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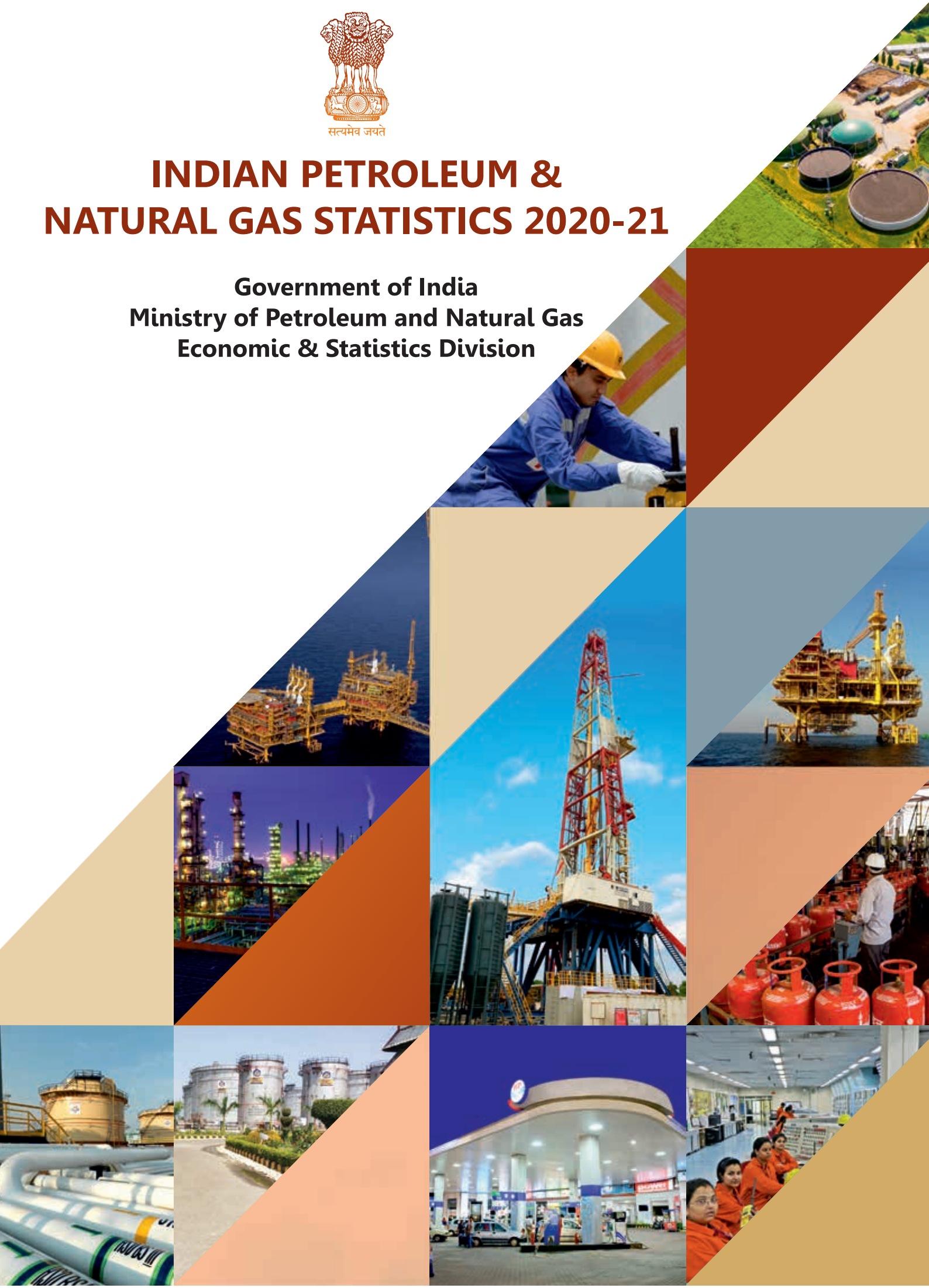
INDIAN PETROLEUM & NATURAL GAS STATISTICS 2020-21

Government of India
Ministry of Petroleum and Natural Gas
Economic & Statistics Division



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आज़ादी का अमृत महोत्सव

पेट्रोलियम एवं प्राकृतिक गैस;
आवासन और शहरी कार्य मंत्री
भारत सरकार
Minister of
Petroleum and Natural Gas;
Housing and Urban Affairs
Government of India

MESSAGE

Oil and Gas Sector is among eight core industries in India and will continue to be a prominent driver of India's economic transformation. India's Energy Plan aims to ensure energy justice while adhering to global commitments to sustainable growth.

Our Hon'ble Prime Minister has recently presented five nectar elements, Panchamrit, to deal with the challenge of climate change with a target to achieve Net Zero targets by the year 2070. In line with this, several major reforms have been carried out in the hydrocarbon sector for ensuring energy security of the country while pursuing the green path to progress for a balanced energy mix. Government is moving forward with the vision of Atmanirbhar Bharat and driving strategic energy engagements with the key global energy players.

Quality, reliable and accurate oil and gas statistics are imperative for effective data analysis as they enable all stakeholders to make judicious decisions. Data being the new oil is a lifeline for the emerging digital economy. The Indian Petroleum and Natural Gas Statistics is a comprehensive document encapsulating the performance of India's oil and gas sector for year 2020-21 alongside major international scenarios.

I am sure that this publication will provide valuable insights to all the stakeholders in the Indian oil and gas sector.

(Hardeep S Puri)

2nd February 2022
New Delhi

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सत्यमेव जयते

राज्य मंत्री
पेट्रोलियम एवं प्राकृतिक गैस और
श्रम और रोजगार
भारत सरकार
Minister of State for
Petroleum and Natural Gas &
Labour and Employment
Government of India

MESSAGE

India's Oil and Gas Sector is a prominent driver of country's economic transformation. By balancing accessibility and affordability, India is creating a global model of energy justice and will chart its own strategy and pathway for its green energy transition.

India's energy demand is going to increase in the future, and it has taken a number of concrete steps that are shaping India's energy transition pathways for a low carbon economy. Several major reforms have been carried out in the hydrocarbon sector for ensuring energy security of the country while pursuing the green path to progress for a balanced energy mix. The one nation one gas grid will offer vast opportunities for integrating different sources of energy in the country. The Ministry is working towards increasing the share of natural gas in the primary energy mix from 6.8% to 15% by 2030. After a temporary slowdown in 2020, India is set to emerge as one of the primary drivers of growth in gas demand in Asia.

Statistical analyses of reliable, accurate and effectively presented data are imperative for effective data transparency and it permits all stakeholders to make judicious decisions. Oil and gas datasets will be helpful to give an insight into petroleum exploration, fields and reserves around the globe. The Indian Petroleum and Natural Gas Statistics is a comprehensive document encapsulating the performance of India's oil and gas sector for year 2020-21 alongside major international scenarios.

This publication, which is being widely used by all stakeholders, will continue to provide valuable insights into the Indian oil and gas sector.

25/1/22

(Rameswar Teli)

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Petroleum and Natural Gas sector is a vital contributor to the energy mix and will continue to be the crucial pillar, for ensuring energy access and energy sustainability, to the people of the country. In recent years, major reforms that have been undertaken in the subsectors viz. Explorations & Production, Refinery, Pipelines, Marketing, City Gas Distribution, Bio-fuels, Strategic storages etc. have catalysed investments in this sector and the impact of these reforms is become visible in the changing dynamics of the Indian energy scenario. With an ambitious vision of setting up of 5000 compressed biogas plants by 2023-24 envisaging an investment of 2 lakh crore rupees, goal of ethanol blending of 20% in petrol by 2025 and 14300 KMs of gas pipelines under construction, India aims to be a frontrunner globally in transition towards a Green and Gas based Economy.

The 55th edition of the Indian Petroleum & Natural Gas (IPNG)provides an overall picture of Oil & Gas sector in India. IPNG Statistics is an integrated, relevant, reliable and updated database of petroleum and natural gas sector, covering the entire gamut of hydrocarbon data from hydrocarbon production since inception, details of existing infrastructure (Upstream, Refinery, LNG, Pipeline, CGD and Marketing), consumption, manpower and economics.

I compliment the efforts of the officers of Economics & Statistics Division, under the Ministry, in bringing out this publication that encapsulates the supply side as well as demand side data of the entire hydrocarbon chain. I am sure that this publication will be a valuable referral document for policy makers, planners, administrators, academicians, people from the industry and researchers, working in the Oil & Gas sector, across the world.

[Pankaj Jain]

उषा सुरेश
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PREFACE

India is a major force in the global energy economy, as one of the fastest growing economies in the world the energy needs of India are expected to grow manifold.

The current edition of Indian Petroleum & Natural Gas Statistics is 55th in the series and presents comprehensive view of the Oil & Gas Sector in India. The integrated and updated database of this publication provides an objective and insight into the developments over the entire gamut of India's hydrocarbon data including exploration, production, refining, transportation and marketing, imports and exports of crude oil & petroleum products, taxes and duties, manpower employed in oil & gas CPSEs, etc.

I would like to thank all departments of the Ministry, Oil & Gas CPSEs, attached offices of MoPNG for their cooperation and consistent support in furnishing the required information / data for this publication. The international petroleum statistics has been compiled with inputs taken from Organization of Petroleum Exporting Countries, International Energy Agency and BP Statistical Review of World energy.

I take this opportunity to put on record the contribution of the team of officers and staff in the Economics & Statistics Division whose collaboration and untiring efforts have been instrumental in bringing out this publication. Shri Gaurav Katiyar, Deputy Director, Ms. Avinash Kumari, Assistant Director, Shri Shyam Lal, Senior Statistical Officer, Shri Shiv Prakash, Jr. Statistical Officer, have played key roles in the collection/compilation /graphical design/analysis/ of this publication amongst all other assignments. Ms. Indrani Kaushal, Economic Adviser played a stellar role in ensuring data consistency, whilst also providing guidance and editorial suggestion, in bringing out this publication. Special thanks also to Ms. Ramya Krishna, Shri Amit Duhan, Shri Ramit Kalia, Shri Arun Kumar Technical Officers in the E&S Division who contributed with their insights/valuable suggestions with their expertise and knowledge of energy data management.

Towards further improvement in future editions of this publication, we welcome comments/suggestions to make this publication more useful to all stakeholders and data users in the oil & gas sector.

Usha Suresh

(Usha Suresh)
Senior Adviser

डी. के. ओझा
उप महानिदेशक
D. K. Ojha
Deputy Director General (E&S)

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PREFACE

The Indian Petroleum & Natural Gas Statistics is a reference work, 55th in its series, which presents comprehensive statistics of the Oil & Gas Sector in India. The major reformation in area of publication provides an objective insight into the developments of India's hydrocarbon strategy like exploration, production, refining, transportation and marketing, imports and exports of crude oil & petroleum products, taxes and duties, manpower employed in oil & gas CPSEs, etc. The publication also provides glimpses of the global petroleum scenario, through user friendly graphics, charts and tables and with a list of conversion factors.

I am grateful to various Ministries / Departments, oil & gas CPSEs, attached offices of MoPNG, the international organizations, for their utmost cooperation in sharing the required information / data in time to complete this publication. The international petroleum statistics has been prepared using data from Organization of Petroleum Exporting Countries, International Energy Agency and BP Statistical Review of World Energy.

The untiring efforts put in collectively by the team of officers and staff in Economics and Statistics Division in bringing out the present issue is highly commended. Any comments/suggestions towards improving the scope, contents, layout, etc of the publication would be welcomed and highly appreciated.

I am sure that this publication would be very useful to all kinds of data users in oil & gas sector and will be a valuable referral documents for policy makers, planning researchers & people from the oil & gas industry.

(D.K. Ojha)
Deputy Director General

New Delhi
9th,February, 2022

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SCOPE AND COVERAGE OF DATA PUBLISHED

1. **Scope :** The **"Indian Petroleum & Natural Gas Statistics"** presents updated comprehensive statistics on various aspects of Indian Petroleum & Natural Gas sector. The data on international developments in respect of the key parameters of Petroleum and Natural Gas sector have also been captured in the publication.

2. **Coverage :** The Statistics presented in the current publication cover the exploration, production, refining, alternate fuels, marketing activities, etc. of Oil and Gas sector.

3. **Source :** The primary statistics in respect of petroleum and natural gas industries included in the publication are based on various returns, submitted by the Oil& Gas Central Public Sector Enterprises (CPSEs), Joint Venture companies and Private companies under the Ministry of Petroleum & Natural Gas.

   The sources of all the secondary data, including international statistics, incorporated in the publication, have been indicated at the bottom of relevant tables.

4. **Limitations :** The data in respect of sales/consumption of petroleum products reflect dispatches of various petroleum products from the sales depots of different oil companies to the bulk consumers/ retail outlets. The state-wise sales/consumption of such products show dispatches to direct consumers/retail outlets meant for consumption / sales in a particular state.

5. **Reference Period :** Key statistics for the domestic petroleum and natural gas industries have been presented on calendar (January-December) as well as on financial year (April-March) basis.

6. **Natural Gas :** The gross production of natural gas reflects gross withdrawals of natural gas from reservoir. On the other hand, the net production of natural gas show gross withdrawal of natural gas from reservoirs less gas used for reinjection into reservoirs for pressuring gas which is flared and / or vented/loss.

   The utilization data for natural gas includes gas marketed, gas used for LPG extraction and gas consumed for field operations by the companies engaged in hydrocarbons exploration / production activities.

7. **Petroleum Imports :** The crude oil and product import figures given in the publication includes crude oil / petroleum products imported by the oil PSUs, private and parallel marketers on behalf of Nepal for processing of crude oil in Indian refineries and arranging supplies of desired products to Nepal. Petroleum products actually brought into the country from processing of Indian and International crudes at foreign refineries for Indian oil companies have also been included under the product import figures.

8. **Value of Import/Export :** The value data in respect of exports of petroleum included in the publication show F.O.B. value of exports whereas similar value figures for imports reflect C.I.F. value of imports.

9. **Revision / Modification / Updation :** The statistics provided in this publication for the current year is provisional in view of the time lag involved in receipt of actual figures. In view of this, some information based on provisional data may undergo change as and when the actual data are available.

   Necessary revision / updation in the past data has been made in the light of latest available figures. To illustrate:

   (a) Data on international statistics of certain parameters like world crude oil exports taken from different sources viz. OPEC Bulletins and BP Statistical Review may not tally due to difference in coverage and methodology used.

   (b) To help to understand trends of major oil and gas indicators, historical data taken from different previous version of Indian petroleum and natural gas statistics since 1960-61 onwards.

10. **Abbreviations :** Details of abbreviations used have been provided in Appendix.

11. **Conversion factor :** The conversion factors generally used in the Oil & Gas sector are also given in the Appendix.

    Errors or Omissions and Commissions, if any, detected may kindly be brought to the notice of the Deputy Director, Economic & Statistics Division, Ministry of Petroleum & Natural Gas at email **eands-mopng@gov.in** for rectification in the subsequent issue.

CHAPTER-I

Performance of Petroleum & Natural Gas Sector- Some Key Macro-Economic Trends

INTRODUCTION

Performance of Petroleum & Natural Gas Sector-Some Key Macro-Economic Trends

Introduction : India is the third largest energy consumer in the world after China and USA. It is also the fastest growing energy consumer. With a share of 5.7% of the World's primary energy consumption, India's energy requirement is fulfilled primarily by Coal, Crude Oil, Natural Gas and Renewable Energy. Oil and gas within the energy mix play an important role as over one third of the energy required is met by hydrocarbons. Growing economy and population growth are the main drivers for oil & gas demand increasing every year. Government of India is determined to promote usage of natural gas, as a fuel and feedstock across the country, and to increase its share in primary energy mix from around 6.7% to 15% by 2030.

Amongst commodity imports, share of imports of Oil & Gas sector (Oil ₹ 4,59,779 crore, Petroleum products ₹ 1,09,430 and LNG ₹ 54,850 crore) was 21.4% in 2020-21 of the country's overall imports (₹ 29,09,937 crore). To spur growth of domestic production and attract new entrants, a large number of policy initiatives in the areas of generation of quality geo-scientific data and providing easy access, finding future oil & gas by awarding new exploration acreage, expediting production from new development acreages and from existing production acreages and focus on production maximisation have been taken in the recent years. The Government has also taken various steps towards achieving 20% blending of ethanol in petrol by 2025 which includes allowing use of sugarcane, damaged food grains and maize for conversion to ethanol. The National Policy on Biofuels – 2018 prescribes an indicative target of 5% blending of biodiesel in diesel by 2030. Thrust is being given to Advanced Biofuels such as Second Generation (2G) Ethanol, Bio CNG/ Compressed Bio Gas (CBG), UCO based biodiesel etc. which can be sourced from wastes such as crop residues, Biomass, industrial waste, sewage water etc. and are abundantly available in the Country. 'SATAT' (Sustainable Alternative Towards Affordable Transportation) scheme for CBG was launched in 2018 which envisages targeting production of 15 MMT of CBG from 5000 plants by 2023-24.

