Petroleum Planning & Analysis Cell
Ministry of Petroleum & Natural Gas, Government of India

INDUSTRY CONSUMPTION REPORT-POL & NG, DECEMBER 2022

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वितरण CIRCULATION:

पेट्रोलियम और प्राकृतिक गैस मंत्रालय:	**MoP&NG:**
निजी सचिव- माननीय मंत्री - (पेट्रोलियम और प्राकृतिक गैस) ओ एस डी- माननीय मंत्री - (पेट्रोलियम और प्राकृतिक गैस) निजी सचिव- माननीय राज्य मंत्री - (पेट्रोलियम और प्राकृतिक गैस) सचिव, पीएनजी अपर सचिव, पीएनजी अपर सचिव एवं वित्त सलाहकार संयुक्त सचिव (रिफाइनरी) संयुक्त सचिव (मार्के.) संयुक्त सचिव (जीपी) संयुक्त सचिव (जी) उप महानिदेशक, (इ एवं एस) संयुक्त सचिव (आईएफडी) संयुक्त सचिव (आईसी) **डी जी एच:** महानिदेशक (डी जी एच) **ओ आई डी बी :** सचिव (ओ आई डी बी) नीति आयोग: सलाहकार (ऊर्जा), नीति आयोग उद्योग: अध्यक्ष, आईओसी, / ओएनजीसी, नई दिल्ली अध्यक्ष एवं प्रबंधक निदेशक- बीपीसी/एचपीसी/गेल निदेशक (मार्के.), आईओसी/ बीपीसी/ एचपीसी/ गेल प्रेजिडेंट, आरआईएल / एमडी और सीईओ, एच एम ई एल / सीईओ (मार्के.) नयारा एनर्जि महानिदेशक, फिपी प्रबंध निदेशक-एनआरएल, गुवाहाटी/सीपीसीएल, चेन्नई/एमआरपीएल, मंगलुरु ओएमसी योजना एवं रिटेल ग्रुप – एचओ	PS to Hon'ble Minister (P&NG) OSD to Hon'ble Minister (P& NG) PS to Hon'ble Minister of State (P&NG) Secretary, P&NG Additional Secretary, P&NG Additional Secretary & Financial Advisor Jt. Secretary (Refinery) Jt. Secretary (Marketing) Jt. Secretary (GP) Jt. Secretary (G) Deputy Director General (E&S) Jt. Secretary (IFD) Jt. Secretary (International Cooperation) **DGH:** DG, DGH **OIDB:** Secretary (OIDB) **NITI Aayog:** Advisor (Energy), NITI Aayog **Industry:** Chairman, IOC / ONGC New Delhi C&MD – BPC / HPC / GAIL Director (Mkt.), IOC/ BPC / HPC /GAIL President - RIL, MD & CEO – HMEL, CEO (Mktg.) – Nayara DG, FIPI MD- NRL, Guwahati/ CPCL, Chennai/ MRPL, Mangalore OMCs Planning & Retail Groups – HO

From the desk of DG-PPAC

Greetings from Petroleum Planning & Analysis Cell!

Dear readers,

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.

PPAC publishes the Industry POL and NG consumption report on its website www.ppac.gov.in which jas been readily redesigned to have modern look and feel.

It is a critical data analysis of pan India demand and distribution profile of POL & NG products. The historical trend of domestic consumption of various products and their YoY and cumulative growth rate define a clear time series profile of the demand regime. The sectoral breakup of consumption of most of the POL and NG products put a light on the actual percentage share of a finished product to its end users. Though I belief there are lots of scope of improvement to define more and more finadamental sectors and their market share in domestic sales.

In this revised edition a new approach has been adopted to represent the data and its critical analysis in a holistically artistic manner.

I hope the report would serve the purpose of meta data analysis for stakeholders in the oil and gas sectors, alternate energy division & the planners, policymakers, academicians, analysts, market researchers & the industries. I suggest all the stakeholders to have a look in ppac website for various data and reports.

पेट्रोलियम योजना एवं विश्लेषण प्रकोष्ठ की ओर से अभिवादन!

प्रिय पाठकों,

पेट्रोलियम योजना और विश्लेषण सेल (PPAC), **भारत सरकार के पेट्रोलियम और प्राकृतिक गैस मंत्रालय** (MoPNG) **का एक संबद्ध कार्यालय, तेल और गैस क्षेत्र पर डेटा एकत्र और विश्लेषण करता है।**

पीपीएसी अपनी वेबसाइट पर उद्योग पीओएल और एनजी खपत रिपोर्ट प्रकाशित करता है www.ppac.gov.in जिसे आधुनिक लुक और फील के लिए आसानी से फिर से डिजाइन किया गया है। **यह पीओएल और एनजी उत्पादों की अखिल भारतीय मांग और वितरण रुपरेखा का एक महत्वपूर्ण डेटा विश्लेषण है। विभिन्न उत्पादों की घरेलू खपत की ऐतिहासिक प्रवृत्ति और उनकी साल दर साल और संचयी विकास दर मांग व्यवस्था की एक स्पष्ट समय श्रृंखला और रुपरेखा को परिभाषित करती है। अधिकांश पीओएल और एनजी उत्पादों की खपत का क्षेत्रीय विभाजन अंतिम उपयोगकर्ताओं के लिए तैयार उत्पाद के वास्तविक प्रतिशत हिस्से पर प्रकाश डालता है। हालांकि मेरा मानना है कि अधिक से अधिक अंतिम क्षेत्रों और घरेलू बिक्री में उनकी बाजार हिस्सेदारी को परिभाषित करने के लिए सुधार की बहुत गुंजाइश है। इस संशोधित संस्करण में समग्र रूप से कलात्मक तरीके से डेटा और उसके महत्वपूर्ण विश्लेषण का प्रतिनिधित्व करने के लिए एक नया दृष्टिकोण अपनाया गया है। मुझे उम्मीद है कि यह रिपोर्ट तेल और गैस क्षेत्रों में हितधारकों, वैकल्पिक ऊर्जा प्रभाग और योजनाकारों, नीति निर्माताओं, शिक्षाविदों, विश्लेषकों, बाजार शोधकर्ताओं और उद्योगों के लिए मेटा डेटा विश्लेषण के उद्देश्य को पूरा करेगी। मैं सभी हितधारकों को सुझाव देता हूं कि वे विभिन्न डेटा और रिपोर्ट के लिए पीपीसी वेबसाइट देखें।**

P.Manoj Kumar
Director General-PPAC
प.मनोज कुमार
महानिदेशक-पीपीएसी

From the desk of D&ES- I/C

संख्या : डी-12013/02/2022-II

No. D-12013/02/2022-II

Subject: Industry Consumption Review Report of PPAC: December 2022

At the end of third quarter, I see the domestic POL consumption, 165MMT marked as the highest 'Q1,2,3' consumption since FY1997-98 till date. The December-22 domestic HSD consumption was higher than November-22 and recorded the second highest consumption in that category during FY1997-98 to FY2022-23. Indian Oil and Gas industries are maintaining strong sequential growth in their crude refining and production potential.

However, it is a matter of concern that Bitumen consumption figure has been affected by external bitumen sourced from some un-organized sectors.

IHS Markit Manufacturing Purchasing Manager's Index (PMI) marked three month high at 57.8 in December 2022 from 55.7 from October-22.

The crude supply to India remained flexible & the average crude price for Indian Basket in December-22 hinged around USD78.1/bbl.

The Petroleum Planning and Analysis Cell (PPAC) have prepared the monthly Petroleum Industry Consumption Review Report. The report contains analysis of consumption of POL products and natural gas with sectoral break up during April - December 2022 (cumulative). 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.**

विषय: पीपीएसी की उद्योग बिक्री समीक्षा रिपोर्ट – दिसंबर 2022

तीसरी तिमाही के अंत में, मैं घरेलू पीओएल खपत देखता हूं, 165 एमएमटी को वित्त वर्ष 1997-98 से अब तक की सबसे अधिक 'क्यू1,2,3' खपत के रूप में चिह्नित किया गया है। दिसंबर-22 घरेलू एचएसडी खपत नवंबर-22 से अधिक थी और वित्त वर्ष 1997-98 से वित्त वर्ष 2022-23 के दौरान उस श्रेणी में दूसरी सबसे बड़ी खपत दर्ज की गई। इंडियन ऑयल और गैस उद्योग अपनी क्रूड रिफाइनिंग और उत्पादन क्षमता में मजबूत अनुक्रमिक वृद्धि बनाए हुए हैं।

आईएचएस मार्किट मैन्युफैक्चरिंग परचेजिंग मैनेजर्स इंडेक्स (पीएमआई) अक्टूबर-22 के 57.8 से नवंबर 2022 में तीन महीने के उच्चतम स्तर 55.7 पर पहुंच गया।

भारत में कच्चे तेल की आपूर्ति लचीली रही और सितंबर-22 में भारतीय बास्केट के लिए कच्चे तेल की औसत कीमत लगभग USD 78.1/bbl थी।

पेट्रोलियम योजना और विश्लेषण प्रकोष्ठ (PPAC) द्वारा मासिक पेट्रोलियम उद्योग खपत समीक्षा रिपोर्ट तैयार की गई है। रिपोर्ट में अप्रैल-नवम्बर 2022 (संचयी) के दौरान क्षेत्रीय ब्रेक अप के साथ (पीओएल) उत्पादों और प्राकृतिक गैस की खपत का विश्लेषण शामिल है। यह आपके संदर्भ के लिए संलग्न है।

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

डॉ. पंकज शर्मा

अपर निदेशक (मांग एवं आर्थिक अध्ययन)-प्रभारी

Dr. Pankaj Sharma
Addl. Director (I/C)-D&ES

Highlights of the month:

Hon'ble Prime Minister of India inaugurated the first phase, 520Km out of 701Km of Green Field Express Way on 11.12.2023. To meet the fuel demand 17 sites for development of Fuel stations as well as 'Way side amenitie's along the Corridor along both flanks has been planned. At present 13 Outlets are running along the corridor upheldding the "Uninterrupted Supply Obligations".

