total LDO monthly domestic consumption with a volume of 0.334 MMT registered 14.8% growth Year-on Year basis over the volume of 0.291 MMT in 'April-August-FY2022-23'.

The cumulative consumption of Light Diesel oil (LDO) during 'April-August-FY2023-24' was driven by 'Power Generation' 32.78% followed by 'Miscellaneous industries' (23.40%) Mechanical/Metallurgy 12.69%, and Civil Engineering 10.92%. On YoY basis sectoral consumption in power generation sector decreased by 1 percentage point. Detailed comparisons are pictorially presented in the following charts.

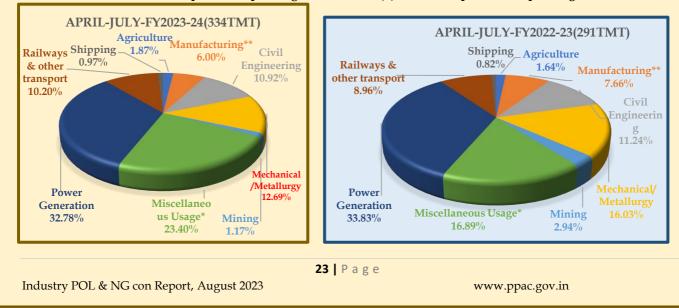
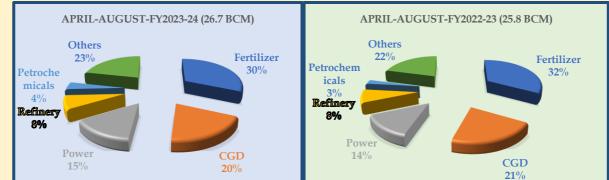


Chart-9: Sector wise LDO consumption of 'April-August-FY2023-24' (P) and its comparison to April-August-FY2022-23'

*Miscellaneous Usage (23.4%) includes 'Bulk applications'	*Miscellaneous Usage (16.89%) includes 'Bulk
(22.69%), Universities (0.07%), Catering & hotels (nil%) &	applications' (15.76%), Universities (0.06%), Catering &
State electricity boards (0.63%).	hotels (nil%) & State electricity boards (1.07%).
** Manfacturing (6%) includes chemicals (3.39%),	** Manfacturing (7.66%) includes chemicals (3.61%),
'Electricals/electronics' (0.31%), Bulk use(2.21%) and	'Electricals/electronics' (0.27%), Bulk use(3.29%) and
'Textiles' (0.09%)	'Textiles' (0.50%)
Natural Gas:	During 'April-August-FY2023-24', total Natural
	Gas monthly domestic consumption with a
Natural Gas is used as a feedstock in several	volume of 26.7 BCM reistered 3.5% growth,
industries like fertilizers, plastics and other	Year-on Year basis over the volume of 25.8 BCM
commercially important organic chemicals and	in 'April-August-FY2022-23'
used as a fuel for electricity generation, heating	
purpose in industrial and commercial units.	During 'April-August-FY2023-24', consumption
Natural gas is also used for cooking in domestic	of Natural gas (NG) was driven by fertilizer (30%)
households and as a transportation fuel for	followed by Others category (mostly bulk use)
vehicles. Consumption of Natural Gas with a	23% CGD (20%), Power (15%) Refinery (8%),
volume of 5.3 BCM (billion cubic meters) during	Petrochemicals (4%). With respect to 'April-
the month of August 2023 registered 8.2% growth	August-FY2022-23', sectoral consumption in
year-on year basis over the volume of 4.9 BCM in	fertilizer sector decreased by 2 percentage points,
the month of August 2022	CGD sector decreased by 1 percentage point,
	where as Petrochemicals sector increased by 1
Sectoral consumption of Natural Gas	percentage point as shown in the following chart.
consumption of 'April-August -FY2023-24'& its	
comparison to 'April-August-FY2022-23':	
(PROVISIONAL)	

Chart-10: Sector wise consumption of Natural Gas of 'April-August-FY2023-24' (P) and its comparison to April-August-FY2022-23'



*Other includes Ceramic, Chemical, Glass, Metal & small customers etc. *Source: PPAC data; P: provisional*

\$ Totals August not tally due to rounding off. Based on information provided by ONGC, OIL, DGH, GAIL, Torrent PowerLimited, Shell Energy India Pvt. Ltd., BPCL, RIL (P) and IOCL. Components of internal consumption related to VAP shrinkage, LPG Shrinkage, Captive Power Generation, supply to power houses, supply to crematoriums & schools etc. as reported by ONGC, OIL & DGH (prorated) have been included. Others includes sectors like Internal consumption for Pipeline System, Agriculture (Tea Plantation), Industrial, Manufacturing, LPG shrinkage, Sponge Iron and Miscellaneous
Totals August not tally due to rounding off. Based on information provided by ONGC, OIL, DGH, GAIL, Torrent Power Limited, Shell Energy India Pvt. Ltd., BPCL, RIL (P) and IOCL. Sectoral consumption data for GSPC is prorated.