I. 1 Crude Oil and Natural Gas Production:

The crude oil production during the year 2020-21 is at 30.49 Million Metric Tonnes (MMT) as against production of 32.17 MMT in 2019-20, showing a decline of 5.2%. Out of the total crude oil production, there is contribution of 66.2% (20.18 MMT) from ONGC (nomination), 9.6% (2.94 MMT) from OIL (nomination) and 24.2% (7.37 MMT) from PSC/RSC regime.

Further, Natural Gas production during the year 2020-21 stood at 28.67 Billion Cubic Meters (BCM) which is 8.1% lower than production of 31.18 BCM in 2019-20. Out of total natural gas production, there is contribution of 76.3% (21.87 BCM) from ONGC (nomination), 8.6% (2.48 BCM) from OIL (nomination) and 15.1% (4.32 BCM) from PSC/RSC/CBM regime. The reasons for lower domestic oil and gas production are inter-alia declining production from old and marginal fields, unplanned shutdown and operational losses from few producing wells and less withdrawal of gas by some of the anchor customers.

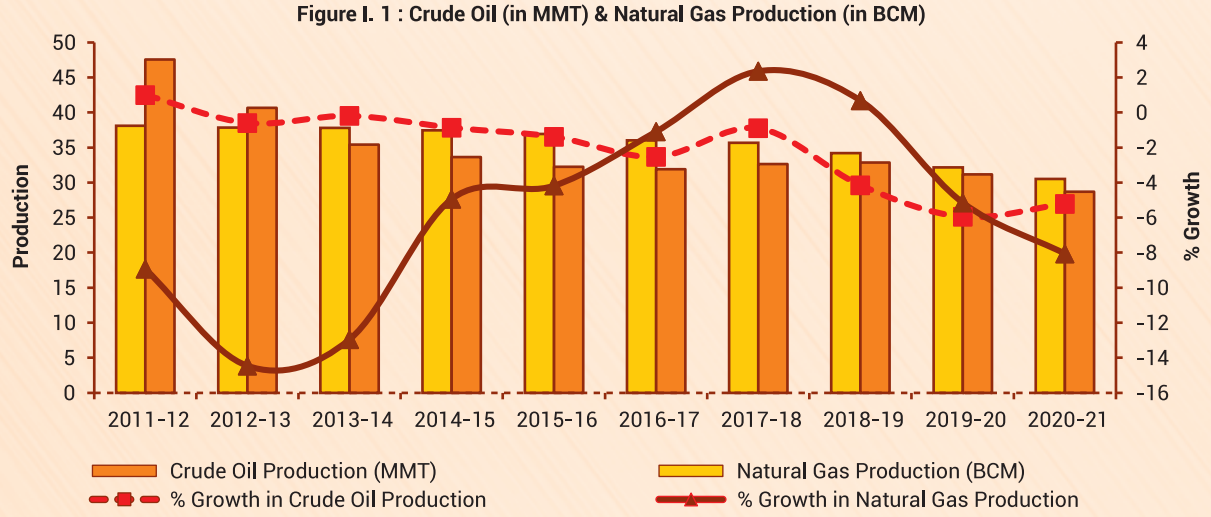
The trends in the production of crude oil and natural gas from the year 1960-61 to 2020-21 have been depicted as follows: -

Table I. 1 : Crude Oil and Natural Gas Production

Year	Crude Oil Production (MMT)	% Growth in Crude Oil Production	Natural Gas Production (BCM)	% Growth in Natural Gas Production
1960-61	0.45	-	-	-
1970-71	6.82	1.49	1.45	5.07
1980-81	10.51	-10.71	2.40	-13.36
1990-91	33.02	-3.14	18.00	5.88
2000-01	32.45	1.56	29.48	3.79
2010-11	37.71	11.94	52.22	9.95
2011-12	38.09	1.00	47.56	-8.93
2012-13	37.86	-0.60	40.68	-14.47
2013-14	37.79	-0.19	35.41	-12.96
2014-15	37.46	-0.87	33.66	-4.94
2015-16	36.94	-1.39	32.25	-4.18
2016-17	36.01	-2.53	31.90	-1.09
2017-18	35.68	-0.90	32.65	2.36
2018-19	34.20	-4.15	32.87	0.69
2019-20	32.17	-5.95	31.18	-5.14
2020-21(P)	**30.49**	**-5.21**	**28.67**	**-8.05**
CAGR 2011-12 to 2020-21 (%)	**-2.4**		**-5.5**	

P : Provisional

Figure I. 1 : Crude Oil (in MMT) & Natural Gas Production (in BCM)



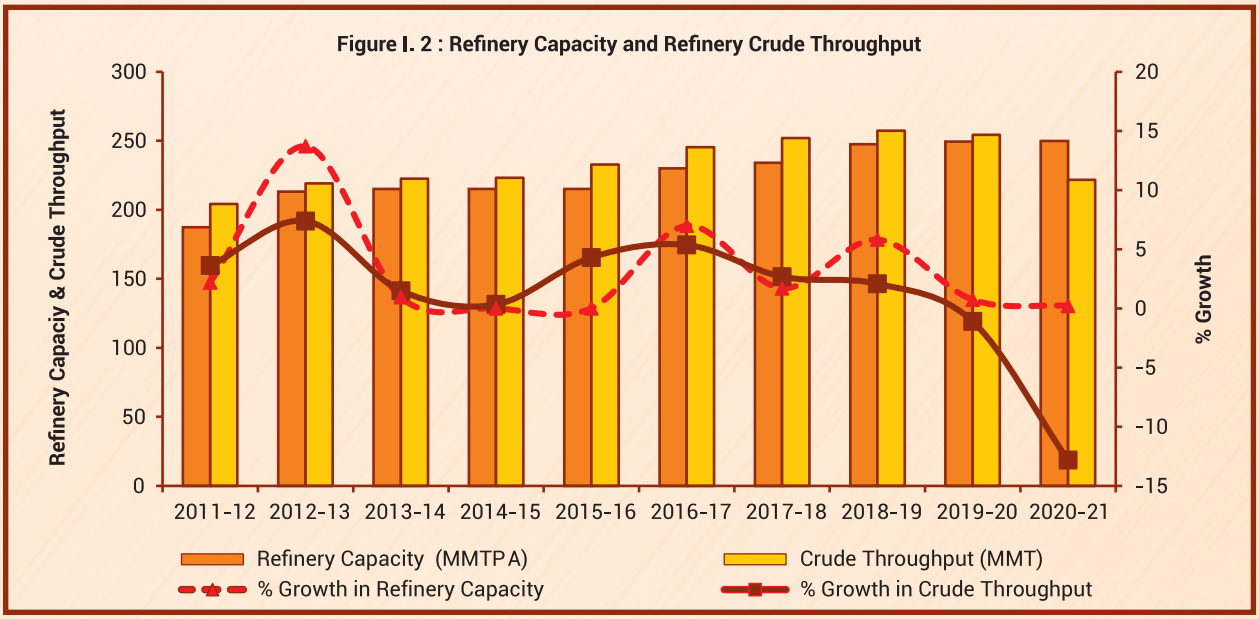
I. 2 Refinery Capacity & Refinery Crude Throughput:

Indian refinery industry has done well in establishing itself as a major player globally. India, which is fourth largest refiner in the world and second largest refiner in Asia after China, is emerging as a refinery hub with refining capacity exceeding demand. The country's refinery capacity has increased to 249.22 MMTPA as on 01.04.2021. Refinery capacity utilisation is 88.8% for the year 2020-21. Crude Oil Processed for the year 2020-21 is 221.77 MMT as against 254.39 MMT in 2019-20, showing a decrease of about 12.8%. This was mainly due to the less product demand due to Covid-19 pandemic and lockdown in the country for several months. The trend in Refinery Capacity and Crude throughput from the year 1960-61 to 2020-21 have been depicted as follows: -

Table I. 2 : Refinery Capacity & Refinery Crude Throughput (in terms of Crude Oil Processed)

Year	Refinery Capacity (MMTPA)^	% Growth in Refinery Capacity	Crude Throughput (MMT)	% Growth in Crude Throughput	Refinery Capacity Utilization
1960-61	6.09	-	6.13	-	100.66
1970-71	18.46	5.49	18.37	2.57	99.51
1980-81	25.08	-10.91	25.84	-5.93	103.03
1990-91	51.67	-0.58	51.77	-0.33	100.19
2000-01	101.79	27.97	103.44	20.34	101.62
2010-11	183.39	4.22	196.99	5.60	107.42
2011-12	187.39	2.18	204.12	3.62	108.93
2012-13	213.07	13.70	219.21	7.39	102.88
2013-14	215.07	0.94	222.50	1.50	103.46
2014-15	215.07	0.00	223.24	0.33	103.80
2015-16	215.07	0.00	232.86	4.31	108.28
2016-17	230.07	6.97	245.36	5.37	106.65
2017-18	233.97	1.70	251.93	2.68	107.68
2018-19	247.57	5.81	257.20	2.09	103.89
2019-20	249.37	0.73	254.39	-1.10	102.01
2020-21 (P)	**249.87**	**0.20**	**221.77**	**-12.82**	**88.76**
2021-22	249.22	-	-	-	-
CAGR 2011-12 to 2020-21 (%)	**3.2**		**0.9**		**-**

P : Provisional ^ : As on 1st April of initial year



I. 3 Production and Consumption of Petroleum Products:

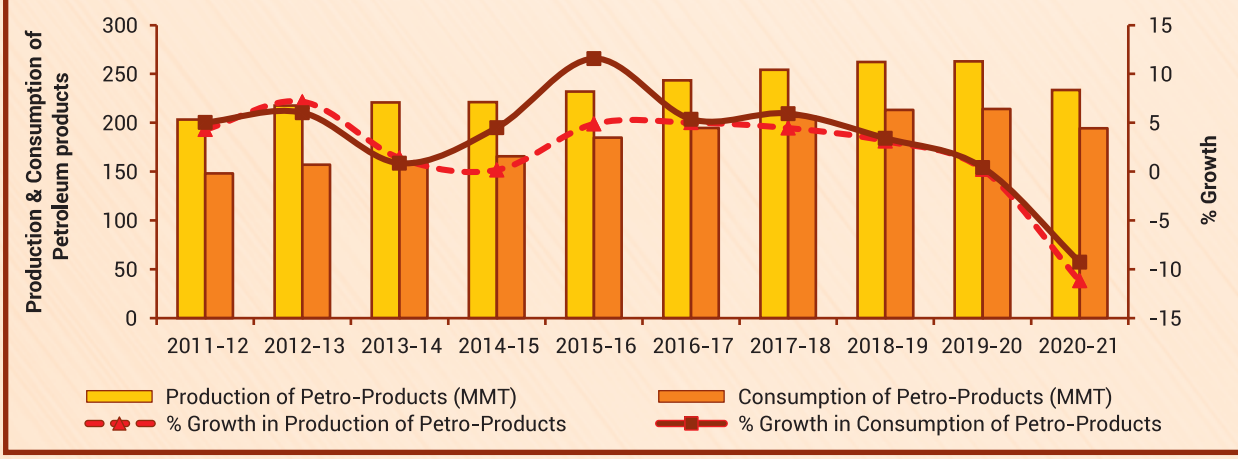
The production of petroleum products is at 233.51 MMT in year 2020-21 against 262.94 MMT achieved in 2019-20, showing decrease of about 11.2%. During FY 2020-21, Diesel (HSD+LDO) accounted for the highest Production share (43.3%) followed by Petrol/Motor Spirit (15.3%), Naphta (8.3%), Petroleum Coke (5.4%), LPG (5.2%), Fuel Oil (3.1%) ATF (3%), Bitumen (2.2%), Kerosene (1%) and Lubes & Greases (0.5%). Total consumption of Petroleum products in the country during FY 2020-21 was 194.30 million metric tonnes (MMT) registering negative growth rate of 9.3% vis FY 2019-20 (214.13 MMT) due to COVID-19. During FY 2020-21, Diesel (HSD+LDO) accounted for the highest consumption share (37.9%) followed by Petrol/Motor Spirit (14.4%), LPG (14.2%), Petroleum Coke (8.0%), Naphtha (7.3%), Bitumen (3.9%), Fuel Oil (2.9%), ATF (1.9%), Lubes & Greases (2.1%) and Kerosene (0.9%). The trend in production and consumption of petroleum products from the year 1960-61 to 2020-21 have been depicted as follows: -

Table I. 3 : Production and Consumption of Petroleum Products

Year	Production of Petro-Products (MMT)	% Growth in Production of Petro-Products	Consumption of Petro-Products (MMT)	% Growth in Consumption of Petro-Products
1960-61	5.78	-	7.10	-
1970-71	17.11	3.13	19.14	17.35
1980-81	24.12	-6.48	32.26	3.00
1990-91	48.56	-0.27	57.75	1.71
2000-01	95.61	20.41	100.07	3.07
2010-11	194.82	5.53	141.04	2.35
2011-12	203.20	4.30	148.13	5.03
2012-13	217.74	7.15	157.06	6.02
2013-14	220.76	1.39	158.41	0.86
2014-15	221.14	0.17	165.52	4.49
2015-16	231.92	4.88	184.67	11.57
2016-17	243.55	5.01	194.60	5.37
2017-18	254.40	4.46	206.17	5.95
2018-19	262.36	3.13	213.22	3.42
2019-20	262.94	0.22	214.13	0.43
2020-21 (P)	**233.51**	**-11.19**	**194.30**	**-9.26**
CAGR 2011-12 to 2020-21 (%)	**1.6**		**3.1**	

P : Provisional

Figure I. 3 : Production and Consumption of Petroleum Products



I. 4 Import & Price of Crude Oil :

Import of crude oil during 2020-21 was 196.46 MMT valued at ₹ 4,59,771 crore against import of 254.39 MMT valued at ₹ 7,17,001 crore in 2019-20 which is lower by 13.4% in quantity terms and 35.9% in value terms vis-a-vis 2019-20.

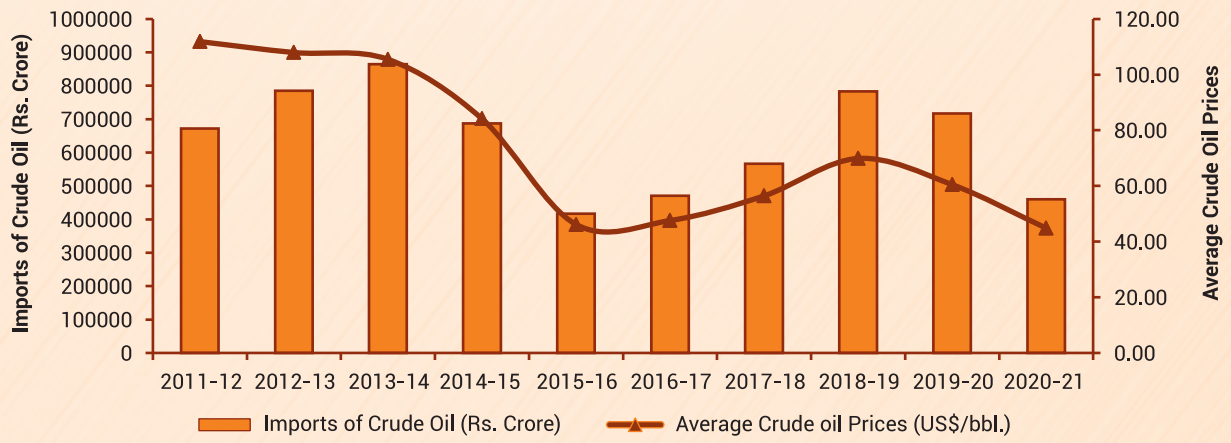
International crude oil price (Indian basket) dipped by 25.9% from 60.47 US $/bbl during 2019-20 to 44.82 US $/bbl during 2020-21. Among major Petroleum products, the highest reduction (38.2%) in International FOB price is observed for Kerosene and the least reduction (8.5%) is observed for LPG during 2020-21 vis-à-vis 2019-20. Since the price of crude oil in the international markets are quoted in US Dollars, the Indian ₹_US$ exchange rate plays a vital role in the Indian context. The trends in growth of crude oil imports and average crude oil international (Indian Basket) prices from the year 2000-01 to 2020-21 have been depicted as follows: -

Table I. 4 : Import of Crude Oil and average Crude Oil Prices

Year	Imports of Crude Oil (MMT)	% Growth in Imports of Crude Oil	Average Crude oil Prices (US$/bbl.)	% Growth in Average Crude oil Prices	Imports of Crude Oil (Rs. Crore)	% Growth in Imports of Crude Oil
2000-01	74.10		26.92		65932	
2010-11	163.60	2.72	85.09	21.97	455276	21.32
2011-12	171.73	4.97	111.89	31.50	672220	47.65
2012-13	184.80	7.61	107.97	-3.50	784652	16.73
2013-14	189.24	2.40	105.52	-2.27	864875	10.22
2014-15	189.43	0.10	84.16	-20.25	687416	-20.52
2015-16	202.85	7.08	46.17	-45.14	416579	-39.40
2016-17	213.93	5.46	47.56	3.02	470159	12.86
2017-18	220.43	3.04	56.43	18.65	566450	20.48
2018-19	226.50	2.75	69.88	23.84	783183	38.26
2019-20	226.95	0.20	60.47	-13.46	717001	-8.45
2020-21 (P)	**196.46**	**-13.44**	**44.82**	**-25.88**	**459779**	**-35.87**
CAGR 2011-12 to 2020-21 (%)	**1.5**		**-9.7**		**-4.1**	