The Goods and Services Tax collection marked Rs.1.5 lakh crore in December 2022, 15% higher than in December 2021. GST collection trend exceeding Rs.1.49 lakh crore band has been continuing in this FY2022-23.

The average FOB (Free on Board) price of Indian basket crude oil during the month December-2022 was USD 78.1/bbl.

The power demand in December 2022 increased by 8.9% as compared to December 2021 and power deficit remained the same as 0.2% in the month of December 2021. The average rainfall during the month was registered at 13.6 mm with percentage of departures 14percent with respect to 'this year December normal rainfall value' of 15.9 mm. Traffic at major ports during the month of December 2022 recorded a YoY growth 10.4% of the volumes in the month of December 2021.
The growth percentage in consumption of petroleum products, category-wise, for the month of December 2022 is given in Table-1.

SUMMARY OF PRODUCT WISE POL CONSUMPTION PROFILE FOR DECEMBER-22

1. The consumption of petroleum products in December 2022 with a volume of 19.6MMT recorded a growth of 3.1% on volume of 19MMT in December 2021, 6.7% growth on volume of 18.4 MMT in December 2020, 3.4% growth on volume of 18.9 MMT in December 2019 and 4.2% on volume if 18.8 in December 2019. The economic momentum is under acceleration with appreciable growth rate.

2. MS (Petrol) consumption during the month of December 2022 with a volume of 3 MMT(0.88 mbpd) recorded a growth of 5.9% on the volume of 2.8MMT (0.83 mbpd) in December 2021.
The Sale of Passenger Vehicles in December-2022 with a volume of 2.4 lacs registered a growth 7.2% over volume of 2.2 lacs during December-2021. Two-wheeler sales in December 2022 with a volume of 10.5 lacs marked 2.9% over volume of 10.2 lacs during December-2021. Three-wheeler domestic passenger vehicles touched a sales volume of 0.39 lac in December-2022 registering 37.7% YoY growth rate over a volume of 0.28 lac in December-2021.

3. HSD (Diesel) consumption during the month of December 2022 with a volume of 7.8 MMT (1.97 mbpd) recorded a growth of 6.5% on the volume of 7.3 MMT(1.85 mbpd) MMT in the month of December-21

4. LPG consumption during the month of December 2022 with a volume of 2.58 MMT registered a growth of 3.9% over the volume of 2.4 MMT in the month of December 2021. As usual, LPG consumption during the month had been largely driven by consumption in domestic category.

5. ATF consumption during December 2022 with a volume of 0.7 MMT registered a growth of 19.4%, over a volume of 0.6 MMT during the month of December 2021.

6. Bitumen consumption during December 2022 with a volume of 0.7 MMT revovered 84.9% over a volume of 0.8 MMT in the month of December 2021.

7. Kerosene (SKO) consumption with a volume of 0.04 MMT registered a de-growth of 66.7% in December 2022 as compared to December 2021. SKO consumption during the month is largely constituted by PDS category 0.028 MMT followed by non PDS SKO 0.012 MMT. Only the state of Karnataka and Kerala registered 1948 KL and 2184 KL sales respectively in nonsubsidised PDS SKO category during the month of December.

8. Average percentage of ethanol blending in petrol (EBP) marked 10.4% in December-2022. Around 39.5 cr litre ethanol has been blended in petrol under EBP program

9. Total Natural Gas Consumption (including internal consumption) for the month of December

2022, with a volume of 5.2 BCM, recovered 95.9% to a volume of 5.4 BCM, in corresponding month of the previous year.

This report analyses the trend of consumption of petroleum products in the country during the month of December 2022. Data on product-wise monthly consumption of petroleum products for December 2022 is uploaded on the PPAC website (www.ppac.gov.in) and on the mobile app "PPACE (PPAC-Easy)". A small summary of Natural Gas consumption is also provided.

Detailed NG production and consumption reports are available at www.ppac.gov.in.

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

Product	December				April-December		
	2021-22	2022-23	% share of 2022-23	Growth (%)	2021-22	2022-23	Growth (%)
(A) Sensitive Products							**Unit-TMT**
LPG	2479	2576	13	**3.9**	20890	21256	1.8
SKO	119	40	0.2	**-66.7**	1136	393	-65.4
Sub Total	**2599**	**2616**	**13**	**0.7**	**22027**	**21649**	**-1.7**
(B) Major Decontrolled Product							
HSD	7303	7779	40	**6.5**	56098	63924	**14.0**
MS	2816	2983	15	**5.9**	22918	26264	**14.6**
Naphtha	1099	1105	6	**0.5**	10579	9491	**-10.3**
ATF	552	659	3	**19.4**	3575	5387	**50.7**
Bitumen	780	662	3	**-15.1**	5215	5521	**5.9**
FO/LSHS	569	622	3	**9.5**	4635	5107	**10.2**
Lubes+Greases	455	424	2	**-6.8**	3350	3391	**1.2**
LDO	93	65	0.3	**-29.7**	761	542	**-28.8**
Sub Total	**13667**	**14300**	**73**	**4.6**	**107132**	**119627**	**11.7**
(C) Other Minor Decontrolled Products							
Pet.Coke	1741	1302	7	**-25.2**	10639	11496	7670
Others*	1002	1380	7	**37.8**	9359	12095	7846
Sub Total	**2743**	**2682**	**14**	**-2.2**	**19998**	**23591**	**18.0**
Total	**19008**	**19597**	**100**	**3.1**	**149156**	**164868**	**10.5**

**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,

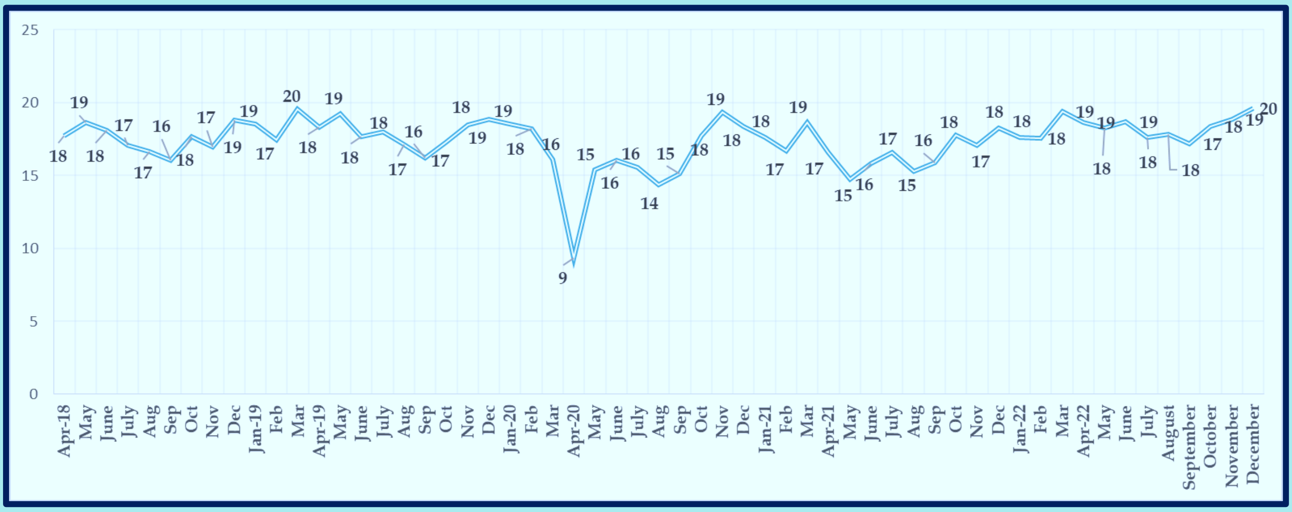
(b) consumption through direct imports by private parties (Private direct imports prorated for Apr-December'22, which may undergo change on receipt of actual data), and

(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.