Conversion factors taken for MT to barrel conversion (Table-7)

		Convore	ion factor (ap	prox)		
		Convers			· 1 + () (TT)	D1 1
	oduct				eight (MT)	Bbl.
LPG				1		11.6
SKO				1		8.1
Diesel					1	7.6
Petrol					1	8.9
Naphtha					1	8.7
ATF					1	8.1
Bitumen					1	6.1
Furnace Oil Lubes				1		6.7
				1		7.2
Light Diesel Oil Petcoke						7.4
				1		
Product Basket (for Others) Industry Domestic Consumption Trend in Million Barrel per Day				$\frac{1}{(MPDD)(Table 8)}$		8.1
Industry Consumption T					abie-0)	
('Million barrels per day)			,			
Product	April-August			August		
muut				Ŭ		
	FY2022- 23	FY2023-24	Growth(%)_ 2023-24 over 2022-23	2022	2023	Growth(%)_2023 over 2022
(A) Sensitive Products			1		I	
LPG	0.85	0.87	2.0	0.90	0.89	-0.6
SKO	0.01	0.01	-17.1	0.01	0.01	114.6
Sub Total	0.86	0.88	1.7	0.91	0.91	0.2
(B) Major Decontrolled P	roduct					
HSD	1.80	1.92	7.1	1.63	1.69	3.9
MS	0.84	0.90	6.7	0.80	0.86	6.3
Naphtha	0.28	0.31	10.5	0.32	0.30	-7.3
ATF	0.15	0.17	13.7	0.15	0.17	14.8
Bitumen	0.13	0.15	18.0	0.07	0.10	55.8
FO/LSHS	0.12	0.13	4.3	0.12	0.12	2.1
Lubes+Greases	0.07	0.07	0.3	0.07	0.07	-1.2
LDO	0.01	0.02	14.0	0.01	0.01	4.6
Sub Total	3.41	3.67	7.8	3.18	3.33	4.8
Sub - Total (A) + (B)	4	5	6.5	4.09	4.24	3.8
(C) Other Minor Decontr	olled Produ	ıcts				
Pet.Coke	0.28	0.29	3.5	0.05	0.05	-6.0
Others*	0.33	0.28	-15.1	0.04	0.03	-17.5
Sub Total	0.61	0.57	-6.6	0.09	0.08	-10.9
Total	4.88	5.12	4.9	4.18	4.32	3.4

(LW 000, Growth(%) 2023 over 2022 85.6 -14.514.222.5 75.1 33.4 -1.53.0 14.33.5 5.22.9 6.3 6.0 6.5 9.2 4.1 Growth(0/0]_2023 over 2021 -54.5 19.0 14.9 22.5 77.8 16.9 54.222.1 78.3 -11.1 -7.9 20.0 ιŋ. ĉ 2.0 3.0 6.2 62. 58. over 2020 Growth(%) 2023 105.5 37.73 163.9-55.7 15.2 -11.5 29.0 29.9 22.6 34.3 28.6 31.44.8 70.4 8.8 7.0 5.2 Analysis 2023-24 (Provisional) Growth(%)_2023 over 2019 140.2-74.7 9.03 20.1 -17.6 19.8 10.5 -15.264.41.511.7-4.3 2.5 9.6 4.4 7.8 8.4 August 15566.4 18567 6670 2023 2461 2519 3093 1127 13047 Other Minor Decontrolled Products 1507 1493 3000 676 554 324 527 59 76 **B) Major Decontrolled Product** 14690.7 17438 6343 2388 3006 1089 1230 1516 2022 24203162747 592 12271 617 243 32 99 Sensitive Products CBFS, butane, MTO etc. 13315.2 5603 10870 2445 2692 15211 2021 2317 129 312 928 968 1896 920 379 517 364 82 Consumption Trend 12106.0 4843 143902262 2394 2382 1075 14082020 132 256 270 9712 876 2284 458 366 62 $\mathbf{\overline{A}}$ propylene, propane, reformat, L.A.B.F.S, 14443.7 17130 6117 2575 1778 2019 2633 2402 1367 11811 2686 231 666 231 310 908 481 3 2022-23over Growth(%)_ Q 2021-22 -10.6-1.6 10.8 13.8 24.114.86.6 -1.5 5.5 -0.3 6.8 5.9 5.6 7.6 2.2 2.1 6.7 Industry A pril-August FY2023-24 81850.2 37497 13700 95550 1158415454 11820 3578 70030 5818 5528 3308 2785 15457882 236 334 FY2022-23 76634.3 35136 Others include sulfur, 11333 90537 13903 11573 14597 2882 2795 65061 7395 6508 4990 2907 1464240 291 Sub Total Sub Total Sub Total ubes+Gre FO/LSHS Product (A) + (B) et.Coke Naphtha Bitumen Sub Total Others Total LDO SKO HSD ATF LPG ases MS

26 | Page



Petroleum Planning and Analysis Cell (PPAC) Ministry of Petroleum & Natural Gas 2nd Floor, Core-8, SCOPE Complex 7, Lodhi Rd, Institutional Area, New Delhi, 110003 https://www.ppac.gov.in/index.aspx Twitter link of PPAC: https://twitter.com/PPACIndia