P : Provisional

Figure I. 4 : Quantity of Crude Oil Imports and Average International Oil Prices (Indian basket)



I. 5 Imports & Exports of Petroleum Products:

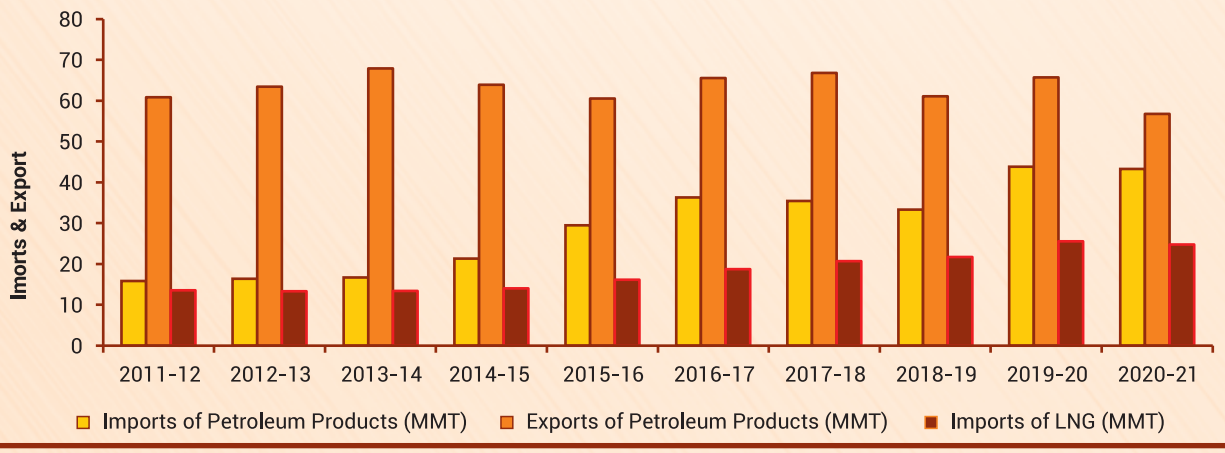
The import of petroleum products during 2020-21 was 43.25 MMT valued at ₹ 1,09,430 crore against the import of 43.79 MMT valued at ₹ 1,25,742 crore in 2019-20 which is lower by 1.2% in quantity terms and 13% in value terms vis-a-vis 2019-20. Further, the while exports of petroleum products during 2020-21 was 56.77 MMT valued at ₹ 1,57,168 crore showing an increase of 7.51% in quantity terms and 5.11% decrease in value terms against the exports of 65.69 MMT valued at ₹ 2,54,018 crore during 2019-20. The trend in imports/exports of petroleum products and LNG from the year 2000-01 to 2020-21 have been depicted as follows:-

Table I. 5 : Imports & Exports of Petroleum Products

Year	Imports of Petroleum Products (MMT)	% Growth in Imports of Petroleum Products	Exports of Petroleum Products (MMT)	% Growth in Export of of Petroleum Products	Imports of LNG (MMT)	% Growth in Imports of LNG
2000-01	9.27	-44.20	8.37	1021.31	-	-
2010-11	17.38	18.51	59.08	15.49	9.93	8.56
2011-12	15.85	-8.80	60.84	2.98	13.58	36.77
2012-13	16.35	3.18	63.41	4.23	13.29	-2.13
2013-14	16.70	2.10	67.86	7.03	13.43	1.06
2014-15	21.30	27.57	63.93	-5.79	14.04	4.53
2015-16	29.46	38.28	60.54	-5.31	16.14	14.95
2016-17	36.29	23.19	65.51	8.22	18.75	16.18
2017-18	35.46	-2.28	66.83	2.01	20.71	10.42
2018-19	33.35	-5.96	61.10	-8.58	21.69	4.74
2019-20	43.79	31.30	65.69	7.51	25.57	17.90
2020-21 (P)	**43.25**	**-1.23**	**56.77**	**-13.57**	**24.80**	**-3.02**
CAGR 2011-12 to 2020-21 (%)	**10.8**		**1.2**		**11.1**	

P : Provisional

Figure I. 5 : Trend in Imports & Exports of Petroleum Products (in MMT)



I. 6 Foreign Direct Investment Inflows:

The Government of India permits Foreign Direct Investment (FDI) across the hydrocarbon value chain covering the upstream, downstream and midstream sectors. The present FDI policy for petroleum & natural gas sector allows 100% automatic route for exploration and production & refining for private companies (49% for PSUs' on automatic route without any disinvestment or dilution of domestic equity in the existing PSUs), marketing of petroleum products, pipelines, storage and LNG regasification infrastructure and all related services, subject to existing sectoral policy and regulatory framework in the oil and gas sector. However, Foreign investment up to 100% under the automatic route is allowed for Petroleum refining by the Public Sector Undertakings (PSU), without any disinvestment or dilution of domestic equity in the existing PSUs in case an 'in-principle' approval for strategic disinvestment of a PSU has been granted by the Government. Exploration and Production of oil and gas are capital intensive and high risk activities requiring use of expensive state-of-the-art technologies and best management practices. Accordingly, the Government is encouraging participation of the private sector, including foreign companies in exploration, production and transportation network for petroleum and natural gas, in order to supplement the domestic investment as well as the efforts of the national oil companies in meeting the rising demand of oil and gas and reducing import dependence inflow of FDI in petroleum and natural gas has varied considerably over the years that could at least be partly due to the bulkiness of investments in the sector. The Government of India has reviewed the extant FDI policy for curbing opportunistic takeovers/ acquisitions of Indian companies due to the current COVID-19 pandemic and amended para 3.1.1 of extant FDI policy as contained in Consolidated FDI Policy, 2017 as under:

(a) A non-resident entity can invest in India, subject to the FDI Policy except in those sectors/ activities which are prohibited. However, an entity of a country, which shares land border with India or where the beneficial owner of an investment into India is situated in or is a citizen of any such country, can invest only under the Government route. Further, a citizen of Pakistan or an entity incorporated in Pakistan can invest, only under the Government route, in sectors/activities other than defence, space, atomic energy and sectors/activities prohibited for foreign investment.

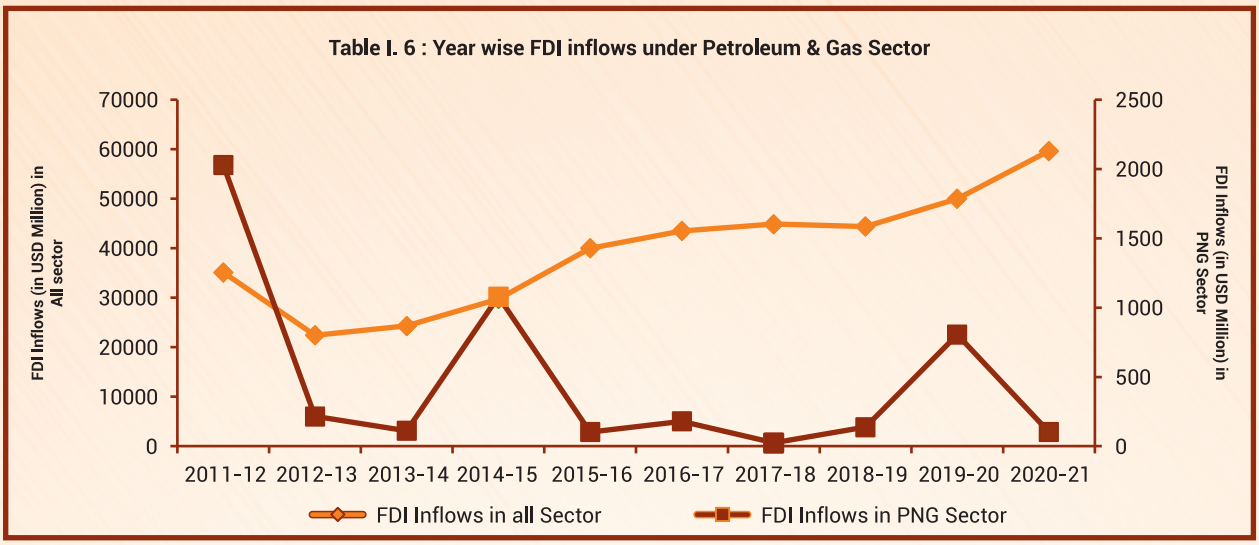
(b) In the event of the transfer of ownership of any existing or future FDI in an entity in India, directly or indirectly, resulting in the beneficial ownership falling within the restriction/purview of the para 3.1.1(a), such subsequent change in beneficial ownership will also require Government approval.

During the year 2020-21, FDI inflow received was 103 USD Million in the P& NG Sector contributing 0.2% of total FDI inflow (59636 USD million) in the economy. The trend in FDI inflows under Oil & Gas Sector are depicted in Table I.6.

Table I. 6 : Year wise FDI inflows under Petroleum & Gas Sector

Years	FDI inflows (in US$ Million)			
	All Sector		P&NG Sector	
	FDI Inflows	% Growth	FDI Inflows	% Growth
2010-11	21383	-17.23	556	109.55
2011-12	35121	64.25	2030	264.82
2012-13	22424	-36.15	215	-89.42
2013-14	24299	8.37	112	-47.75
2014-15	29737	22.38	1079	861.44
2015-16	40001	34.51	103	-90.45
2016-17	43478	8.69	180	75.10
2017-18	44857	3.17	24	-86.60
2018-19	44366	-1.09	138	472.50
2019-20	49977	12.65	806	482.07
2020-21 (P)	**59636**	**19.33**	**103**	**-87.24**
CAGR 2011-12 to 2020-21 (%)	**6.1**		**-28.2**	

P : Provisional



I. 7 Outlay for Ministry of Petroleum & Natural Gas:

Total budgeted Internal and Extra Budgetary Resources (IEBR) for CPSE's under the Ministry of Petroleum and Natural gas in 2021-22 (₹ 1,04,620 crore) was 6.2% higher over 2020-21 (₹ 98,522 crore). Actual expenditure of IEBR during 2020-21 (₹ 1,11,194 crore) is 5.14%, higher than actual expenditure in 2019-20 (₹ 1,05,603 crore) and 112.7% of BE 2020-21 (₹ 98,522 crore). Budget Estimates (BE) of IEBR of oil and gas CPSEs under Ministry of Petroleum & Natural Gas in 2020-21 is ₹ 98,522 crore. The trend in Sector-wise IEBR of under Petroleum & Gas Sector is depicted in **Table I.7**.

Table I. 7 : Sector-wise IEBR (in ₹ Crore) under Petroleum & Gas Sector

Sector	2017-18	2018-19	2019-20	2020-21	2021-22
	Actual	Actual	Actual	Actual	BE
Exploration & Production Sector	95455	49613	44769	52994	49186
Refining & Marketing Sector	32794	46990	56668	51446	49804
Petro-Chemicals Sector	3672	3487	3949	5979	5441
Engineering Sector	83	219	217	776	190
Total	**132004**	**100309**	**105603**	**111194**	**104620**

I. 8 : Indian Economy-Selected Indicators

Indicator	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Gross Domestic Product[1] :							
(i) At current prices (₹. Crore)	12467959	13771874	15391669	17090042	18886957	20351013	19745670
(ii) At constant prices (₹. Crore)	10527674	11369493	12308193	13144582	14003316	14569268	13512740
2. Per Capita GDP (Population in Million)[1] :							
(i) At current prices (₹.)	98405	107341	118489	130061	142328	151760	145680
(ii) At constant prices (₹.)	83091	88616	94751	100035	105526	108645	99694
3. GVA at Basic Price[1] :							
(i) At current prices (₹. Crore)	11504279	12574499	13965200	15505665	17161213	18461343	17915167
(ii) At constant prices (₹. Crore)	9712133	10491870	11328285	12034171	12744203	13271471	12453430
4. Net National Income[1]							
(i) At current prices (₹. Crore)	10978238	12162398	13623937	15140418	16704645	17994301	17461759
(ii) At constant prices (₹. Crore)	9224343	9963681	10782092	11508774	12240380	12681246	11745872
5. Per Capita NNI (Population in Million)[1] :							
(i) At current prices (₹.)	86647	94797	104880	115224	125883	134186	128829
(ii) At constant prices (₹.)	72805	77659	83003	87586	92241	94566	86659
6. Foreign Exchange Reserves :	**2137640**	**2378740**	**2398200**	**2760850**	**2855882**	**3602155**	**4218953**
(i) Gold (₹. Crore)	119160	133430	128830	139740	159585	230527	247723
(ii) SDR (₹. Crore)	24940	9960	9380	10020	10076	10800	10864
(iii) Foreign Currency Assets (₹. Crore)	1985460	2219060	2244940	2597570	2665564	3333815	3924168
(iv) Reserve Tranch Position (₹. Crore)	8080	16290	15050	13520	20657	27013	36198
7. Foreign Trade :							
(i) Import (₹. Crore)	2737087	2490306	2577675	3001033	3594675	3360954	2909937
(ii) Export (₹. Crore)	1896445	1716384	1849434	1956515	2307726	2219854	2154339
(iii) Balance of Trade (₹. Crore)	-840641	-773921	-728242	-1044519	-1286948	-1141100	-755597
8. Index :							
(i) Agricultural Production Index (2007-08=100)	124.0	120.8	132.8	139.4	138.1	145.5	136.8
(ii) Index of Industrial Production (2011-12=100)	111.0	114.7	120.0	125.3	130.1	129.0	118.1
(iii) Wholesale Price Index (2011-12=100)	113.9	109.7	111.6	114.9	119.8	121.8	123.4
(iv) Consumer Price Index of Industrial Workers (Base 2012=100)2	276.0	293.0	305.0	310.0	312.0	335.0	118.0
(v) Consumer Price Index of Agricultural Labourers (Base 1960-61=100)	799.5	834.9	869.8	888.9	907.3	979.6	1034.0
(vi) Consumer Price Index of Combined (Rural + Urban) Labourers (2012=100)	118.9	124.7	130.3	135.0	139.6	146.3	155.3
(vii) Eight Core Industries Index (Base 2011-12=100)	111.7	115.1	120.5	125.7	131.2	131.6	123.1
8. Energy Generation (Gross) :							
Coal & Lignite (TMT)	657	683	703	722	773	773	753
Natural Gas (BCM)	34	32	32	33	33	31	29
Crude Oil (MMT)	37	37	36	36	34	32	30
Petroleum Products (MMT)	221	232	244	254	262	263	234
Electricity Generation (GWh)	1267129	1335956	1407404	1483232	1584853	1622983	1639859

Note : P : Provisional

1. Value for 2019-20 is Revised Estimates and 2020-21 is Provisional Estimates
2. Base year is 2012 for the 2014-15 to 2019-20 and Base year for 2020-21 is 2016 for CPI-IW.

Source : Oil Companies, CEA, Ministry of Power, Ministry of Coal, MoSPI, RBI and Labour Bureau, Govt. of India.