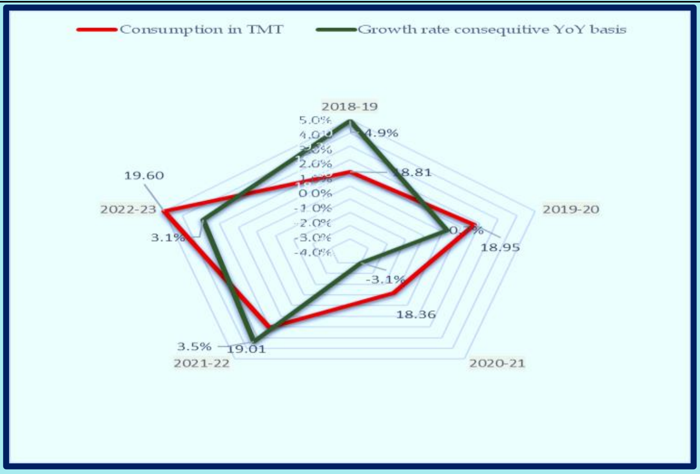
Overall consumption of all petroleum products in December 2022 with a volume of 19.6 MMT registered a growth of 3.1% on volume of 19 MMT in December 2021. The products which registered a growth in the month of December 2022 were liquified Petroleum Gas (LPG) 3.9%,High Speed Diesel (HSD) 6.5%, Petrol (MS) 5.9%, Naphtha (0.5%), Aviation Turbine Fuel (ATF) 19.4%, Furnace Oil & Low Sulphur Heavy Stock (FO/LSHS) 9.5%, and products categorised under "Others" category 37.8% while the products which registered de-growth during the month were Kerosene (SKO) 66.7%, Bitumen (15.1%), Light Diesel Oil (LDO) 29.7%, 'Lubes and Greases' 6.8% and petcoke 25.2% as compared to December 2021.

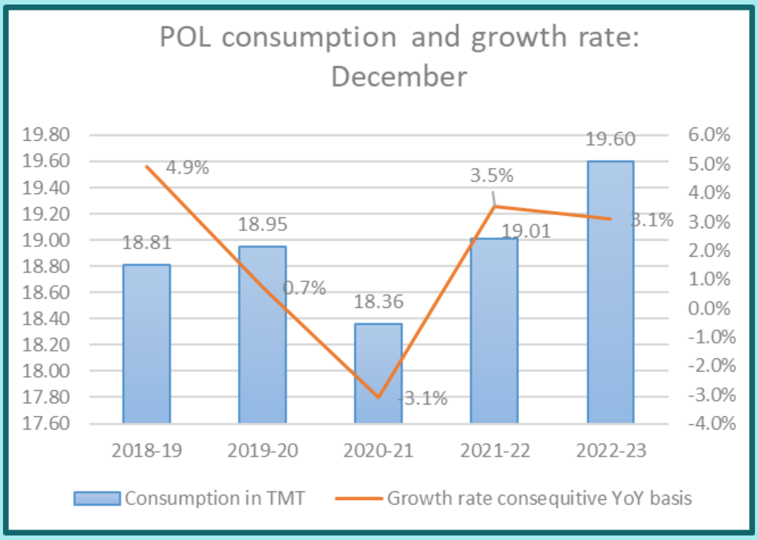
Figure-1: **Monthly POL consumption (MMT) since December 2018**



The overall POL domestic consumption profile during December-2022 & corresponding projected growth rate were quite promising & better than pre-covid regime as found in the radar/bar chart of comparison between total POL consumption in the month of December in FY 2018-19 to FY2022-23 and its corresponding growth rate on YoY basis.

Chart-1: POL consumption & Growth rate YoY basis: radar plot with bar chart





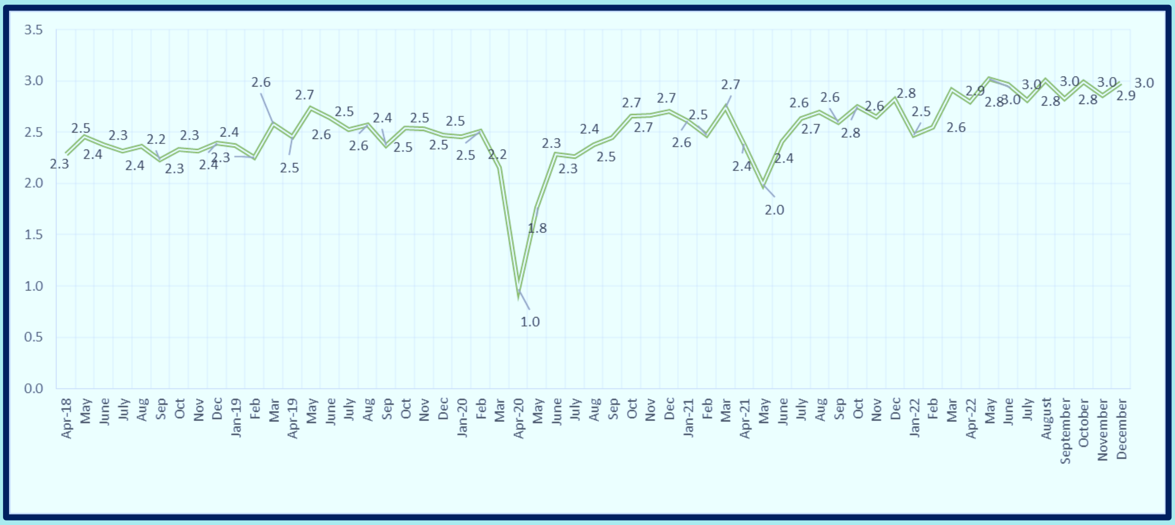
PETROL/MOTOR SPIRIT (MS):

MS (Petrol) consumption during the month of December 2022 with a volume of 3 MMT registered a growth of 5.9%, 10.2%, 20.6% and 24.5% over the volume of 2.8MMT, 2.7MMT, 2.5MMT & 2.4MMT in December 2021, 2020, 2019 & 2018 respectively.

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

- Economic momentum wel maintained during the month
- In few cases, Mobility shifted towards MS due to volatile CNG price
- Tourism dependent states saw heavy influx of travelers giving a boost to economic activities
- Less rain also accounted for higher influx of vehicles
- Marriage season, holiday travel attributed to higher car sales attributing increased MS consumption
- Low base factor accounted for high growth percentage figures as sual.

Figure-2: Month wise MS consumption volume (MMT) since December 2018



OTHER FACTORS IMPACTING CONSUMPTION OF MS:

PASSENGER VEHICLE SALES:

The Sale of Passenger Vehicles in December 2022 at 2.4 lacs recorded growth of 7.2% YoY over sale of 2.2 lacs in the month of December 2021. 'Passenger vehicle' sales have been driven by 'utility vehicles.'

Passenger cars, utility vehicles and vans recorded a growth of -7.3%, 23.6%, 13.6% respectively during the current month as compared to the same period previous year. However, the data comparison is without Tata Motors sales.

Table-2: Passenger vehicle sales in the month of December 2022

Vehicle Segment	December		
	2021-22	2022-23	Growth %age
Passenger Cars	112,873	104,601	-7.3
Utility Vehicles	97,137	120,015	23.6
Vans	9,411	10,693	13.6
Total PV	219,421	235,309	7.2

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

TWO-WHEELER SALES:

Two-wheeler sales in December 2022 with a volume of 10.5 lacs recorded a growth of 2.9% on a month-on-month basis over volume of 10.2 lacs during December 2021.

Scooters/ Scootertte & Motorcycle sales was impacted by the shortage in semiconductors.

Table-3: Two & Three Wheelers vehicle sales in the month of December 2022

Vehicle Segment	December		
	2021-22	2022-23	Growth %age
Scooters/Scotrette	255,960	295,498	15.4
Motor Cycles/Step-Throughs	726,587	723,593	-0.4
Mopeds	33,395	25,961	-22.3
2 Wheelers total estimate	1,015,942	1,045,052	2.9
Passenger Carrier-3 wheeler	20,134	28,473	41.4
Goods Carrier-3 wheeler	6,617	7,314	10.5
E-Rickshaw	1,144	2,783	143.3
E-cart	289	230	-20.4
3 Wheelers total estimate	28,184	38,800	37.7

Source: SIAM

THREE-WHEELER SALES:

Three-wheeler domestic sales in December 2022 with a volume of 0.39 lac recorded a growth of 37.7% on a-month-on-month basis over volume of 0.28 lac during December 2021.

HIGH SPEED DIESEL (HSD):

HSD (Diesel) consumption during the month of December 2022 with a volume of 7.8 MMT recorded a growth of 6.5%, 8.2%, 5.3% & 5.28% over a volume of 7.3MMT,7.2 MMT, 7.387 MMT & 7.389 MMT in the month of December 2021,2020,2019 & 2018 respectively. The HSD consumption for the month is the second highest consumption in POL history after May-2019 with 7.789 MMT.

Factors affecting diesel consumption during December 2022 are as follows:

- Less rain fall & growing season of rabi crop ramped up diesel consumption in irrigation, pumps etc.
- Marriage season influenced personal mobility and gave push to diesel consumption.
- Full fleged industrial and mining activites in various parts of India increased diesel consumption. Less rainfall during the month ramped up mining activities.
- Election in some states of the country ramped up vehicular movement and usage of Diesel Genrator etc. attributing increased HSD consumption

IHS Markit Manufacturing Purchasing Manager's Index (PMI) increased to a three-month high 57.8 in December 2022 from 55.7 in November-22.

Pan India based dometic HSD consumption since April-18 till date is shown in the Fig-3. HDS market share in direct and retail sales is shown in the Figure-4.