I. 9 : Trends in Indian Petroleum Industry at a Glance

Item	Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Production								
(i) Crude Oil	MMT	37.46	36.94	36.01	35.68	34.20	32.17	30.49
(ii) Natural Gas	BCM	33.66	32.25	31.90	32.65	32.87	31.18	28.67
(iii) Petroleum Products	MMT	221.14	231.92	243.55	254.40	262.36	262.94	233.51
2. Consumption								
(i) Crude Oil (in terms of refinery crude processed)	MMT	223.24	232.86	245.36	251.93	257.20	254.39	221.77
(ii) Natural Gas (including LNG)	BCM	51.30	52.52	55.70	59.17	60.80	64.14	60.64
(iii) Petroleum Products	MMT	165.52	184.67	194.60	206.17	213.22	214.13	194.30
3. Reserves (Balance Recoverable) as on 31st March								
(i) Crude Oil	MMT	635.59	621.28	604.10	594.49	618.94	603.36	587.33
(ii) Natural Gas	BCM	1251.99	1227.50	1289.70	1339.57	1380.64	1371.90	1372.64
4. Imports & Exports								
(i) Gross Imports :								
(a) Qty : Crude Oil	MMT	189.43	202.85	213.93	220.43	226.50	226.95	196.46
LNG	MMT	14.04	16.14	18.75	20.71	21.69	25.57	24.80
Pol. Products	MMT	21.30	29.46	36.29	35.46	33.35	43.79	43.25
Total (a)	**MMT**	**224.78**	**248.45**	**268.97**	**276.60**	**281.54**	**296.32**	**264.51**
(b) Value : Crude Oil	₹ Billion	6874.16	4165.79	4701.59	5664.50	7831.83	7170.01	4597.79
LNG	₹ Billion	583.59	450.39	410.84	521.22	718.67	673.83	548.50
Pol. Products	₹ Billion	746.44	653.61	715.66	883.74	1136.65	1257.42	1094.30
Total (b)	**₹ Billion**	**8204.19**	**5269.79**	**5828.09**	**7069.46**	**9687.16**	**9101.25**	**6240.58**
(ii) Exports :								
(a) Qty : Pol. Products	MMT	63.93	60.54	65.51	66.83	61.10	65.69	56.77
(b) Value : Pol. Products	₹ Billion	2885.80	1767.80	1948.93	2253.88	2676.97	2540.18	1571.68
(iii) Net Imports :								
(a) Qty : Crude Oil	MMT	189.43	202.85	213.93	220.43	226.50	226.95	196.46
LNG	MMT	14.04	16.14	18.75	20.71	21.69	25.57	24.80
Pol. Products	MMT	-42.63	-31.08	-29.23	-31.37	-27.75	-21.90	-13.52
Total (a)	**MMT**	**160.85**	**187.91**	**203.46**	**209.77**	**220.44**	**230.63**	**207.74**
(b) Value : Crude Oil	₹ Billion	6874.16	4165.79	4701.59	5664.50	7831.83	7170.01	4597.79
LNG	₹ Billion	583.59	450.39	410.84	521.22	718.67	673.83	548.50
Pol. Products	₹ Billion	-2139.36	-1114.19	-1233.27	-1370.14	-1540.31	-1282.76	-477.38
Total (b)	**₹ Billion**	**5318.39**	**3501.99**	**3879.16**	**4815.58**	**7010.19**	**6561.08**	**4668.91**
(iv) Unit Value of Crude oil imports(gross)								
	₹./MT	36287.73	20536.25	21977.04	25697.18	34577.97	31592.26	23403.06
(v) India's Total Imports	₹ Billion	27370.87	24903.06	25776.75	30010.33	35946.75	33609.54	29099.37
(vi) India's Total Exports	₹ Billion	18964.45	17163.84	18494.34	19565.15	23077.26	22198.54	21543.39
(vii) Petroleum Imports as % of India's total Imports	%	29.97	21.16	22.61	23.56	26.95	27.08	21.45
(viii) Petroleum Exports as % of India's total Exports	**%**	**15.22**	**10.30**	**10.54**	**11.52**	**11.60**	**11.44**	**7.30**
5. Contribution of Oil Sector to Centre/State Resources								
(i) Royalty from crude oil	₹ Crore	16320	11351	12317	14733	16969	14794	10919
(ii) Royalty from gas	₹ Crore	1929	2472	1865	1726	2394	2593	1699
(iii) Oil Development Cess	₹ Crore	14491	17928	15397	16581	18959	14789	10676
(iv) Excise & Custom duties	₹ Crore	94239	173675	237675	222020	163162	251556	417994
(v) Sales Tax	₹ Crore	137157	142807	166414	185850	201265	200493	202937
(vi) Dividend	₹ Crore	14675	16519	30633	32429	29562	21150	42261
(vii) GST	₹ Crore	-	-	-	4974	7961	7345	6121

P : Provisional

Source : Oil & Gas Comapanies, PPAC, RBI, CBIC and Economic Survey

CHAPTER-II

Exploration & Production-Crude Oil & Natural Gas

CHAPTER HIGHLIGHTS

With a view to explore oil and gas finds, over 4.91 lakh geological surveys have been conducted in India and 562 wells (of which 79.2% are development wells and 20.8% exploratory wells) with 12.03 lakh metreage area drilled by Oil & Gas Companies during 2020-21.

Balance recoverable reserves of crude oil as on 01.04.2021 is 587.3 MMT, out of which 261.9 MMT (44.5%) is sourced from offshore. ONGC (nomination) contributing with the largest share of 71.1% in reserves of crude oil followed by Production Sharing Contract (PSC) / Revenue Sharing Contract (RSC) regime (16.5%) and OIL (nomination) (12.4%).

The crude oil production during the year 2020-21 is 30.49 Million Metric Tonnes (MMT) against production of 32.17 MMT in 2019-20, showing a decline of 5.2%. Maximum production of crude oil occurred in western offshore of ONGC around 46.7% during 2020-21.

Out of total crude oil & condensate production of 30.49 MMT in 2020-21, 66.2% (20.18 MMT) is from ONGC (nomination), 9.6% (2.94 MMT) from OIL (nomination) and 24.2% (7.37 MMT) from PSC/RSC regime.

Balance recoverable reserves of natural gas as on 01.04.2021 were 1372.64 BCM, out of which 882.7 BCM (64.3%) is sourced from offshore. PSC/RSC/CBM regime contributing with the largest share of 49.9% in natural gas reserves followed by ONGC (nomination) and OIL (nomination) at 40.5% and 9.6% respectively.

Natural Gas production during the year 2020-21 is 28.67 Billion Cubic Meters (BCM), which is 8.1% lower than production of 31.18 BCM in 2019-20. Maximum production of natural gas occurred in western offshore of ONGC around 58.1% during 2020-21.

Out of total natural gas production of 28.67 BCM in 2020-21, 76.3% (21.87 BCM) is from ONGC (nomination), 8.6% (2.48 BCM) from OIL (nomination) and 15.1% (4.32 BCM) from PSC/RSC/CBM regime.

Total consumption of natural gas in 2020-21 stands at 60.65 BCM which is 5.5% lower than the consumption during the 2019-20 (64.14 BCM). The Sectorial sale of Gas was 56.12 BCM during 2020-21 which was 0.7% lower than the 2019-20 (56.49 BCM). Consumption of Natural gas for energy purpose as fuel stand at 61.7% against 38.3% for non-energy purpose as feedstock.

In 2020-21, highest consumption of natural gas was in fertilizer industry at 31.7% followed by power sector 19.3%, City & Local Natural Gas Distribution Network (including Road Transport) at 16.4% and refinery 14.1%.

Oil and Gas production from assets abroad is 21.95 MMToE during 2020-21, which is additionally 37.1% of domestic oil and gas production (59.17 MMToE).

II. 1 : Area-wise Development of Deep Drilling Rigs, Wells & Metreage Drilled

	Onshore			Offshore			Total		
	Rigs	Wells	Metreage	Rigs	Wells	Metreage	Rigs	Wells	Metreage
	(Numbers)		('000')	(Numbers)		('000')	(Numbers)		('000')
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(A) Oil & Natural Gas Corporation Ltd. (Nomination)[1]									
2014-15	69	259	495	36	84	215	105	343	710
2015-16	71	271	556	34	54	134	105	325	689
2016-17	69	319	636	36	117	316	105	436	951
2017-18	70	331	659	37	108	283	107	439	942
2018-19	70	356	696	31	116	310	101	472	1006
2019-20	73	344	737	34	106	249	107	450	987
2020-21 (P)	**68**	**313**	**630**	**36**	**131**	**275**	**104**	**444**	**905**
(B) Oil India Limited (Nomination)									
2014-15	17	36	131	-	-	-	17	36	131
2015-16	20	44	143	-	-	-	20	44	143
2016-17	19	56	169	-	-	-	19	56	169
2017-18	19	39	135	-	-	-	19	39	135
2018-19	17	33	112	-	-	-	17	33	112
2019-20	19	36	118	-	-	-	19	36	118
2020-21 (P)	**19**	**36**	**91**	**0**	**0**	**0**	**19**	**36**	**91**
(C) PSC/RSC & CBM Regime									
2014-15	36	201	370	20	34	109	56	235	478
2015-16	27	110	209	12	27	78	39	137	286
2016-17	23	39	100	9	9	25	32	48	125
2017-18	23	53	120	10	14	31	33	67	152
2018-19	44	151	295	18	33	95	62	184	390
2019-20	26	131	260	11	30	77	37	161	337
2020-21 (P)	**18**	**66**	**154**	**8**	**16**	**53**	**26**	**82**	**206**
Total (A+B+C)									
2014-15	122	496	995	56	118	324	178	614	1319
2015-16	118	425	907	46	81	211	164	506	1118
2016-17	111	414	904	45	126	341	156	540	1246
2017-18	112	423	915	47	122	314	159	545	1228
2018-19	131	540	1103	49	149	404	180	689	1507
2019-20	118	511	1115	45	136	326	163	647	1442
2020-21 (P)	**105**	**415**	**875**	**44**	**147**	**328**	**149**	**562**	**1203**

Note : Total may not tally due to rounding off

P : Provisional

1. Nomination wells includes Exploratory, Development &Side tracked wells. CBM wells not included

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd & DGH

Figure II. 1 : Share of wells drilled during 2020-21 (%)

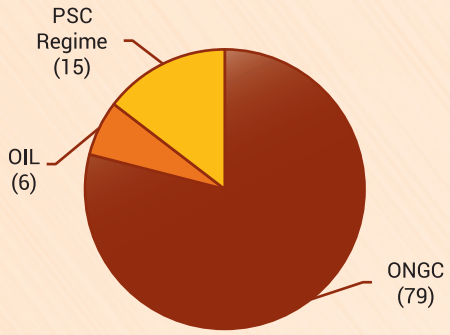
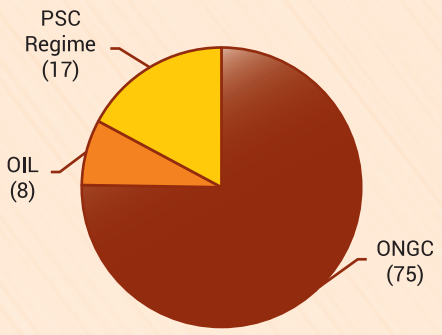


Figure II. 2 : Share in metreage drilled during 2020-21(%)



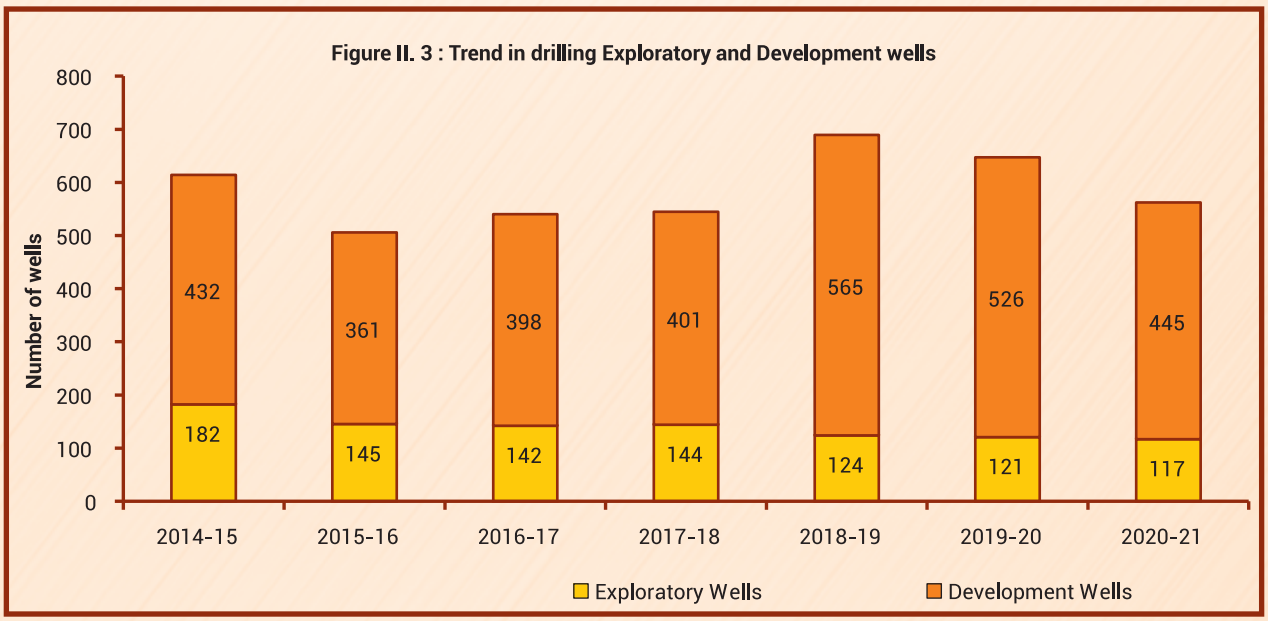
II. 2 : Exploratory & Development Drilling by Oil Companies

Year	Exploratory		Development		Total	
	Wells (Nos.)	Metreage ('000')	Wells (Nos.)	Metreage ('000')	Wells (Nos.)	Metreage ('000')
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(A) Onshore						
2014-15	130	344	366	652	496	995
2015-16	105	320	320	587	425	907
2016-17	102	277	312	628	414	904
2017-18	85	266	338	649	423	915
2018-19	89	229	451	874	540	1103
2019-20	84	270	427	845	511	1115
2020-21 (P)	**78**	**226**	**337**	**649**	**415**	**875**
(B) Offshore						
2014-15	52	158	66	166	118	324
2015-16	40	105	41	106	81	211
2016-17	40	119	86	222	126	341
2017-18	59	149	63	165	122	314
2018-19	35	104	114	300	149	404
2019-20	37	102	99	224	136	327
2020-21 (P)	**39**	**111**	**108**	**217**	**147**	**328**
Total (A+B)						
2014-15	182	502	432	817	614	1319
2015-16	145	425	361	693	506	1118
2016-17	142	396	398	850	540	1246
2017-18	144	414	401	814	545	1228
2018-19	124	333	565	1174	689	1507
2019-20	121	373	526	1069	647	1442
2020-21 (P)	**117**	**337**	**445**	**866**	**562**	**1203**

Note : P : Provisional

1. Includes Water Disposal Wells and Non-Associated Gas Wells
2. Total may not tally due to rounding off
3. ONGC's Nomination wells includes Exploratory, Development &Side tracked wells. CBM wells not included. One well drilled in Pre-NELP Acreage with Metreage of 3.003 TMT from ONGC in 2018-19.

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd & DGH



II. 3 : Status of Wells (as on 01.04.2021)

Status	Offshore	Gujarat	Rajasthan	Assam & Arunachal Pradesh	Tripura	Andhra Pradesh	Tamilnadu	West Bangal (CBM)	Jharkhand (CBM)	Madhya Pradesh (CBM)	Other state (UP, HP, MP, Bihar, Punjab, JK, WB)	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
ONGC (Nomination)	1273	3316	0	424	0	45	97	0	0	0	0	5155
Oil (Nomination)	0	0	8	344	0	0	0	0	0	0	0	352
PSC/RSC & CBM Regime	34	135	375	31	0	4	6	0	0	0	1	586
Total-Flowing Oil Wells	**1307**	**3451**	**383**	**799**	**0**	**49**	**103**	**0**	**0**	**0**	**0**	**6092**
ONGC (Nomination)	174	87	0	12	89	90	85	0	0	0	0	537
Oil (Nomination)	0	0	17	86	0	0	0	0	0	0	0	103
PSC/RSC & CBM Regime	15	9	59	6	0	0	0	362	13	294	0	758
Total - Flowing Gas Wells	**189**	**96**	**76**	**104**	**89**	**90**	**85**	**362**	**13**	**294**	**0**	**1398**
Total Flowing Wells (a)	**1496**	**3547**	**459**	**903**	**89**	**139**	**188**	**362**	**13**	**294**	**0**	**7490**
ONGC (Nomination)	204	914	29	277	49	88	62					1623
Oil (Nomination)	0	0	20	319	0	0	0	0	0	0	0	339
PSC/RSC & CBM Regime	21	86	96	35	0	0	7	117	9	10		381
Total Non Flowing (b)	**225**	**1000**	**145**	**631**	**49**	**88**	**69**	**117**	**9**	**10**	**0**	**2343**
Total flowing + Non flowing well (a+b)	**1721**	**4547**	**604**	**1534**	**138**	**227**	**257**	**479**	**22**	**304**	**0**	**9833**
ONGC (Nomination)	407	3967	51	1178	147	492	417					6659
Oil (Nomination)	0	0	30	890	0	0	0	0	0	0	0	920
PSC/RSC & CBM Regime	45	90	320	4	0	0	0	18	0	33	0	510
Other Flowing & Non flowing (c)	**452**	**4057**	**401**	**2072**	**147**	**502**	**417**	**18**	**0**	**33**	**0**	**8099**
ONGC (Nomination)	2058	8284	80	1891	285	715	661	0	0	0	0	13974
Oil (Nomination)	0	0	75	1639	0	0	0	0	0	0	0	1714
PSC/RSC & CBM Regime	115	320	850	76	0	4	13	497	22	337	1	2235
Total (a+b+c)	**2173**	**8604**	**1005**	**3606**	**285**	**729**	**674**	**497**	**22**	**337**	**1**	**17933**

Note : Others includes Injector well, abandoned, to be abandoned etc.

1. ONGC Offshore wells tabulated above are nomination regime only.

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd & DGH

II. 4 : State-wise Geological Surveys Achievements upto 31.03.2021

(in Numbers)

States	ONGC	OIL	Survey under NSP LKM	Total Geological Surveys
(1)	(2)	(3)	(4)	(5)
Andhra Pradesh	53427	-	2172	55599
A.N. Islands	6860	-	211	7071
Arunachal Pradesh	3692	-	186	3878
Assam	48073	-	3520	51593
Bihar (incl. Jharkhand)	4035	-	766	4801
Gujarat (Gulf Of Cambay)	60625	-	5540	66165
Haryana	-	-	250	250
Himachal Pradesh	9948	-	691	10639
Jammu & Kashmir	31970	-	188	32158
Kerala-Karnataka (incl. Goa)	4000	-	2058	6058
Madhya Pradesh	117920	-	6115	124035
Chhattisgarh	5920	-	2223	8143
Manipur	2781	-	5	2786
Meghalaya	1911	-	13	1924
Mizoram	6194	-	980	7174
Nagaland	6971	-	-	6971
Odisha	-	-	2481	2481
Punjab	-	-	802	802
Rajasthan	46501	-	3313	49814
Sikkim	720	-	-	720
Tamil Nadu (Incl. Puducherry)	20003	-	-	20003
Telangana	-	-	800	800
Tripura	21263	-	163	21426
Uttar Pradesh (incl. Uttarakhand)	29797	-	2920	32717
West Bengal	8808	-	911	9719
Maharashtra	-	-	9696	9696
Eastern offshore	-	-	-	0
Western offshore	-	-	-	0
Total	**491419**	**0**	**46004**	**491419**

NSP : National Seismic Programme LKM : Line Kilometre

Source : Oil and Natural Gas Corporation Limited Oil India Limited, DGH

II. 5 : State-wise Achievements of Geophysical Field Parties in India since inception upto 31.03.2021

Area/ State	ONGC (Nomination)		OIL (Nomination)		PSC + RSC/CBM (Including DSF) Regime		Grand Total	
	2D (LKM)	3D (SKM)	2D (LKM)	3D (SKM)	2D (LKM)	3D (SKM)	2D (LKM)	3D (SKM)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(A) Onshore								
Andhra Pradesh	39166	10392	0	0	0	0	39166	10392
Arunachal Pradesh			2641	331	200	0	2841	331
Assam[1]	31721	5091	9003	7695	537	136	41261	12922
Bihar[2]	6566	0	0	0	0	0	6566	0
Chhattisgarh	202	0	0	0	0	0	202	0
Gujarat	104712	11329	0	0	702	471	105414	11800
Himachal Pradesh	3959	0	0	0	0	0	3959	0
Haryana	1038	0	0	0	0	0	1038	0
Jammu & Kashmir	2563	0	0	0	0	0	2563	0
Madhya Pradesh	10021	1189	0	0	430	194	10451	1383
Maharashtra			0	0	0	0	0	0
Manipur			0	0	0	0	0	0
Meghalaya	205	0	0	0	0	0	205	0
Mizoram	35	0	0	0	0	0	35	0
Nagaland	602	6	0	0	0	0	602	6
Odisha	313	0	1822		580	145	2715	145
Punjab	4078	0			0	0	4078	0
Rajasthan	20571	1633	11571	729	4379	244	36520	2606
Tamil Nadu	41031	8269	0	0	0	0	41031	8269
Telangana			0	0	0	0	0	0
Tripura	6327	1209	0	0	72	48	6400	1257
Uttar Pradesh	26798	0	0	0	0	0	26798	0
Uttarakhand	1522	0	0	0	0	0	1522	0
West Bengal	29227	596	0	0	0	100	29227	696
Total(A)	**330656**	**39715**	**25036**	**8755**	**6900**	**1338**	**362592**	**49808**
(B) Offshore								
Andaman	0	0	0	0	8501	0	8501	0
Saurashtra	0	0	0	0	0	3	0	3
Eastern offshore	117515	8100	2863	0	288	367	120665	8467
Western offshore	434940	84378	0	0	0	4451	434940	88829
Total(B)	**552454**	**92478**	**2863**	**0**	**8788**	**4821**	**564105**	**97299**
Total	**883110**	**132193**	**27899**	**8755**	**15688**	**6159**	**926698**	**147107**

Note : Total may not tally due to round off. LKM : Line Kilometre SKM : Square Kilometre

1. Excludes 387.81 LKM in Pre-NELP acreage (Assam) in ONGC's 2D LKM.
2. Geophysical fields of Pvt./JVs in State of Bihar include Jharkhand
3. Figures not strictly comparable with earlier issues of publication prior to 2015-16 due to change in nomenclature, rationalisation and classification of reporting.

Source : Oil & Natural Gas Corporation Ltd.,Oil India Ltd. and DGH

II. 6 : Basin-wise / State-wise Achievements of Drilling since inception upto 31.03.2021

Basin	State / Region	Wells	Metreage
		Numbers	('000')
(1)	(2)	(3)	(4)
(A) Onshore		**14317**	**32332**
Cambay	Gujarat	8559	14626
Kutch	Gujarat	0	3662
Rajasthan	Rajasthan	223	466
Vindhyan	Rajasthan	0	0
	Madhya Pradesh	0	0
Total WRBC		**8782**	**15092**
	Nagaland	37	131
Upper Assam	Assam	3559	11668
	Meghalaya	3	6
Mahanadi	Odisha	5	11
Fold Belt	Mizoram under ERBC	8	27
	Arunachal Pradesh	62	160
Assam-Arakan	Tripura	284	819
Total ERBC		**3958**	**12821**
Foot hills & Ganga Valley	West Bengal	58	164
Ganga Valley	Bihar	6	30
CBM	Jharkhand		
CBM	West Bengal	0	0
Satpura-South Rewa-Damodar	Madhya Pradesh	0	0
Total CRBC		**84**	**215**
Himalayan Foot-hills,	Himachal Pradesh	15	54
Ganga Valley &	Punjab	4	16
Vindhyan/Gondwana/Ganga	Uttar Pradesh	8	30
	Madhya Pradesh	20	58
	Jammu & Kashmir	4	12
Total NRBC		**51**	**170**
Krishna-Godavari	Andhra Pradesh	701	2118
Pranhita-Godavari	Andhra Pradesh	10	37
Cauvery	Tamil Nadu	731	1879
Total SRBC		**1442**	**4033**
(B) Offshore		**3431**	**8703**
East Coast (SW+DW)	East Coast including KG, Cauvery	313	1025
West Coast (SW+DW)	West Coast including drilling in	3100	7617
	Orissa, Andaman & Saurashtra	18	61
	Others	0	0
Total (A+B)		**17748**	**41035**

Note : All figures are provisional

WRBC : Western Region Basin Coast, CRBC : Central Region Basin Coast, SRBC : Southern Region Basin Coast, NRBC : Northern Region Basin Coast, ERBC : Eastern Region Basin Coast

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH

II. 7 : State-wise/Basin -wise Oil Fields in India (as on 31.03.2021)

(in Number)

Company / State	Basin	Oil Fields	Gas Fields	Oil and Gas Fields	Total Fields
(1)	(2)	(3)	(4)	(5)	(6)
A. Oil & Natural Gas Corporation Ltd. (Nomination)		**121**	**74**	**25**	**220**
Gujarat	Cambay	72	5		77
Assam	Upper Assam	26			26
Assam	A&AA	2	2		4
Rajasthan	Jodhpur		4		4
Andhra Pradesh	K.G. Basin	7	37		44
Tamil Nadu	Cauvery	14	11		25
Tripura	AAFB		9		9
Nagaland	A&AA				0
Madhya Pradesh	Vindhyan Basin				0
Total Onshore		121	68	0	189
East Coast	Cauvery Offshore				0
East Coast	KG Offshore(Shallow)				0
East Coast	KG Offshore(Deep)		3	3	6
West Coast	Cambay				0
West Coast	Mumbai Offshore		3	21	24
West Coast	Kutch			1	1
Total Offshore		**0**	**6**	**25**	**31**
B. Oil India Ltd. (Nomination)		**0**	**0**	**19**	**19**
Assam	Upper Assam	0	0	14	14
Arunachal Pradesh	Upper Assam	0	0	1	1
Rajasthan	Jaisalmer	0	0	3	3
	Bikaner Nagur	0	0	1	1
C. PSC + RSC/CBM		**54**	**19**	**4**	**77**
Andhra Pradesh	Krishna Godavari	1			1
Arunachal Pradesh	Assam-Arakan	1			1
Assam	Assam-Arakan		2		2
Tripura	Assam-Arakan	0	0		0
Gujarat	Cambay	35	3		38
Madhya Pradesh*	Sohagpur		2		2
Jharkhand*	Jharia		1		1
Jharkhand*	Bokaro		1		1
Rajasthan	Rajasthan	12	2		14
Tamil Nadu	Cauvery	1	0	1	2
West Bengal	Bengal	1			1
West Bengal*	Ranigunj		2		2
Total Onshore+CBM		**51**	**13**	**1**	**65**
East Coast	Cauvery	1	1	0	2
East Coast	Krishna Godavari	2	4	1	7
West Coast	Mumbai	0	0		0
West Coast	Cambay	0	1	2	3
Total Offshore		3	6	3	12
Grand Total (A+B+C)		**175**	**93**	**48**	**316**

A&AA : Assam & Assam Arakan. *: CBM Fields

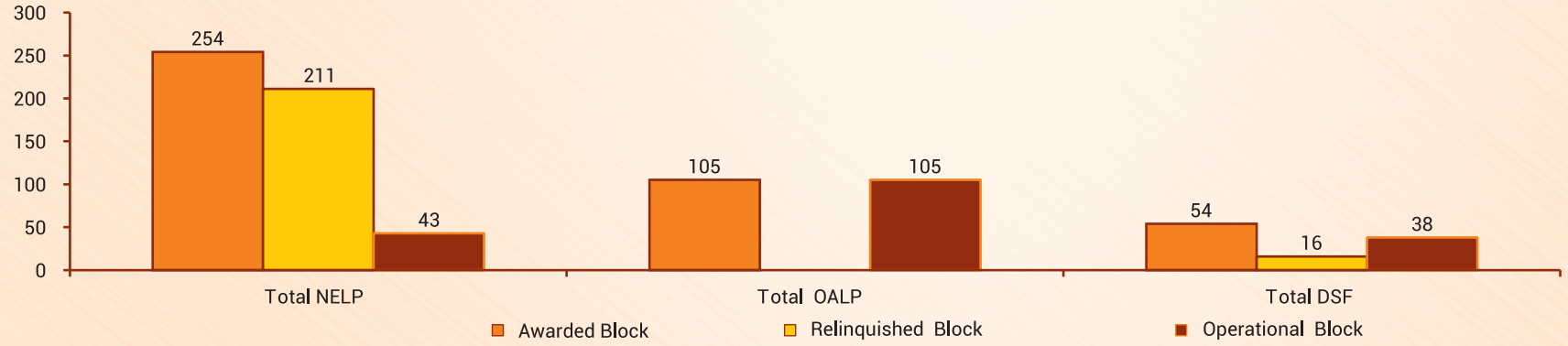
Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH

III. 8 : Exploration Contracts Awarded in Rounds Under NELP, DSF and OALP

Round	RSC/PSC Signed for Blocks					Relinquished Block				Operational Block				
	Offered Block/ Contract Area	Ultra Deep/ Deep Water	Shallow Water	Onland	Total	Ultra Deep/ Deep Water	Shallow Water	Onland	Total	Ultra Deep/ Deep Water	Shallow Water	Onland	Total	Area Awarded (Sq. Km)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
NELP-I	48	7	16	1	24	5	15	1	21	2	1		3	231527
NELP-II	25	8	8	7	23	8	8	6	22			1	1	267883
NELP-III	27	9	6	8	23	9	5	5	19		1	3	4	204596
NELP-IV	24	10	0	10	20	10		7	17			3	3	192810
NELP-V	20	6	2	12	20	6	1	9	16		1	3	4	115180
NELP-VI	55	21	6	25	52	21	4	19	44		2	6	8	306426
NELP-VII	57	11	7	23	41	11	4	18	33		3	5	8	112950
NELP-VIII	70	8	11	13	32	8	9	12	29		2	1	3	52573
NELP-IX	34	1	3	15	19	1	2	7	10		1	8	9	26431
Total NELP	**360**	**81**	**59**	**114**	**254**	**79**	**48**	**84**	**211**	**2**	**11**	**30**	**43**	**1510376**
OALP-I	55	1	8	46	55	0	0	0	0	1	8	46	55	59283
OALP-II	14	1	5	8	14	0	0	0	0	1	5	8	14	29233
OALP-III	23	1	3	14	18	0	0	0	0	1	3	14	18	29765
OALP-IV	7	0	0	7	7	0	0	0	0	0	0	7	7	18510
OALP-V	11	1	2	8	11	0	0	0	0	1	2	8	11	19789
Total OALP	110	4	18	83	105	0	0	0	0	4	18	83	105	156580
DSF-I	46	0	7	23	30	0	4	7	11	0	3	16	19	777
DSF-II	25	0	9	15	24	0	1	4	5	0	8	11	19	3000
Total DSF	**71**	**0**	**16**	**38**	**54**	**0**	**5**	**11**	**16**	**0**	**11**	**27**	**38**	**3777**

Source : DGH

Figures II. 4 : Status of Exploration Contracts Awarded in Rounds Under NELP, DSF and OALP



II. 9 : State-wise/Area-wise Balance Recoverable Reserves of Crude Oil

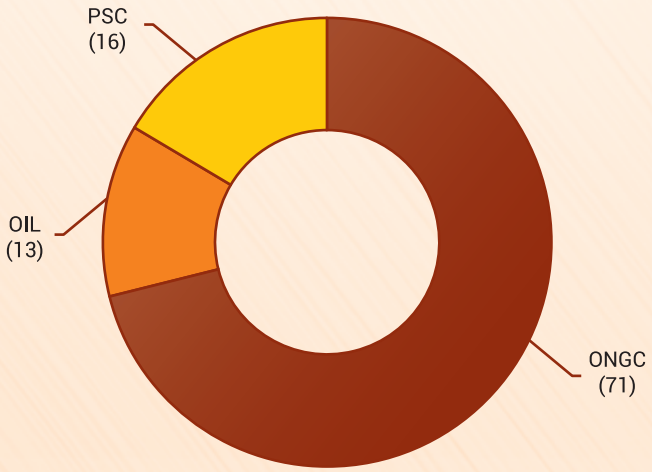
State/Region	2016	2017	2018	2019	2020	2021 (P)	% of Total (2020)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. State-wise Reserves of Crude Oil (MMT)							
Andhra Pradesh	10.90	8.15	7.94	8.05	7.85	7.33	1.2
Arunachal Pradesh	1.73	1.52	1.74	2.67	3.12	3.64	0.6
Assam	160.78	159.95	160.34	158.62	155.45	153.05	26.1
Gujarat	121.16	118.61	118.20	119.63	118.60	115.41	19.6
Nagaland	2.38	2.38	2.38	2.38	2.38	2.38	0.4
Rajasthan	31.72	24.55	17.99	40.71	34.78	34.77	5.9
Tamil Nadu	8.99	9.00	9.16	9.21	9.03	9.08	1.5
Tripura	0.07	0.07	0.07	0.07	0.07	0.07	0.0
Eastern Offshore	36.39	40.67	40.42	42.34	42.05	42.34	7.2
Western Offshore	247.13	239.20	236.25	235.27	230.04	219.27	37.3
Total Reserves of Crude Oil	**621.28**	**604.10**	**594.49**	**618.94**	**603.36**	**587.33**	**100.0**
Initial-In Place	**6669.43**	**6754.00**	**6895.30**	**7021.54**	**6972.25**	**6996.25**	**-**
Ultimate	**1876.80**	**1894.73**	**1919.77**	**1977.86**	**1959.97**	**2005.89**	**-**

Note : Figures as on 1st April of particular year P : Provisional

1. Proved and indicated Balance Recoverable Reserves including ONGC's Contingent Resources(2C) since 2019
2. Western offshore includes Gujarat offshore
3. Total may not tally due to rounding off

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH

Figures II. 5 : Entity-wise (%) Share in Reserves in Crude Oil



II. 10 : State-wise/Area-wise Balance Recoverable Reserves of Natural Gas

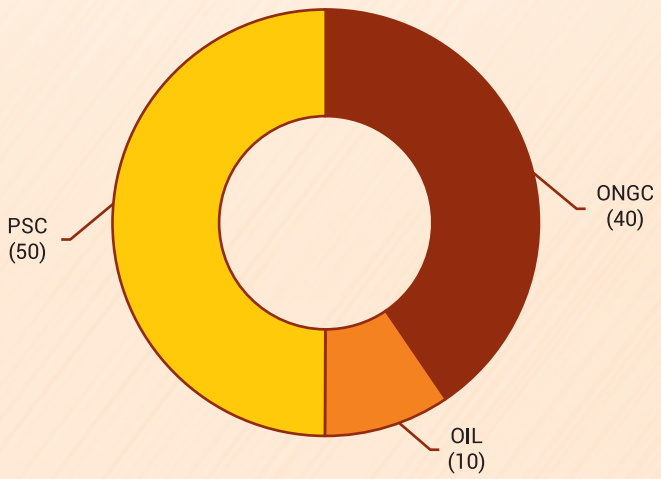
State/Region	2016	2017	2018	2019	2020	2021 (P)	% of Total (2020)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2. State-wise Reserves of Natural Gas (BCM)							
Andhra Pradesh	42.03	48.31	59.89	63.57	63.85	65.50	4.8
Arunachal Pradesh	0.95	0.72	1.26	1.64	2.72	3.14	0.2
Assam	153.76	158.57	161.65	170.71	166.60	166.63	12.1
Gujarat	63.06	62.28	58.23	59.44	57.13	56.79	4.1
Jharkhand (CBM)	28.23	8.11	8.11	8.10	8.42	8.56	0.6
Madhya Pradesh (CBM)	32.12	32.11	31.91	31.55	31.21	30.88	2.2
Nagaland	0.09	0.09	0.09	0.09	0.09	0.09	0.0
Rajasthan	35.66	34.86	54.85	63.03	61.80	59.06	4.3
Tamil Nadu	31.68	31.98	39.11	38.00	37.09	37.89	2.8
Tripura	28.28	36.10	35.20	23.24	29.45	29.18	2.1
West Bengal						0.02	0.0
West Bengal (CBM)	66.24	66.45	65.92	32.91	32.61	32.17	2.3
Eastern Offshore	451.46	507.76	510.83	565.15	556.33	557.07	40.6
Western Offshore	293.96	302.35	312.52	323.19	324.60	325.65	23.7
Total Natural Gas Reserves	**1227.50**	**1289.70**	**1339.57**	**1380.64**	**1371.90**	**1372.64**	**100.0**
Initial-In Place	**3812.70**	**3980.57**	**4113.50**	**4272.24**	**4180.35**	**4213.60**	
Ultimate	**2153.22**	**2230.56**	**2312.77**	**2386.48**	**2333.12**	**2398.64**	