Figure-3: Month-wise HSD consumption (MMT) since December 2018

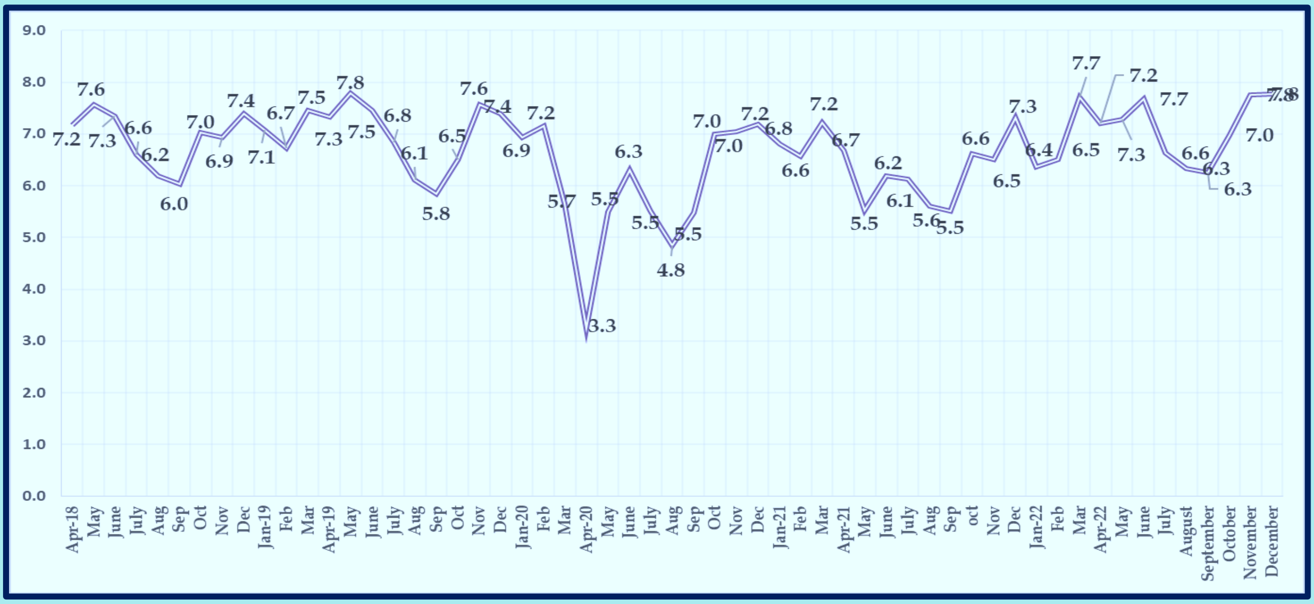
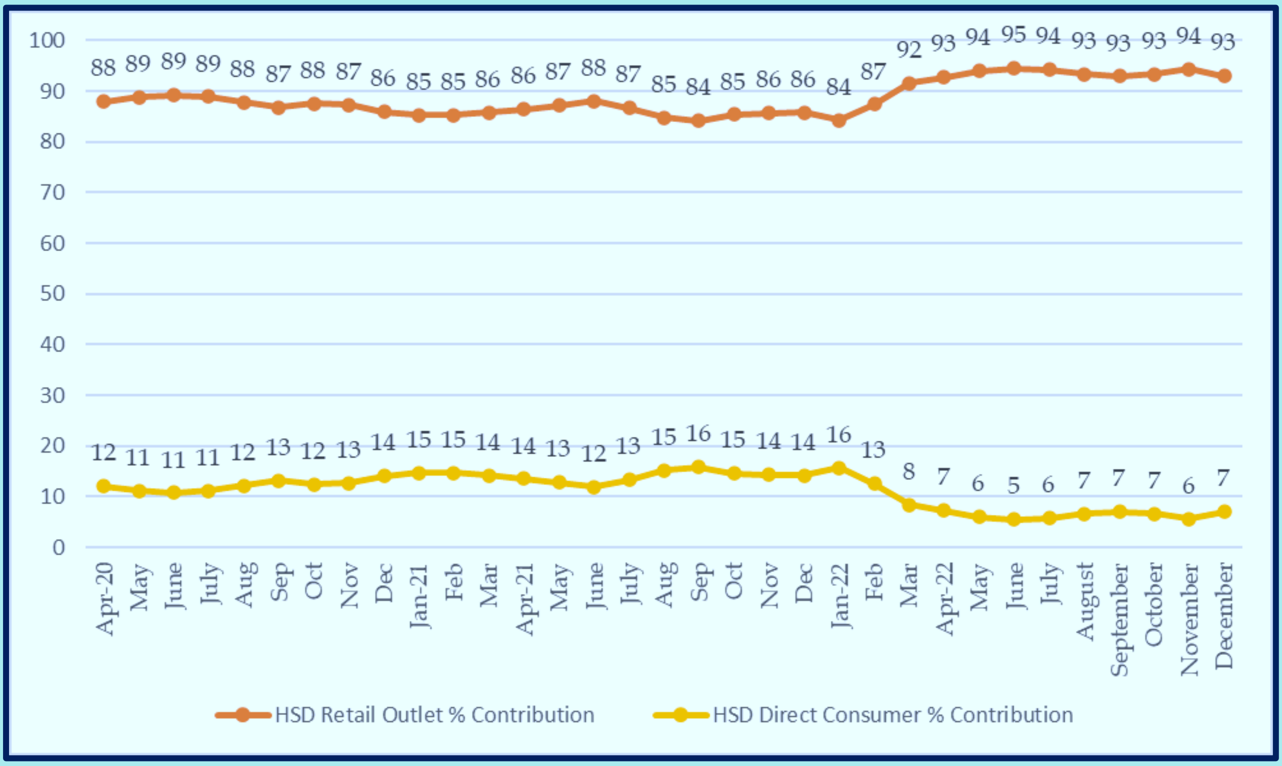
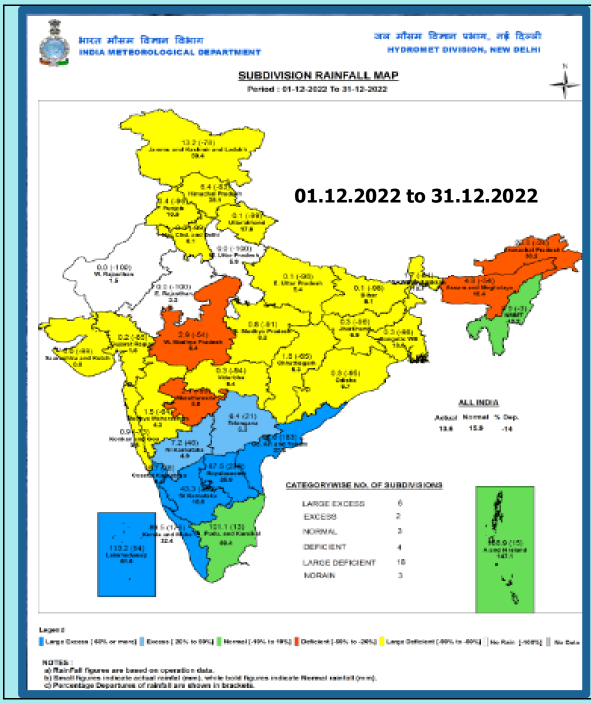


Figure-4: **Share of Retail & Direct business (%) in Diesel consumption month-wise since December 2020**



OTHER FACTORS IMPACTING CONSUMPTION OF HSD:

Seasonal rainfall scenario: The rainfall in the country during December 2022 was 14% below normal precipitation. A rainfall of 13.6 mm was recorded in the month of December 2022 as against a normal reading of 15.9 mm. Out of total 36 subdivisions, 8 divisions received excess to large excess rainfall, 25 divisions received deficient rainfall whereas 3 division received normal rainfall.



Source: India Meteorological Department (IMD)

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. Number of E-way bills reflect quantum of transport activities directly influencing Diesel sales.

For the month of December, the volume of e-way bills generated was 84.14 million after 80.69 million for November.

Commercial Vehicle

Based on data reported by individual companies, on an average there has been a growth of around 35% in domestic sales of commercial vehicles including three-wheelers during the month of December 2022 as compared to December 2021. The growth in commercial vehicle indicates an emerging outlook towards robust economic growth.

Tractor Sale:

Tractor sales as reported by major individual companies in the month of December 2022 has registered a growth rate of 26% as compared to sales in December 2021. Sowing Rabi crop season and less rainfall affected the growth in tractor sales during the month December-2022.

Port Traffic:

The traffic handled at major ports in India with a volume of 69.5 MMT in December 2022 recorded a growth of 10.4% on volume of 63 MMT in the month of December 2021.

Growth was observed in cargo handled during the month of December 2022 in all the major ports like Kolkata & Haldia 19.8%, Paradip 29.7%, Visakhapatnam 10.9%, Kamarajar (Ennore) 11.1%, V.O.Chidambaranar 4.1%, Cochin 6.8%, New Mangalore 15.8%, Mormugao 15.1%, Mumbai 6.1% and JNPA (revised from JNPT in Nov-22) 8.6% with respect to December-2021.

During April-December 2022, sector wise growth was registered in coal (thermal, steam and coking) 52.2%, Other miscellaneous cargo 12.3%, Crude & Petroleum Oil & lubricants, LPG/LNG' (CPOL) 7.7%, with respect to April-December-2021. The Percentage tonnage share in Dec-22 was maximum in CPOL 35.01% followed by Coal (thermal & steam and coking & others) 26.55%, container-tonnage & TEUs 25.99% & other miscellaneous cargo 13.17%, Iron ore & pellets 7.76%, other liquids 4.91% and fertilizer 2.86%.

Figure-5: Growth percentage of traffic handled at major ports since December 2020

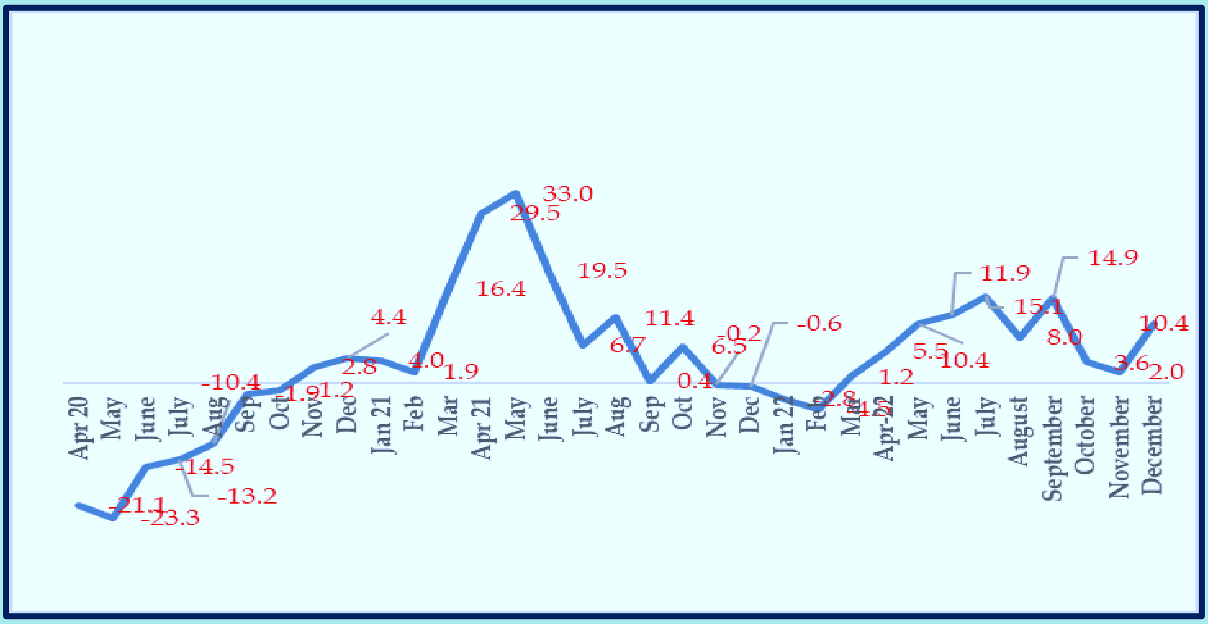


Table-4: Traffic handled at major ports in December 2022(Qty in TMT)

Ports	December 2021	December 2022	Growth (%)
Kolkata & Haldia	5,179	6,203	19.8
Paradip	9,711	12,599	29.7
Visakhapatnam	5,929	6,574	10.9
Kamarajar (Ennore)	3,173	3,524	11.1
Chennai	4,224	4,031	-4.6
V.O. Chidambaranar	2,892	3,012	4.1
Cochin	3,112	3,324	6.8
New Mangalore	3,482	4,031	15.8
Mormugao	1,447	1,665	15.1
Mumbai	5,485	5,820	6.1
JNPT	7,016	7,619	8.6
Deendayal	11,319	11,106	-1.9
Total:	**62,969**	**69,508**	**10.4**

Source: ipa.nic.in

Power situation:

The position of power supply for the month of December 2022 is given in Table-5. As per the data reported, power deficit position was 0.29% in December-2022 whereas it was 0.33% in December 2021. The requirement of power in December 2022 was 1,19,284 MU has recorded a growth of 8.9% over requirement of power at 1,09,541 MU in the month of December 2021.

Table-5: Power supplied and deficit for December 2022

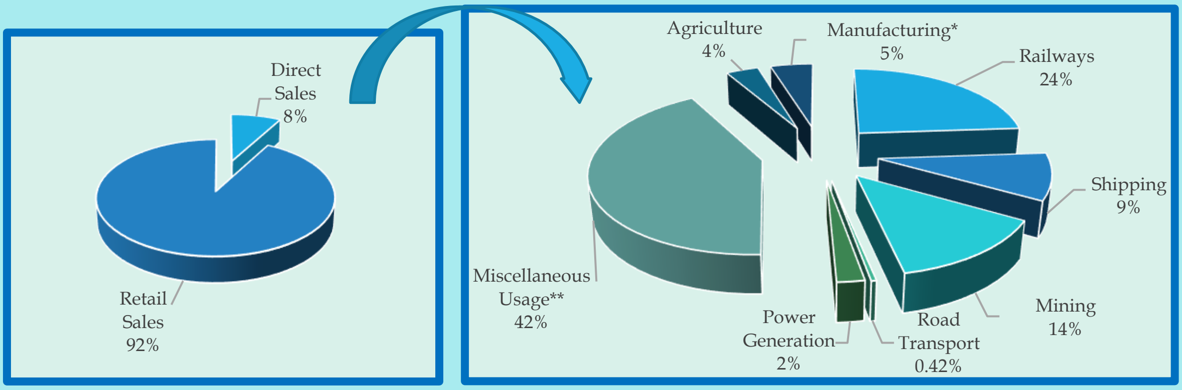
	December-2021			December-2022		
	Requirement	Supplied (MU)	Deficit %	Requirement	Supplied (MU)	Deficit %
North	32,123	31,893	-0.7%	34,498	34,266	-0.7%
West	37,116	37,100	0.0%	42,117	42,115	0.0%
South	26,914	26,914	0.0%	29,326	29,326	0.0%
East	11,961	11,843	-1.0%	11,917	11,803	-1.0%
North-East	1,427	1,427	0.0%	1,426	1,426	0.0%
Total	109,541	109,177	-0.33%	119,284	118,936	-0.29%

Source: Central Electricity Authority (CEA)

Sectoral consumption of HSD:

The cumulative diesel sale during April-December-2022 was 63.9 MMT; 92% of which was constituted by retail sales. Balance 8% falls under direct sales category as shown in 5A chart. In direct sales category, the sectoral consumption break up is shown in 5B chart with Miscellaneous Usage (42%) followed by Railways 24%, Mining 14%, Shipping 9%, Manufacturing 5%, Agriculture 4%, Power Generation 2% and road transport 0.42%. Most of the retail sales are consumed in road transport.

Figure-5A/B: sector-wise HSD consumption



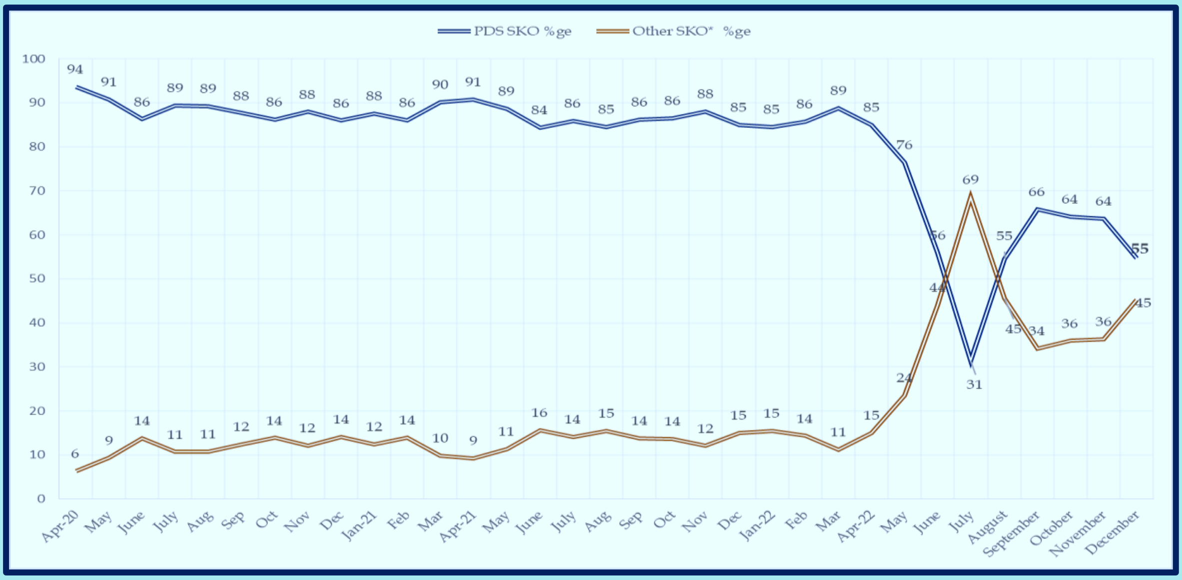
*Manufacturing includes Electricals/electronics (0.11%), Iron & Steel plants(0.76%),Jute Mills (0.003%), Synthetic rubber and textiles (0.02%),Tobacco products (0.001%) etc.