Note : Figures as on 1st April of particular year P : Provisional

1. Proved and indicated Balance Recoverable Reserves including ONGC's Contingent Resources(2C) since 2019
2. Western offshore includes Gujarat offshore
3. Total may not tally due to rounding off

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH

Figures II. 6 : Entity-wise (%) Share in Reserves of Natural Gas



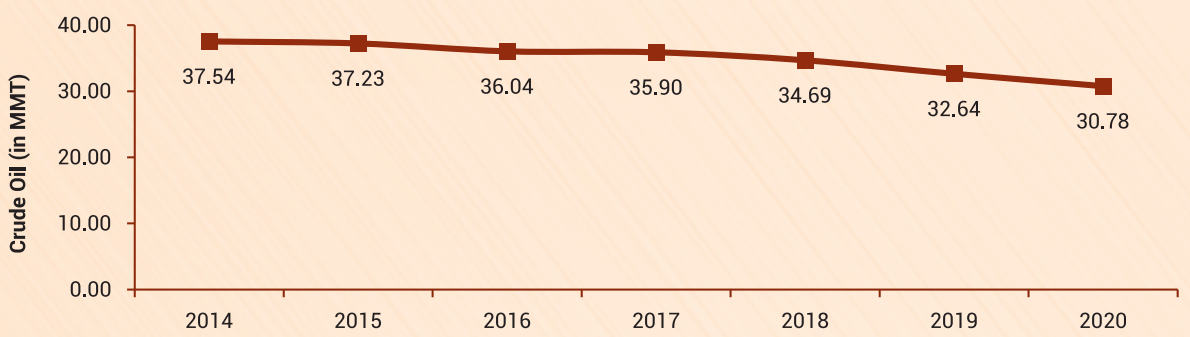
II. 11 : Production of Crude Oil & Condensate (Calendar Year-wise)

State/Region	2014	2015	2016	2017	2018	2019	2020	% variation in 2020 over 2019
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. State-wise Crude Oil Production (TMT)								
Andhra Pradesh	258	295	273	322	299	252	206	-18.0
Arunachal Pradesh	84	57	58	52	43	52	55	5.1
Assam	4492	4239	4153	4341	4353	4113	3951	-4.0
Gujarat	4751	4444	4590	4597	4622	4676	4668	-0.2
Rajasthan	9059	8674	8288	7876	7832	7024	5859	-16.6
Tamil Nadu	237	255	269	341	375	415	413	-0.6
Offshore	18662	19271	18412	18369	17163	16111	15625	-3.0
Total	**37541**	**37235**	**36042**	**35898**	**34687**	**32642**	**30777**	**-5.7**
of which								
Crude Oil Production	35887	35751	34592	34302	32969	30959	29329	-5.3
Condensate Production	1654	1485	1450	1596	1718	1683	1448	-14.0
2. Entity-wise Crude Oil Production (TMT)								
Onshore	**18879**	**17964**	**17630**	**17529**	**17524**	**16531**	**15152**	**-8.3**
of which								
ONGC-Nomination	6243	5804	5913	6016	6053	6064	5990	-1.2
OIL-Nomination	3359	3284	3206	3376	3344	3131	2979	-4.9
Pvt/JVs-PSC + RSC/CBM	9277	8876	8512	8137	8127	7336	6183	-15.7
Offshore	**18662**	**19271**	**18412**	**18369**	**17163**	**16111**	**15625**	**-3.0**
of which								
ONGC-Nomination	16009	16615	16199	16422	15256	14457	14459	0.0
Pvt/JVs-PSC + RSC/CBM	2653	2656	2212	1947	1907	1653	1166	-29.5
Total Crude Oil Production*	**37540**	**37235**	**36042**	**35898**	**34687**	**32642**	**30777**	**-5.7**
of which								
ONGC-Nomination	**22252**	**22420**	**22112**	**22438**	**21309**	**20521**	**20449**	**-0.4**
OIL-Nomination	**3359**	**3284**	**3206**	**3376**	**3344**	**3131**	**2979**	**-4.9**
Pvt/JVs-PSC + RSC/CBM	**11930**	**11531**	**10724**	**10084**	**10035**	**8989**	**7350**	**-18.2**

Note : Total may not tally due to rounding off P : Provisional *: Included Condensate

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH

Figure II. 7 : Trend in Crude Oil Production



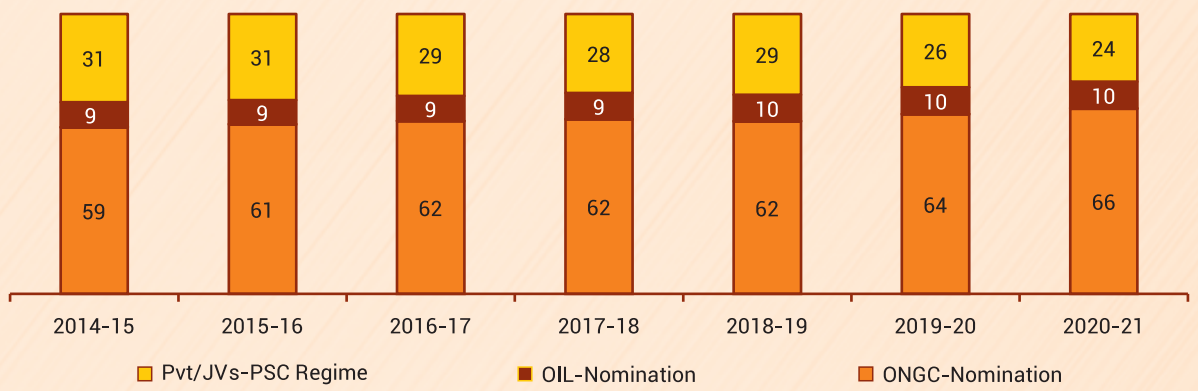
II. 12 : Production of Crude Oil and Condensate (Financial Year-wise)

State/Region	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2021-21 (P)	% variation in 2020-21 over 2019-20
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. State-wise Crude Oil Production (TMT)*								
Andhra Pradesh	254	295	276	322	296	243	195	-19.8
Arunachal Pradesh	76	57	55	50	43	56	53	-3.9
Assam	4466	4185	4203	4345	4309	4093	3902	-4.7
Gujarat	4653	4459	4605	4591	4626	4707	4651	-1.2
Rajasthan	8848	8602	8165	7887	7667	6653	5891	-11.4
Tamil Nadu	240	255	284	345	395	415	410	-1.2
Offshore	18924	19089	18421	18145	16868	16003	15391	-3.8
Total	**37461**	**36942**	**36009**	**35684**	**34203**	**32170**	**30494**	**-5.2**
of which								
Crude Oil Production	35891	35500	34501	34045	32474	30524	29121	-4.6
Condensate Production	1570	1442	1508	1639	1729	1646	1373	-16.6
2. Entity-wise Crude Oil Production (TMT)*								
Onshore	**18537**	**17853**	**17588**	**17540**	**17336**	**16167**	**15103**	**-6.6**
of which								
ONGC-Nomination	6069	5817	5934	6010	6074	6090	5934	-2.6
OIL-Nomination	3412	3226	3258	3376	3293	3107	2937	-5.4
Pvt/JVs-PSC + RSC/CBM	9056	8810	8396	8154	7969	6970	6232	-10.6
Offshore	**18924**	**19089**	**18421**	**18145**	**16868**	**16003**	**15391**	**-3.8**
of which								
ONGC-Nomination	16195	16543	16284	16240	14969	14537	14249	-2.0
Pvt/JVs-PSC + RSC/CBM	2729	2546	2137	1905	1899	1466	1142	-22.1
Total Crude Oil Production*	**37461**	**36942**	**36009**	**35684**	**34203**	**32170**	**30494**	**-5.2**
of which								
ONGC-Nomination	**22264**	**22360**	**22218**	**22249**	**21042**	**20627**	**20183**	**-2.2**
OIL-Nomination	**3412**	**3226**	**3258**	**3376**	**3293**	**3107**	**2937**	**-5.4**
Pvt/JVs-PSC + RSC/CBM	**11785**	**11356**	**10532**	**10059**	**9868**	**8436**	**7374**	**-12.6**

Note : Total may not tally due to rounding off P : Provisional * : Included Condensate

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH

Figure II. 8 : Entity-wise % Share of Crude Oil Production



II. 13 : Basin-wise Production of Crude Oil

(Figures in TMT)

Basin	State	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crude Oil Production by Oil and Natural Gas Corporation							
Western Offshore *	Maharashtra	16268	16231	14950	14517	14236	46.7
Krishna Godavari Offshore (Eastern offshore)	Andhra Pradesh	16	8	18	19	13	0.04
Western Onland	Gujarat	4468	4452	4492	4574	4484	14.7
Assam & Assam Arakan	Assam	953	975	993	987	964	3.2
Krishna Godavari	Andhra Pradesh	276	322	285	202	154	0.5
Cauvery	Tamilnadu	238	262	303	328	331	1.1
ONGC-Nomination		**22218**	**22249**	**21042**	**20627**	**20183**	**66.2**
ONGC-NELP/JVs Share		**3316**	**3186**	**3189**	**2726**	**2350**	**7.7**
Total ONGC's Production		**25534**	**25435**	**24231**	**23353**	**22533**	**73.9**
Crude Oil Production by Oil India Ltd.							
Assam-Arakan	Assam	3250	3367	3282	3075	2905	9.5
Assam-Arakan	Arunachal Pradesh	8	7	9	23	24	0.1
Rajasthan	Rajasthan	0	2	3	8	9	0.0
OIL-Nomination		**3258**	**3376**	**3293**	**3107**	**2937**	**9.6**
OIL-JVs Share		**19**	**17**	**14**	**26**	**27**	**0.1**
Total OIL's Production		**3277**	**3393**	**3307**	**3133**	**2964**	**9.7**
Crude Oil Production by Pvt/JVs-in PSC + RSC/CBM							
Krishna Godavari Offshore (Eastern offshore)	Andhra Pradesh	960.2	814.5	633.7	537.1	730.9	2.4
Cauvery Offshore (Eastern offshore)	Tamilnadu	2.4	4.2	2.2	0.7	0.1	0.0
Cambay (Offshore)	Gujarat Offshore	381.6	399.1	735.6	590.8	410.8	1.3
Mumbai Offshore (Western Offshore)	Western Offshore	792.5	687.2	527.4	337.8	0.0	0.0
KG Onshore	Andhra Pradesh	0.0	0.0	11.2	41.2	40.4	0.1
Assam-Arakan	Arunachal Pradesh	47.6	42.9	34.1	32.2	29.8	0.1
	Assam	0.0	3.1	34.4	30.1	33.3	0.1
Cambay	Gujarat	137.2	139.3	133.5	133.8	166.9	0.5
Rajasthan	Rajasthan	8164.6	7885.3	7663.8	6644.9	5882.4	19.3
Cauvery	Tamilnadu	46.3	83.1	92.1	87.5	79.3	0.3
Bengal	West Bengal	0.0	0.0	0.0	0.0	0.1	0.0
Total Pvt/JVs Production-in PSC + RSC/CBM **		**10532**	**10059**	**9868**	**8436**	**7374**	**24.2**
Total Crude Oil Production		**36009**	**35684**	**34203**	**32170**	**30494**	**100.0**

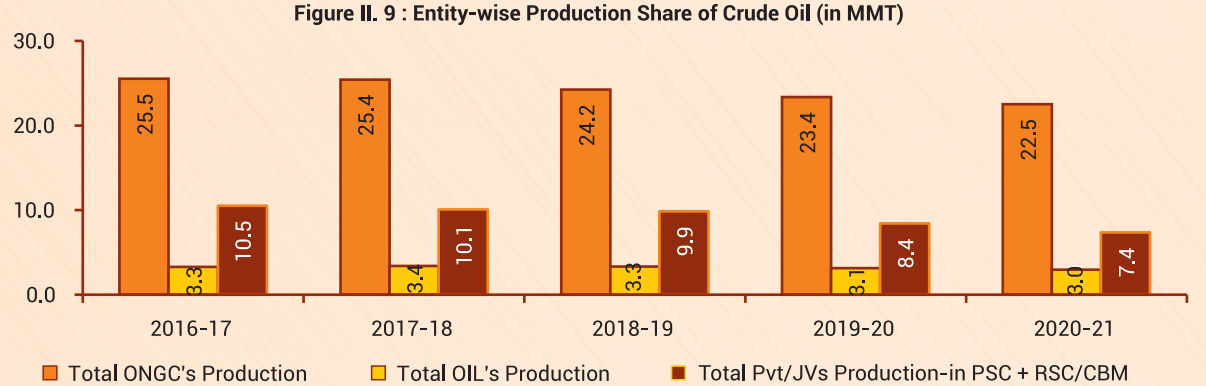
Note : Total may not tally due to rounding off P : Provisional

* Condensate receipt at Uran & Hazira included in Western Offshore Basin of Maharashtra

** : Including NELP/JVs Share of ONGC's & OIL's Production

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH

Figure II. 9 : Entity-wise Production Share of Crude Oil (in MMT)

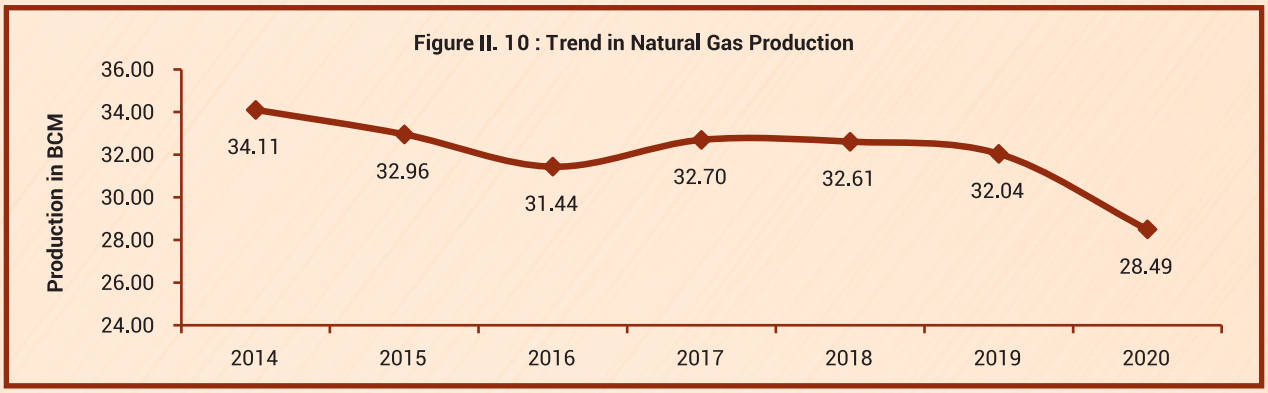


II. 14 : Production of Natural Gas (Calendar Year-wise)

State/Region	2014	2015	2016	2017	2018	2019	2020 (P)	% variation in 202 over 2019
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. State-wise Natural Gas Production (MMSCM)								
Andhra Pradesh	673	593	811	921	1090	950	847	-10.9
Arunachal Pradesh	34	31	27	28	31	37	55	47.7
Assam	2934	2966	3113	3219	3263	3239	2979	-8.0
Gujarat	1538	1481	1529	1669	1424	1356	1184	-12.7
Jharkhand (CBM)	3	2	3	4	3	5	2	-62.8
Madhya Pradesh (CBM)	4	1	5	126	345	344	344	-0.2
Rajasthan	1128	1329	1313	1373	1472	1721	2007	16.6
Tamil Nadu	1255	1046	962	1163	1213	1121	968	-13.7
Tripura	1113	1293	1402	1455	1507	1584	1520	-4.0
West Bengal (CBM)	203	354	516	554	380	312	302	-3.0
Offshore	25222	23862	21757	22186	21883	21373	18286	-14.4
Total Natural Gas Production	**34106**	**32957**	**31437**	**32699**	**32612**	**32043**	**28493**	**-11.1**
2. Entity-wise Natural Gas Production (MMSCM)								
Onshore	**8885**	**9095**	**9681**	**10512**	**10729**	**10670**	**10208**	**-4.3**
of which								
ONGC-Nomination	4942	4732	5039	5616	5635	5372	4810	-10.5
OIL-Nomination	2682	2784	2929	2922	2745	2708	2491	-8.0
Pvt/JVs-in PSC + RSC/CBM	1262	1579	1712	1974	2348	2590	2907	40.2
Offshore	**25222**	**23862**	**21757**	**22186**	**21883**	**21373**	**18286**	**-14.4**
of which								
ONGC-Nomination	17466	16966	16286	17702	18559	18805	17563	-6.6
Pvt/JVs-in PSC + RSC/CBM	7756	6896	5471	4484	3324	2568	723	-71.9
Total Natural Gas Production	**34106**	**32957**	**31437**	**32699**	**32612**	**32043**	**28493**	**-11.1**
of which								
ONGC-Nomination	**22408**	**21698**	**21325**	**23319**	**24195**	**24177**	**22372**	**-7.5**
OIL-Nomination	**2682**	**2784**	**2929**	**2922**	**2745**	**2708**	**2491**	**-8.0**
Pvt/JVs-in PSC + RSC/CBM	**9018**	**8475**	**7183**	**6458**	**5672**	**5158**	**3630**	**-15.6**