**Miscellaneous Usage include Universities (0.03%),State electricity boards (0.05%), Posts & telegraphs (0.003%), Catering & hotels (0.04%) etc.

KEROSENE:

Kerosene consumption during December-2022 with a volume of 0.04MMT registered a de-growth of 66.7%, 70.6%, 74% & 85.8% as compared to December 2021, 2020, 2019 & 2018 respectively. There are ten states/UTs who have voluntarily surrendered the PDS kerosene quota. Except the UT of J&K, Ladakh and Lakshadweep, all UTs and the states of Andhra Pradesh, Delhi, Haryana, Punjab, Uttar Pradesh and Rajasthan have been declared kerosene free. A volume of 4132KL of non-subsidized PDSSKO sales has been registered during the month for the state of Karnataka (1948KL) and Kerala (2184KL). In PDSSKO upliftment, West Bengal (15061 KL) was the biggest consumer followed by Tamil Nadu (4440KL) and Jharkhand (1750KL). The market share of subsidized-PDS and other SKO was 55% & 45% respectively.

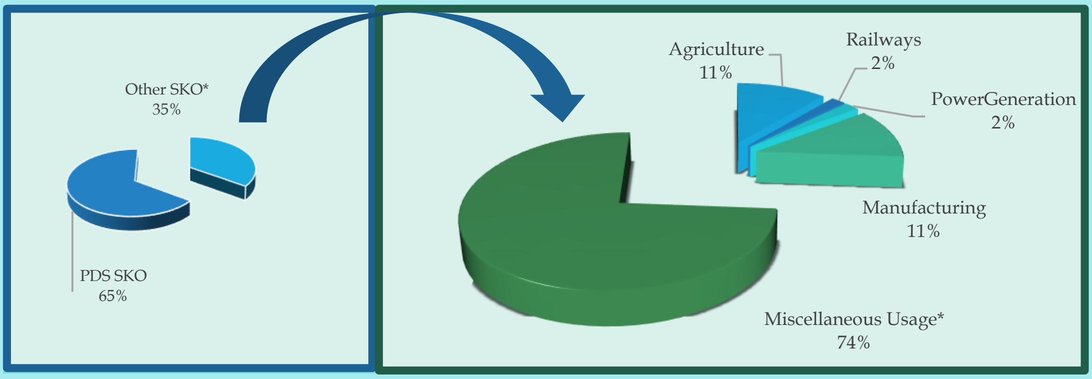
Figure-6: Month-wise PDS & other-SKO consumption in share (%) since December 2020



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

Sectoral consumption of SKO:

Out of total SKO sales during April-December-2022 with a volume of 0.4 MMT 'PDS domestic SKO' upliftment constituted to 65%. So far as SKO sales in 'non-PDS commercial sector is concerned,' 74% accounted to miscellaneous industries followed by agriculture 11% manufacture 11% as shown in 6A/B chart.



*Other SKO includes 'Nonsubsidized PDS SKO' , 'non-PDS SKO' and 'Imported SKO'

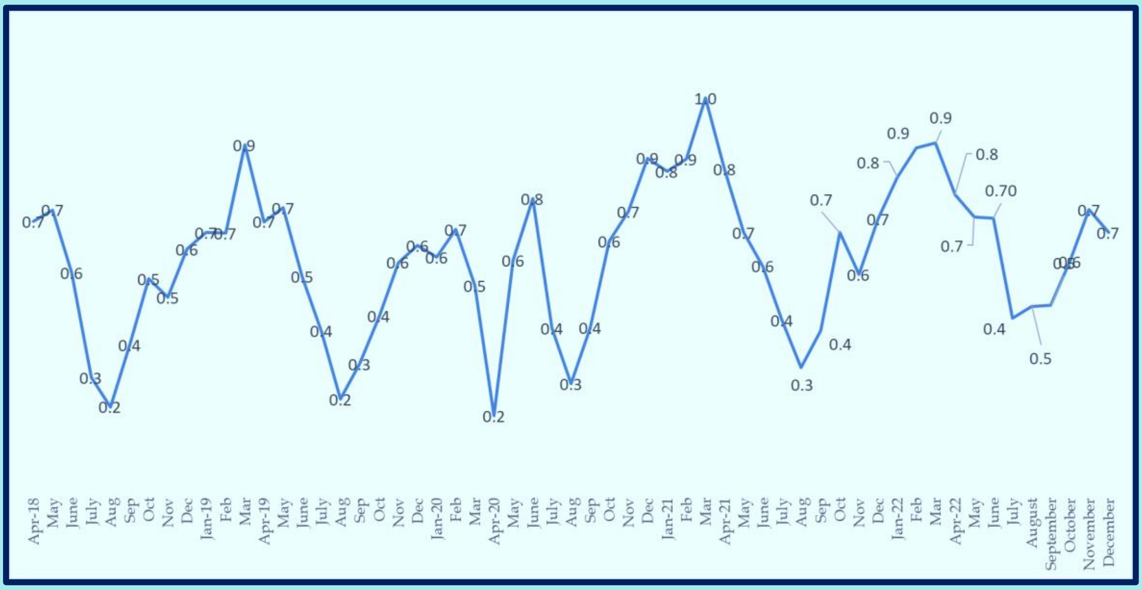
**Miscellaneous Usage include 'Bitumen/Build.Material (3.22%), Synthetic Rubber & Fibre (1.14%), Atomic power plants & Power miscellaneous (0.20%), Iron & Steel (Metallurgy) (0.74%) ,Paints etc. (0.05%) and Fisheries (2.83%)

Figure-6A/B: PDS domestic, non-PDS commercial SKO sales & their breakup for April-December-202

BITUMEN:

Bitumen consumption during December 2022 with a volume of 0.66 MMT recovered 84.9% and 77.4% over a volume of 0.78 MMT & 0.86MMT in the month of December 2021 & 2020 respectively;however, it registered growth rate of 5.2% & 7% over a volume of 0.63 MMT & 0.62 MMT in the month of December-2019 & 2018 respectively.

Figure-7: Month-wise Bitumen consumption (MMT) since December 2018



Sectoral consumption of Bitumen:

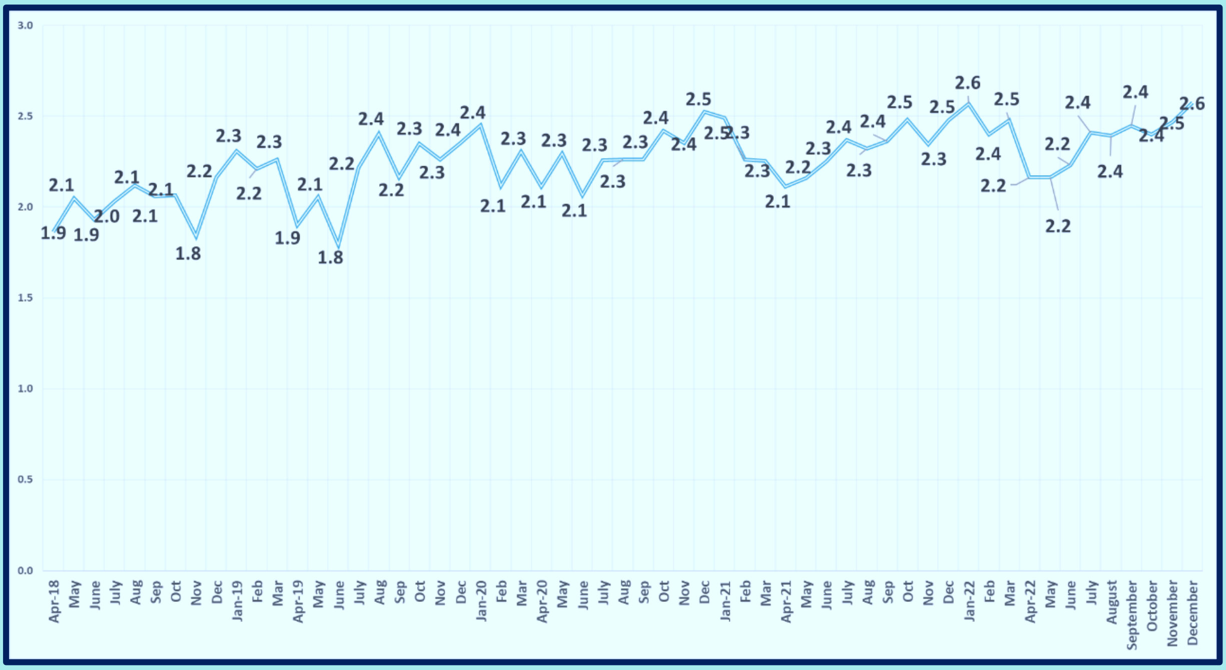
Cumulative bitumen sales during April-December-2022 marked a volume of 5.5 MMT of which 97% was constituted to Road construction, balance 3% was consumed by miscellaneous industries.

LPG:

LPG consumption during the month of December 2022 with a volume of 2.6MMT registered a growth rate of 3.9%, 2.1%, 9.4% and 19% over the volume of 2.48MMT,2.52MMT, 2.3MMT & 2.2MMT in month of December 2021, 2020,2019 & 2018 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.

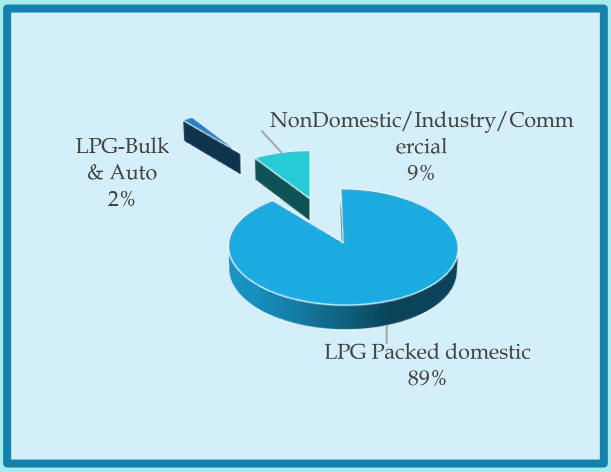
Figure-8: Month-wise LPG consumption (MMT) since December 2018



Sectoral consumption of LPG:

In April-December-2022 total LPG sale was 21.3 MMT driven by packed domestic category 89% followed by 'non-domestic/industry/commercial sector 9% as shown in 8A chart.

Figure-8A: Sector wise LPG consumption for April – December 2022



NAPHTHA:

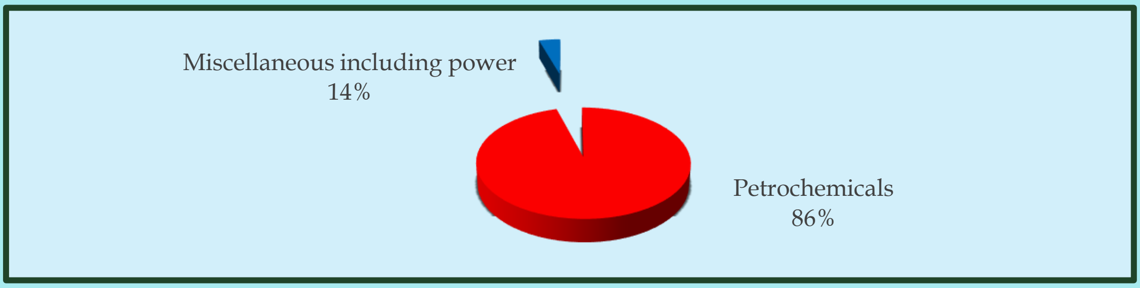
Naphtha consumption during the month of December 2022 with a volume of 1 MMT recovered 81.8%,71.8%,80.7% and 82.4% over the volume of 1.23MMT, 1.4MMT, 1.24MMT & 1.22 MMT in December2021, 2020, 2019& 2018 respectively.

Petrochemical industries remain the main consumers of naphtha.

Sectoral consumption of Naphtha:

Consumption of naphtha during April-December-2022 with a volume of 8.4MMT was driven by petrochemicals sector 86%, whereas 16% naphtha consumption fell in 'miscellaneous industries including power' as shown in 8A chart.

Figure-8A: Sector wise naphtha consumption for April – December 2022



ATF:

ATF consumption during December 2022 with a volume of 0.66 MMT registered a growth of 19.4% and 54.5% over the volume of 0.55 MMT and 0.43 MMT in December 2021 and 2020 respectively. However, it recovered 90.4% & 91.5% over the volume of 0.73 MMT & 0.72MMT in December 2019 & 2018 respecyively.

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.

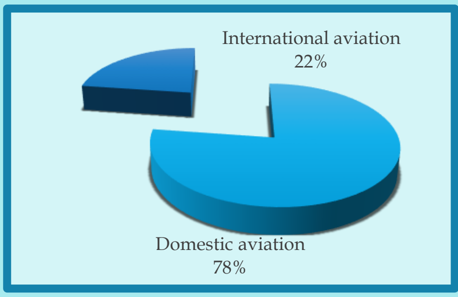
Month wise ATF consumption since December-2018 is depicted in the Figure-9.

Figure-9: Month-wise ATF consumption (MMT) since December 2018

Sectoral consumption of ATF:

Almost entire ATF consumption during April-December-2022 with a volume of 5.4 MMT, attributed to aviation sector; 78% domestic & 22% international aviation as shown in the chart.

Figure-10A: Sector wise ATF consumption for FY2022-23



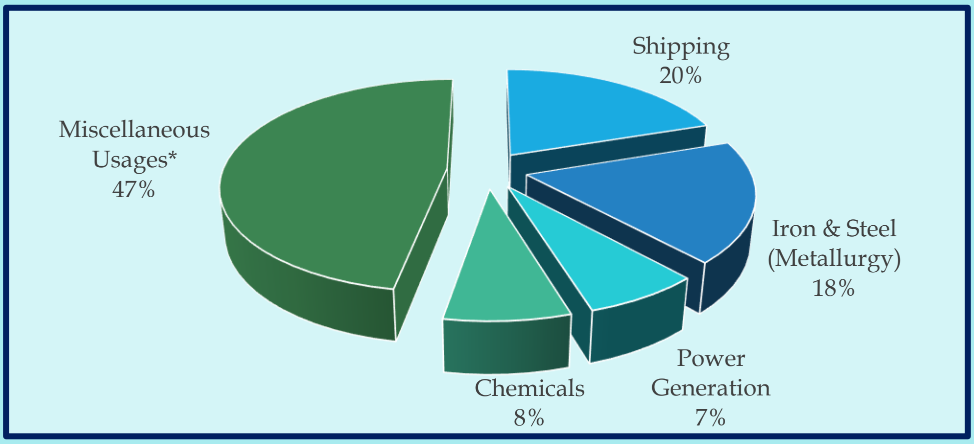
FURNACE OIL & LOW SULPHUR HEAVY STOCK (FO/LSHS):

FO/LSHS consumption during December 2022 with a volume of 0.662 MMT recorded a growth rate of 9.5%, 17.6% 20.9% & 0.2% year-to-year basis over volume of 0.569 MMT, 0.529MMT, 0.621 MMT in the month of December 2021, 2020 & 2018 respectively. However, it recovered 99.1%over the volume of 0.628MMT in the month of December-2019. The higher growth rate is attributed to consumption shift from gas to LSHS in refining, chemical, glass sector and the volatile price regime in natural gas in recent time. Though few companies shifted their internal feulling consumption from FO to CNG due to environmental obligations and to coal due to price factors. Some mining companies' FO intake for the month was less due to inventory limitations. Bunkering FO consumption in Chennai and Tuticorin was less during the month. Some aluminium industries started taking FO as their burning fuel.

Sectoral consumption of FO/LSHS:

Consumption of FO/LSHS during April-December-2022 with a volume of 5.1 MMT was driven by 'Miscellaneous industries' 47%, followed by 'shipping' 20% 'Iron & steel (metallurgy)' 18%, chemicals' 8% 'Power generation 7% as shown in the chart.

Figure-10B: Sector wise FO+LSHS consumption for April – December 2022



*Miscellaneous usage includes 'Railways & Transport'(2.74%), Agriculture(0.81%), Civil Engineering (0.98%), Elec./Electronics(0.06%), Textiles (0.34%), Mining (1.32%) etc.

PETCOKE:

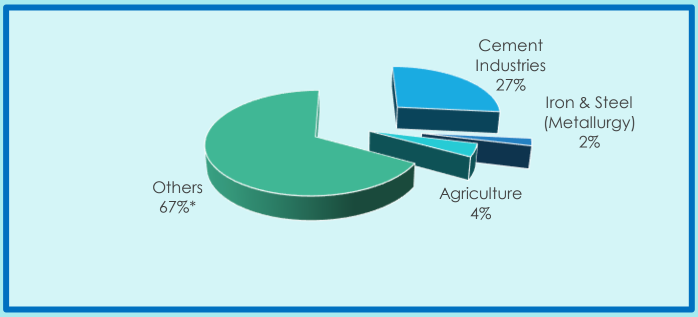
Petcoke consumption during the month of December 2022 with a volume of 1.3 MMT recovered 74.8% ,65% & 67.7% over volume of 1.7,2 & 1.9 MMT in the month of December 2021,2019 and 2018 respectively. However, it marked a growth rate of 4.6% on year-to-year basis over a volume of 1.2MMT in December-2020respectively.

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.

Sectoral consumption of Petcoke:

Petcoke consumption during April-December-2022 was of 11.5MMT. The domestic sales driven by 'others 67%, followed by 'cement industries' 27%, Agriculture 4% as shown in the chart.

Figure-10A: Sector wise Petcoke consumption for APRIL-DECEMBER-2022



*'Others' includes chemicals (4.79%), Textiles (0.45%), Mining (1.35%), Power Generation (0.13%) etc.