Note : Total may not tally due to rounding off CBM : Coal Bed Methane P : Provisional ^ : less than 0.5

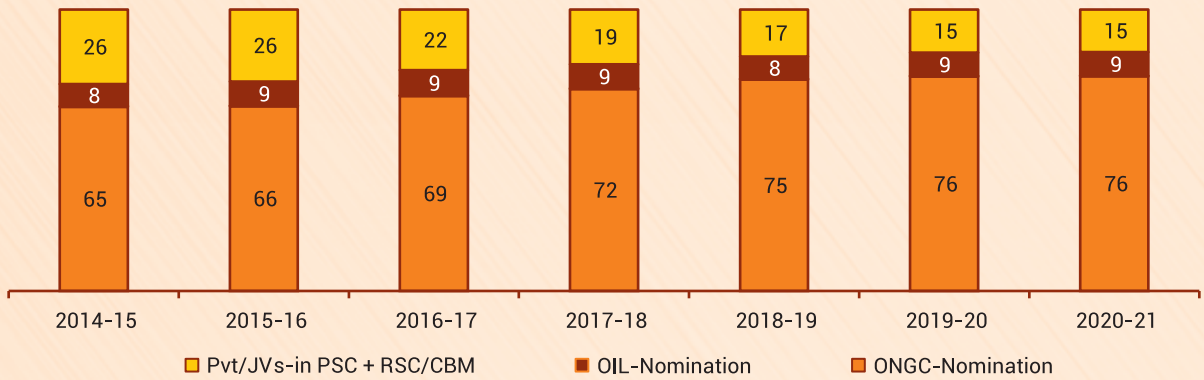
Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH



II. 15 : Production of Natural Gas (Financial Year-wise)

State/Region	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% variation in 2020-21 over 2019-20
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. State-wise Natural Gas Production (MMSCM)								
Andhra Pradesh	541	619	868	959	1081	912	827	-9.3
Arunachal Pradesh	34	30	28	30	28	46	55	21.4
Assam	2958	3025	3128	3219	3289	3141	2995	-4.6
Gujarat	1527	1490	1580	1607	1402	1342	1138	-15.2
Jharkhand (CBM)	2	2	3	4	4	5	2	-64.1
Madhya Pradesh (CBM)	2	1	6	200	357	345	334	-3.2
Rajasthan	1178	1338	1277	1442	1483	1883	2040	8.3
Tamil Nadu	1192	1011	983	1207	1208	1097	911	-16.9
Tripura	1140	1332	1430	1440	1554	1473	1634	10.9
West Bengal (CBM)	224	389	555	531	350	306	307	0.4
Offshore	24861	23012	22038	22011	22117	20635	18429	-10.7
Total Natural Gas Production	**33657**	**32249**	**31897**	**32649**	**32873**	**31184**	**28673**	**-8.1**
2. Entity-wise Natural Gas Production (MMSCM)								
Onshore	**8797**	**9237**	**9858**	**10639**	**10756**	**10549**	**10244**	**-2.9**
of which								
ONGC-Nomination	4752	4770	5205	5638	5633	5170	4786	-7.4
OIL-Nomination	2722	2838	2937	2881	2722	2668	2480	-7.1
Pvt/JVs-in PSC + RSC/CBM	1323	1629	1717	2119	2401	2710	2978	9.9
Offshore	**24861**	**23012**	**22038**	**22011**	**22117**	**20635**	**18429**	**-10.7**
of which								
ONGC-Nomination	17272	16406	16883	17791	19042	18576	17086	-8.0
Pvt/JVs-in PSC + RSC/CBM	7589	6605	5155	4219	3075	2059	1343	-34.8
Total Natural Gas Production	**33657**	**32249**	**31897**	**32649**	**32873**	**31184**	**28673**	**-8.1**
of which								
ONGC-Nomination	**22023**	**21177**	**22088**	**23429**	**24675**	**23746**	**21872**	**-7.9**
OIL-Nomination	**2722**	**2838**	**2937**	**2881**	**2722**	**2668**	**2480**	**-7.1**
Pvt/JVs-in PSC + RSC/CBM	**8912**	**8235**	**6872**	**6338**	**5477**	**4770**	**4321**	**-9.4**

Figure II. 11 : Entity-wise Natural Gas Production Share (%)



II. 16 : Basin-wise Production of Natural Gas

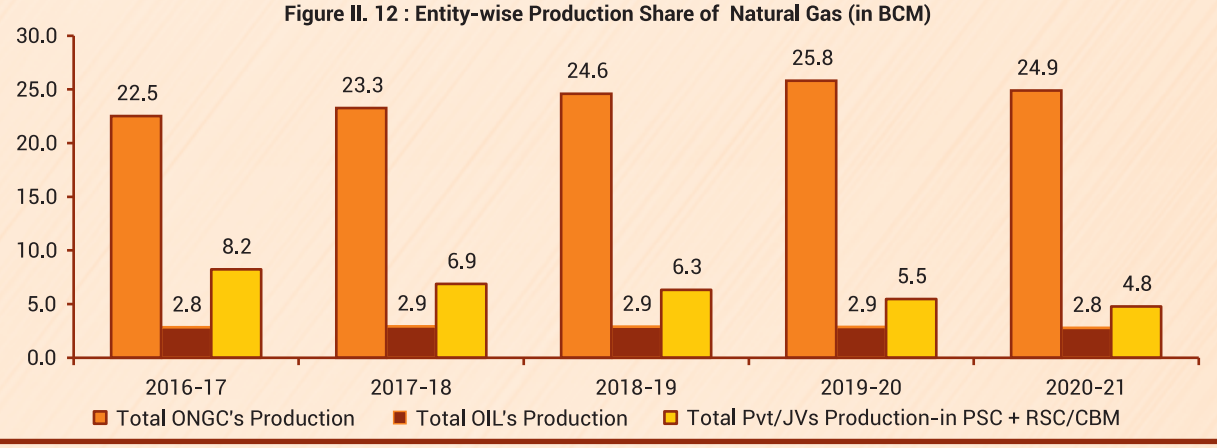
(Figures in MMSCM)

State	Basin	2016-17	2017-18	2018-19	2019-20	2020-21(P)	% Share of Total 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Natural Gas Production by Oil and Natural Gas Corporation							
Western Offshore	Maharashtra	16413	17243	18005	17645	16660	58.1
Krishna Godavari Offshore (Eastern offshore)	Andhra Pradesh	470	548	1037	931	426	1.5
Western Onland	Gujarat	1490	1532	1332	1274	1074	3.7
Frontier	Rajasthan	5	6	4	0	0	0.0
Assam & Assam Arakan	Assam	435	508	483	460	387	1.3
	Tripura	1430	1440	1554	1473	1634	5.7
Krishna Godavari	Andhra Pradesh	868	959	1077	897	814	2.8
Cauvery	Tamilnadu	977	1194	1182	1066	877	3.1
ONGC-Nomination		**22088**	**23429**	**24675**	**23746**	**21872**	**76.3**
ONGC-NELP/JVs Share		**1182**	**1180**	**1136**	**1150**	**944**	**3.3**
Total ONGC's Production		**23270**	**24610**	**25810**	**24896**	**22816**	**79.6**
Natural Gas Production by Oil India Ltd.							
Assam-Arakan	Assam	2693	2659	2482	2379	2241	7.8
Assam-Arakan	Arunachal Pradesh	12	12	12	38	50	0.2
Rajasthan	Rajasthan	232	211	228	251	188	0.7
OIL-Nomination		**2937**	**2881**	**2722**	**2668**	**2480**	**8.6**
OIL-JVs Share		**0**	**23**	**143**	**133**	**162**	**0.6**
Total OIL's Production		**2937**	**2905**	**2865**	**2801**	**2642**	**9.2**
Natural Gas Production by Pvt/JVs-in PSC + RSC/CBM							
Krishna Godavari Offshore (Eastern offshore)	Andhra Pradesh	3183	2245	1338	849	1182	4.1
Cauvery Offshore (Eastern offshore)	Tamilnadu	18	24	84	43	13	0.0
Cambay (Offshore)	Gujarat Offshore	81	98	122	129	148	0.5
Mumbai Offshore (Western Offshore)	Maharashtra	1874	1853	1531	1039	0	0.0
KG Onshore	Andhra Pradesh			5	15	13	0.0
Assam-Arakan	Arunachal Pradesh	16	18	16	7	5	0.0
	Assam		53	324	302	367	1.3
Cambay	Gujarat	90	75	70	69	65	0.2
Rajasthan	Rajasthan	1041	1225	1251	1632	1852	6.5
Cauvery	Tamilnadu	6	14	25	31	34	0.1
Ranigunj South (CBM)	West Bengal	170	203	153	139	110	0.4
Ranigunj East (CBM)	West Bengal	385	328	198	167	197	0.7
Jharia (CBM)	Jharkhand	3	4	4	5	2	0.0
Sohagpur East / West (CBM)	Madhya Pradesh	6	200	357	345	334	1.2
Total Pvt/JVs Production-in PSC + RSC/CBM		**6872**	**6338**	**5477**	**4770**	**4321**	**15.1**
Total Natural Gas Production		**31897**	**32649**	**32873**	**31184**	**28673**	**100.0**

Note : Total may not tally due to rounding off CBM : Coal Bed Methane P : Provisional

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH

Figure II. 12 : Entity-wise Production Share of Natural Gas (in BCM)



II. 17 : State-wise Gross & Net Production of Natural Gas in India

(Figures in MMSCM)

State / Utilisation	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21(P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Andhra Pradesh							
Gross Production	540.59	619.36	867.78	959.16	1081.31	912.32	827.47
Flare	21.83	50.81	34.26	16.04	36.88	38.51	44.04
Losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Availability/Net Production	518.76	568.55	833.52	943.13	1044.43	873.82	783.43
Internal Use/Consumption	15.64	19.78	31.47	31.91	25.48	24.00	23.23
Sales	503.12	548.77	802.05	911.21	1018.95	849.81	760.19
Arunachal Pradesh							
Gross Production	33.53	29.56	27.54	29.51	27.81	45.59	55.36
Flare	14.10	13.06	12.26	14.35	14.60	33.24	43.29
Losses	10.87	8.54	7.36	7.31	5.14	1.45	0.02
Net Availability/Net Production	8.56	7.95	7.92	7.86	8.07	10.91	12.04
Internal Use/Consumption	8.56	7.95	7.92	7.86	8.07	10.91	12.05
Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Assam							
Gross Production	2958.24	3024.78	3127.88	3219.02	3289.06	3141.23	2995.37
Flare	180.37	171.72	192.10	185.75	192.47	196.25	178.60
Losses	3.86	3.63	2.21	5.07	11.53	13.30	13.84
Net Availability/Net Production	2774.01	2849.43	2933.57	3028.21	3085.06	2931.68	2802.93
Internal Use/Consumption	581.73	569.29	584.30	617.58	585.71	569.97	537.75
Sales	2192.28	2280.14	2349.27	2410.63	2499.35	2361.70	2265.18
Gujarat							
Gross Production	1526.83	1490.08	1580.27	1606.66	1402.22	1342.33	1138.38
Flare	121.88	86.61	62.87	50.81	53.52	55.48	79.77
Losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Availability/Net Production	1404.95	1403.47	1517.40	1555.86	1348.71	1286.85	1058.61
Internal Use/Consumption	428.65	459.06	470.31	422.56	382.98	419.86	381.57
Sales	976.30	944.41	1047.09	1133.30	965.72	866.99	677.04
Rajasthan							
Gross Production	1177.77	1338.01	1277.34	1441.93	1483.25	1882.52	2039.66
Flare	38.69	59.58	43.91	36.98	52.96	90.61	85.33
Losses	59.36	88.37	43.20	66.69	52.35	19.56	16.45
Net Availability/Net Production	1079.73	1190.07	1190.23	1338.27	1377.94	1772.35	1937.88
Internal Use/Consumption	508.66	533.43	568.92	595.16	597.46	624.31	711.01
Sales	571.06	656.63	621.31	743.10	780.48	1148.04	1226.87
Tamil Nadu							
Gross Production	1191.57	1010.87	983.17	1207.22	1207.85	1096.65	910.91
Flare	17.02	21.68	17.76	21.32	40.45	45.69	53.92
Losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Availability/Net Production	1174.55	989.19	965.41	1185.90	1167.40	1050.96	857.00
Internal Use/Consumption	1.38	1.12	4.53	7.11	6.59	5.27	4.87
Sales	1173.16	988.07	960.88	1178.79	1160.81	1045.69	852.13
Tripura							
Gross Production	1140.04	1331.96	1429.91	1440.37	1554.30	1472.75	1633.97
Flare	0.17	0.46	0.21	0.26	0.27	0.29	0.29
Losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Availability/Net Production	1139.88	1331.51	1429.70	1440.12	1554.04	1472.46	1633.68
Internal Use/Consumption	2.36	2.37	2.48	2.90	2.93	2.81	2.94
Sales	1137.52	1329.14	1427.22	1437.22	1551.10	1469.65	1630.74

Contd...

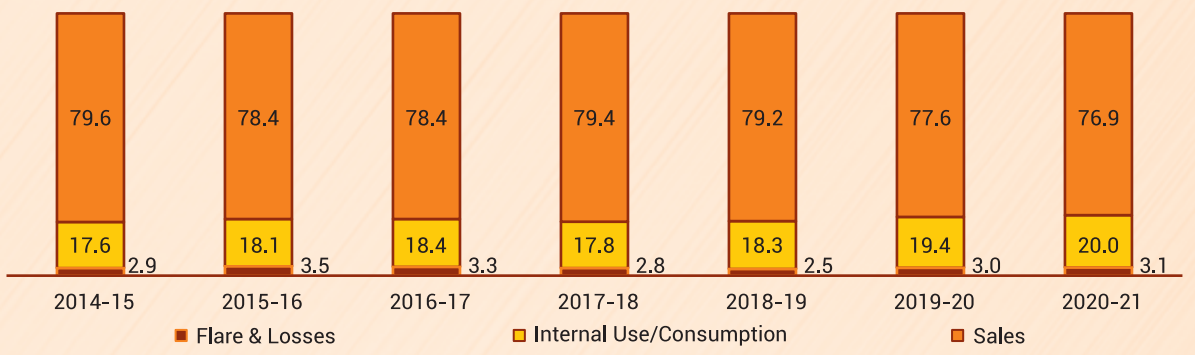
State / Utilisation	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21(P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Jharkhand (CBM)							
Gross Production	2.48	2.04	3.08	3.96	3.58	4.64	1.67
Flare	0.00	0.00	0.00	0.00	0.03	0.07	0.03
Losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Availability/Net Production	2.48	2.04	3.08	3.96	3.55	4.57	1.64
Internal Use/Consumption	0.02	0.16	0.49	0.50	0.56	0.69	0.96
Sales	2.46	1.88	2.59	3.47	3.00	3.88	0.68
Madhya Pradesh (CBM)							
Gross Production	2.08	1.41	6.44	199.77	356.66	344.90	333.70
Flare	1.29	0.31	0.91	0.83	0.67	0.69	0.68
Losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Availability/Net Production	0.79	1.09	5.53	198.95	355.99	344.21	333.02
Internal Use/Consumption	0.79	1.07	4.65	14.82	22.82	25.01	27.63
Sales	0.00	0.03	0.87	184.13	333.17	319.20	305.39
West Bengal (CBM)							
Gross Production	223.68	389.42	555.07	531.07	350.22	305.90	307.02
Flare	20.32	128.91	240.66	173.01	35.66	15.72	45.35
Losses	0.00	0.00	0.00	0.00	7.62	13.06	11.18
Net Availability/Net Production	203.36	260.51	314.41	358.06	306.95	277.12	250.49
Internal Use/Consumption	33.73	41.48	50.36	62.06	56.62	50.10	46.30
Sales	169.63	219.04	264.04	296.00	250.33	227.02	204.19
B. Offshore							
Gross Production	24860.64	23011.74	22038.23	22010.62	22117.11	20635.39	18429.05
Flare	451.35	474.33	371.09	324.51	298.97	383.53	290.24
Losses	27.15	16.63	18.98	15.19	16.34	20.02	25.48
Net Availability/Net Production	24382.14	22520.78	21648.16	21670.92	21801.80	20231.85	18113.34
Internal Use/Consumption	4327.36	4192.28	4131.61	4045.36	4325.94	4318.93	3981.92
Sales	20054.79	18328.50	17516.54	17625.55	17475.85	15912.92	14131.42
Total Balance of Natural Gas							
Gross Production	33657.44	32249.22	31896.70	32649.31	32873.37	31184.22	28672.56
Flare	867.01	1007.47	976.03	823.85	726.47	860.07	821.54
Losses	101.23	117.17	71.75	94.26	92.97	67.38	66.96
Net Availability/Net Production	32689.20	31124.58	30848.92	31731.21	32053.93	30256.77	27784.07
Internal Use/Consumption	5908.86	5827.99	5857.05	5807.81	6015.16	6051.87	5730.23
Sales	26780.33	25296.59	24991.87	25923.39	26038.77	24204.90	22053.83
% Flared to GP	2.58	3.12	3.06	2.52	2.21	2.76	2.87

Note : P : Production

1. Total may not tally due to rounding off.
2. Net availability denotes natural gas available for consumption which is derived by deducting gas flared/losses from gross production.