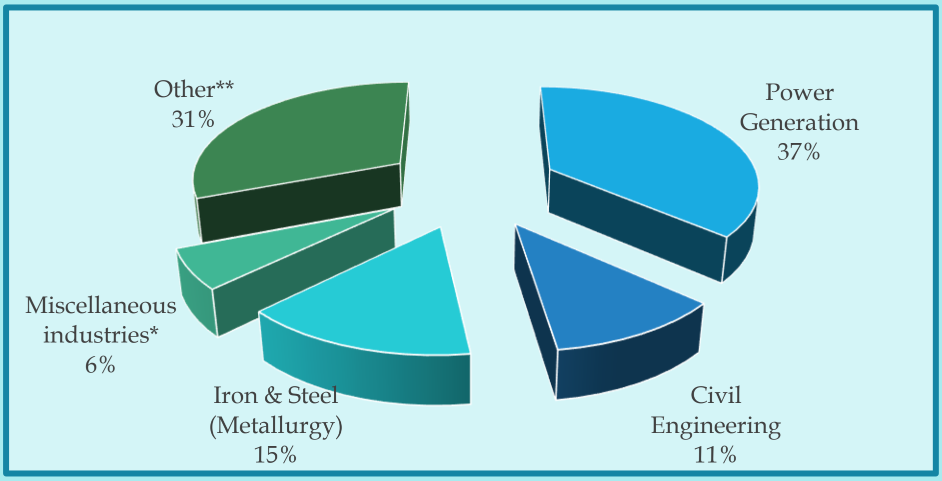
LIGHT DIESEL OIL:

LDO consumption during the month December-2022 with a volume of 0.07 MMT recovered 70.3% & 74.1% on year-to-year basis over a volume of 0.09 MMT & 0.088 MMT in the month of December 2021 & 2020 respectively. However, it registered growth rate of 41.8% & 25.6% over a volume of 0.046MMT, 0.052MMT in the month December-2019 &2018 respectively.

Sectoral consumption of Light Diesel Oil:

During April-December-2022, consumption of Light Diesel oil (LDO) with a volume of 0.54MMT was driven by 'Power Generation' 37% followed by 'Other' 31% and 'Iron& Steel (Metallurgy) 15%, and Civil Engineering 11% as shown below sectoral consumption pie-chart. LDO consumption was largely affected by available alternate fuel like FO&LSHS, LPG/CNG/ Fuelgas etc. and strategy taken by state governments to decrease emission. LDO consumption is banned in Delhi NCR, Haryana, Gujrat etc. LDO is being used to heat bitumen, reduction in bitumen consumption effected LDO consumption in some parts of the country.

Figure-11: Sector wise LDO consumption for April-December 2022



*Miscellaneous industries include chemicals(3.43%), electrical & electronics (0.29%), Industrial goods(2.24%) and textiles (0.36%)

**Other includes Road Transport (0.2%), Agriculture (1.59%), Mining (1.84%), Railways (0.7%) and shipping(0.8%) etc.

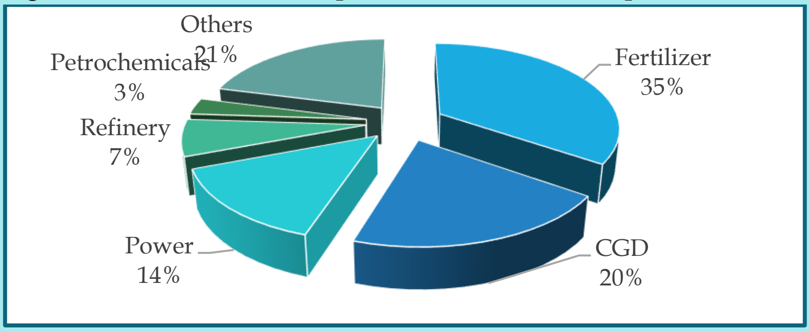
NATURAL GAS:

Natural Gas is used as a feedstock in several industries like fertilizers, plastics and other commercially important organic chemicals and used as a fuel for electricity generation, heating purpose in industrial and commercial units. Natural gas is also used for cooking in domestic households and as a transportation fuel for vehicles. Consumption of Natural Gas with a volume of 5.2 BCM (billion cubic meters) during the month of December 2022 recovered 95.9% on volume of 5.4 BCM in the month of December 2021.

Sectoral consumption of Natural Gas April-November-22: (PROVISIONAL)

During April-November 2022, consumption of Natural gas (NG) with a volume of 40.9 BCM was driven by the fertilizer (35%) followed by CGD (20%), Power (14%) Refinery (7%), , Petrochemicals (3%) and others (21%).

Figure-12: Sector wise consumption of Natural Gas for April-November 2022 (P)



*Other includes Ceramic, Chemical,Glass, Metal & small customers etc.

Source: PPAC data; P: provisional

Conversion factors taken for TMT to barrel conversion

Conversion factor (approx.)		
Product	Weight (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	1	6.7
Lubes	1	7.2
Light Diesel Oil	1	7.4
Petcoke	1	5.5
Product Basket (for Others)	1	8.1

Industry Consumption Trend Analysis 2022-23 (Provisional)

('Million barrels per day)

Product	April- December			December		
	2021-22	2022-23	Growth(%)_2021-22 to 2022-23	2021	2022	Growth(%)_ 2021 to 2022
(A) Sensitive Products						
LPG	1.32	1.35	1.8	0.96	1.00	3.9
SKO	0.05	0.02	-65.4	0.03	0.01	-66.7
Sub Total	1.37	1.36	-0.7	0.99	1.01	1.6
(B) Major Decontrolled Product						
HSD	2.33	2.66	14.0	1.85	1.97	6.5
MS	1.11	1.27	14.6	0.83	0.88	5.9
Naphtha	0.50	0.45	-10.3	0.32	0.32	0.5
ATF	0.16	0.24	50.7	0.15	0.18	19.4
Bitumen	0.17	0.18	5.9	0.16	0.13	-15.1
FO/LSHS	0.17	0.19	10.2	0.13	0.14	9.5
Lubes+Greases	0.13	0.13	1.2	0.11	0.10	-6.8
LDO	0.03	0.02	-28.8	0.02	0.02	-29.7
Sub Total	4.61	5.15	11.6	3.57	3.75	4.9
Sub - Total (A) + (B)	6	7	8.8	4.56	4.75	4.2
(C) Other Minor Decontrolled Products						
Pet.Coke	0.32	0.35	8.1	0.06	0.04	-25.2
Others*	0.41	0.53	29.2	0.03	0.05	37.8
Sub Total	0.73	0.88	20.0	0.09	0.09	-2.2
Total	7	7	10.0	4.65	4.84	4.1

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

Industry Consumption Trend Analysis 2022-23 (Provisional)

('000 MT)

Product	April- December			December								
	2021-22	2022-23	Growth(%)_2021-22 to 2022-23	2018	2019	2020	2021	2022	Growth(%)_ 2018 to 2022	Growth(%)_ 2019 to 2022	Growth(%)_ 2020 to 2022	Growth(%)_ 2021 to 2022
(A) Sensitive Products												
LPG	20890	21256	1.8	2165	2354	2523	2479	2576	19.0	9.4	2.1	3.9
SKO	1136	393	-65.4	280	153	135	119	40	-85.8	-74.0	-70.6	-66.7
Sub Total	**22027**	**21649**	**-1.7**	**2445**	**2507**	**2659**	**2599**	**2616**	**7.0**	**4.3**	**-1.6**	**0.7**
(B) Major Decontrolled Product												
HSD	56098	63924	14.0	7389	7387	7192	7303	7779	5.3	5.3	8.2	6.5
MS	22918	26264	**14.6**	2395	2473	2706	2816	2983	**24.5**	**20.6**	**10.2**	**5.9**
Naphtha	10579	9491	-10.3	1300	1272	1212	1099	1105	-15.1	-13.2	-8.9	0.5
ATF	3575	5387	50.7	720	729	427	552	659	-8.5	-9.6	54.5	19.4
Bitumen	5215	5521	5.9	619	630	856	780	662	7.0	5.2	-22.6	-15.1
FO/LSHS	4635	5107	10.2	621	628	529	569	622	0.2	-0.9	17.6	9.5
Lubes+Greases	3350	3391	1.2	301	307	439	455	424	41.1	38.4	-3.4	-6.8
LDO	761	542	-28.8	52	46	88	93	65	25.6	41.8	-25.9	-29.7
Sub Total	**107132**	**119627**	**11.7**	**13397**	**13472**	**13448**	**13667**	**14300**	**6.7**	**6.1**	**6.3**	**4.6**
Sub - Total (A) + (B)	**129158.2**	**141276.5**	**9.4**	**15842.2**	**15978.7**	**16106.9**	**16265.5**	**16915.3**	**6.8**	**5.9**	**5.0**	**4.0**
(C) Other Minor Decontrolled Products												
Pet.Coke	10639	11496	8.1	1922	2002	1244	1741	1302	-32.3	-35.0	4.6	-25.2
Others*	9359	12095	29.2	1046	965	1009	1002	1380	31.9	43.0	36.7	37.8
Sub Total	**19998**	**23591**	**18.0**	**2968**	**2967**	**2254**	**2743**	**2682**	-9.7	-9.6	19.0	-2.2
Total	**149156**	**164868**	**10.5**	**18811**	**18946**	**18361**	**19008**	**19597**	**4.2**	**3.4**	**6.7**	**3.1**

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

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