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH

Figure II. 13 : Natural Gas Balance (in %)



II. 18 : Sector-wise Sales/Consumption of Natural Gas

(Figures in MMSCM)

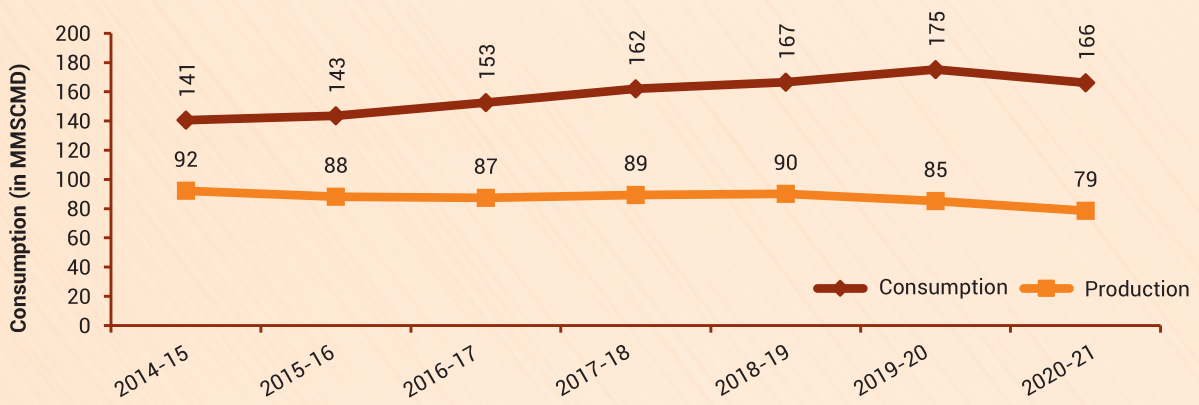
Sector	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(a) Energy Purpose								
Power	10720	10889	11616	12028	12005	11080	10836	19.3
Industrial & Manufacturing	533	545	794	999	1086	701	555	1.0
City or Local Natural Gas Distribution Network incl. Road Transport	5416	5464	7350	8585	9206	10883	9230	16.4
Agriculture (Tea Plantation)	180	187	183	189	192	200	177	0.3
Internal Consumption for Pipeline System	351	410	471	496	541	525	439	0.8
Refinery	4575	5077	5374	6533	7047	7786	7911	14.1
LPG Shrinkage	1005	754	759	798	874	858	900	1.6
Miscellaneous	5941	4111	3746	3226	3393	4209	4569	8.1
Total (a)	**28721**	**27437**	**30294**	**32854**	**34343**	**36241**	**34617**	**61.7**
(b) Non-Energy Purpose								
Fertilizer Industry	15190	16135	15429	14676	14987	16115	17781	31.7
Petrochemical	2890	3733	4170	4024	3386	3569	3072	5.5
Sponge Iron	154	544	885	1278	1124	567	647	1.2
Total (b)	**18234**	**20412**	**20484**	**19978**	**19497**	**20251**	**21500**	**38.3**
Total Sactoral Sales (a+b)	**46955**	**47849**	**50778**	**52832**	**53840**	**56492**	**56117**	**100.0**
Total Consumption **	**51300**	**52517**	**55697**	**59170**	**60798**	**64144**	**60645**	**-**
Total Consumption in MMSCMD	**140.55**	**143.49**	**152.59**	**162.11**	**166.57**	**175.26**	**166.15**	**-**

Note : ** : Availability Basis (Net Production+LNG Imports) P : Provisional

1. Re-classification among the sectors of consumption of natural gas under energy and non-energy sectors, has been done depending on usage. Sectors where natural gas is being used as feedstock are classified as consumption of gas under non-energy purpose whereas those sectors where natural gas is being used as fuel are classified as consumption of gas under energy purpose .
3. As per IRES, LPG shrinkage is a transformation process and LPG produced is further used for energy purposes to meet domestic / household energy requirements. Therefore, it has been shifted from 'non energy flow' to 'energy flow'.
4. Sector-wise Sales/consumption of natural gas includes RLNG.
5. Total may not tally due to rounding off.
6. The reasons for the variation between the consolidated availability and the consumption can be attributed to stock changes, conversion factor (volume/energy) and the provisional data reported by the companies.

Source : PPAC

Figure II. 14 : Trend of Natural Gas Production & Consumption



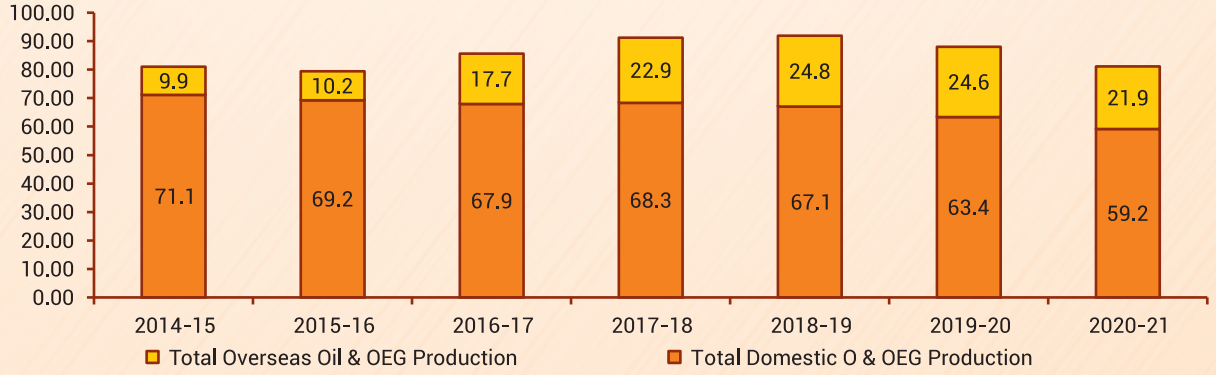
II. 19 : Domestic and Overseas Production of Oil & Gas

Entity/Year	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Domestic Production of Oil & Gas							
Total Production of Oil & Condensate (MMT)	**37.46**	**36.94**	**36.01**	**35.68**	**34.20**	**32.17**	**30.49**
Total Production of Gas (BCM)	**33.66**	**32.25**	**31.90**	**32.65**	**32.87**	**31.18**	**28.67**
Total Domestic O & OEG Production (MMTOE)	**71.12**	**69.19**	**67.91**	**68.33**	**67.08**	**63.35**	**59.17**
Overseas Production of Oil & Gas							
3. Overseas Production of Crude Oil & Condensate (MMT)							
1. ONGC Videsh Ltd. (OVL)	5.53	5.51	8.43	9.35	10.10	9.76	8.51
2. Bharat PetroResources Ltd. (BPRL)	-	-	0.79	1.53	2.15	2.07	1.79
3. Indian Oil Corporation Ltd. (IOCL)	0.07	0.09	1.15	2.68	3.24	3.21	2.71
4. GAIL (India) Ltd. (GAIL)	0.09	0.09	0.05	0.06	0.06	0.04	0.03
5. OIL (Oil India Ltd.)	0.11	0.10	0.91	1.63	1.69	1.58	1.42
6. HPCL-PPCL (Prize Petroleum Co. Ltd.)	0.002	0.01	0.01	0.01	0.01	0.005	0.005
Total-Oil Production	**5.81**	**5.80**	**11.34**	**15.26**	**17.25**	**16.66**	**14.46**
4. Overseas Production of Natural Gas (BCM)							
1. ONGC Videsh Ltd. (OVL)	3.34	3.41	4.37	4.81	4.74	5.23	4.53
2. Bharat PetroResources Ltd. (BPRL)	-	-	0.35	0.65	0.68	0.60	0.67
3. Indian Oil Corporation Ltd. (IOCL)	0.38	0.44	0.78	1.00	1.05	0.95	1.07
4. GAIL (India) Ltd. (GAIL)	0.37	0.48	0.45	0.44	0.37	0.55	0.50
5. OIL (Oil India Ltd.)	0.00	0.01	0.35	0.71	0.70	0.62	0.68
6. HPCL-PPCL (Prize Petroleum Co. Ltd.)	0.01	0.05	0.05	0.05	0.05	0.03	0.03
Total Gas Production	**4.11**	**4.39**	**6.35**	**7.66**	**7.58**	**7.98**	**7.48**
Total Overseas Oil & OEG Production (in MMTOE)	**9.92**	**10.19**	**17.70**	**22.92**	**24.83**	**24.64**	**21.95**
Overseas production as (%) percentage of domestic production	13.94	14.73	26.06	33.55	37.02	38.89	37.09

Note : Total may not tally due to rounding off

Source : Oil & Natural Gas Corporation Ltd., Oil India Ltd. and DGH

Figure II. 15 : Trend of Oil and Gas Production in Domestic vis-a- vis Overseas (in MMTOE)



CHAPTER-III

Refining, Transportation & Marketing Infrastructure

CHAPTER HIGHLIGHTS

As on 31.03.2021, Petroleum Refining Capacity in India is 249.22 MMTPA. Share of Public, JV and Private sector refineries stood at 57.1%, 7.6% and 35.3% respectively in refinery capacity as on 31.03.2021.

Crude oil processed declined by 12.8% reaching to 221.77 MMT in year 2020-21 over 2019-20 (254.39 MMT). Also, Production of Petroleum Products has declined by 11.2% reaching to 233.51 MMT in year 2020-21 over 2019-20 (262.94 MMT).

During FY 2020-21, Diesel (HSD+LDO) accounted for the highest Production share (43.3%) followed by Petrol/Motor Spirit (15.3%), Naphtha (8.3%), Petroleum Coke (5.4%), LPG (5.2%), Fuel Oil (3.1%), ATF (3%), Bitumen (2.2%), Kerosene (1%) and Lubes & Greases (0.5%).

As on 31.03.2021, Total length of Crude Oil Pipelines is 10419 KMs and Total authorised length of Natural Gas Pipeline is 33764 KMs.

As on 31.03.2021, Total Product Pipeline including LPG Pipeline (3738 KMs) is 18465 KMs.

During FY 2020-21, Total PDS SKO Kerosene allocated to States stood at 23.15 Lakh KL against which quantity uplifted was 20.39 Lakh KL (89.5%). Also, maximum SKO (around 30.4%) was allocated to West Bengal at 7.04 Lakh KL. Currently Andhra Pradesh, Andaman & Nicobar, Chandigarh, Dadra & Nagar Haveli and Daman & Diu, Delhi, Haryana, Ladakh, Puducherry and Punjab are kerosene free State/UTs.

As on 31.03.2021, LPG active domestic consumers of CPSE OMCs stood at 28.95 crore marking an increase 3.9% vis-à-vis the total LPG active domestic consumers as on 31.03.2020. Under PMUY, more than 8 crore connection issued as on 31.03.2021.

As on 31.03.2021, there are 77094 number of Retail Outlets (ROs) in India registering a 11.6% increase in 2020-21 vis-a-vis 2019-20 (69093 Nos.).

Compressed Natural Gas (CNG) Sale has declined by 20.3% from 3.25 MMT in 2019-20 to 2.59 TMT in 2020-21. Also, the number of CNG stations have shown a sharp increase of 40.2% from 2208 nos. as on 31.03.2020 to 3095 nos. as on 31.03.2021.

As on 31.03.2021, PNG connection stood at 78,64,529 nos. comprising Domestic connection (78,20,387), Commercial connection (32339) and Industrial connection (11803).

To meet the rising gas demand in the country, different entities are importing Liquefied Natural Gas (LNG) from global gas markets. AS on 31.03.2021, The import of LNG is being carried out at existing four (6) LNG terminals which have regasification capacity of about 42.5 MMTPA.

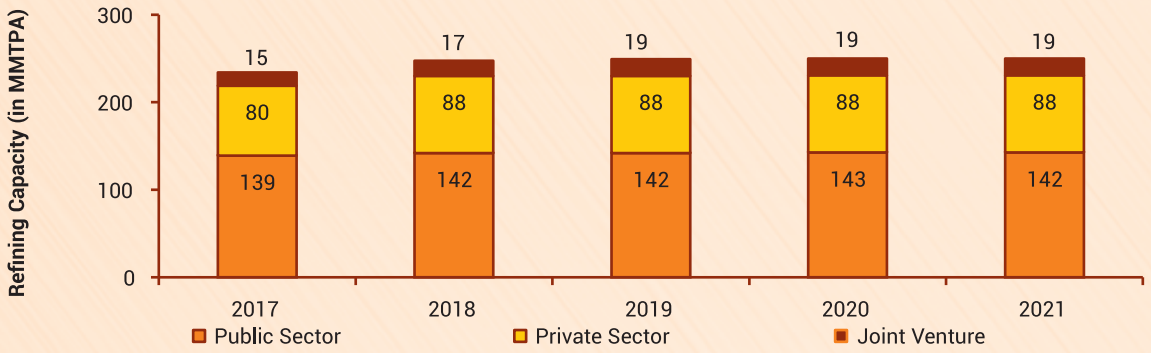
III. 1 : Petroleum Refining Capacity in India

(Figures in MMTPA)

Refinery Location & Year of Commissioning		2017	2018	2019	2020	2021	% Share of Total 2021
(1)		(2)	(3)	(4)	(5)	(6)	(7)
Public Sector		**138.97**	**142.07**	**142.07**	**142.57**	**141.92**	**56.9**
Indian Oil Corporation Ltd.		**69.20**	**69.20**	**69.20**	**69.70**	**70.05**	**28.1**
1.	IOCL, Digboi, Assam - 1901	0.65	0.65	0.65	0.65	0.65	0.3
2.	IOCL, Guwahati, Assam - 1962	1.00	1.00	1.00	1.00	1.00	0.4
3.	IOCL, Barauni, Bihar - 1964	6.00	6.00	6.00	6.00	6.00	2.4
4.	IOCL, Koyali, Gujarat - 1965	13.70	13.70	13.70	13.70	13.70	5.5
5.	IOCL, Haldia, West Bengal - 1975	7.50	7.50	7.50	8.00	8.00	3.2
6.	Mathura, Uttar Pradesh - 1982	8.00	8.00	8.00	8.00	8.00	3.2
7.	IOCL, Panipat, Haryana - 1998	15.00	15.00	15.00	15.00	15.00	6.0
8.	IOCL,'Bongaigaon, Assam - 1974	2.35	2.35	2.35	2.35	2.70	1.1
9.	IOCL, Paradip, Odisha-2016	15.00	15.00	15.00	15.00	15.00	6.0
Bharat Petroleum Corporation Ltd.		**24.40**	**27.50**	**27.50**	**27.50**	**27.50**	**11.0**
10.	BPCL, Mumbai, Maharashtra - 1955	12.00	12.00	12.00	12.00	12.00	4.8
11.	BPCL, Kochi, Kerala - 1963	12.40	15.50	15.50	15.50	15.50	6.2
Hindustan Petroleum Corporation Ltd.		**15.80**	**15.80**	**15.80**	**15.80**	**15.80**	**6.3**
12.	HPCL, Mumbai, Maharashtra - 1954	7.50	7.50	7.50	7.50	7.50	3.0
13.	HPCL, Visakh, Andhra Pradesh - 1957	8.30	8.30	8.30	8.30	8.30	3.3
Chennai Petroleum Corporation Ltd.		**11.50**	**11.50**	**11.50**	**11.50**	**11.50**	**4.6**
14.	CPCL, Manali, Tamil Nadu - 1965	10.50	10.50	10.50	10.50	10.50	4.2
15.	CPCL, Narimanam, Tamil Nadu - 1993	1.00	1.00	1.00	1.00	1.00	0.4
Numaligarh Refinery Ltd. (NRL)		**3.00**	**3.00**	**3.00**	**3.00**	**3.00**	**1.2**
16.	NRL, Numaligarh, Assam-1999	3.00	3.00	3.00	3.00	3.00	1.2
Oil & Natural Gas Corporation Ltd.		**0.07**	**0.07**	**0.07**	**0.07**	**0.07**	**0.0**
17.	ONGC, Tatipaka, Andhra Pradesh - 2001	0.07	0.07	0.07	0.07	0.07	0.0
Mangalore Refinery & Petrochemical Ltd.		**15.00**	**15.00**	**15.00**	**15.00**	**15.00**	**6.0**
18.	MRPL, Mangalore, Karnataka- 1996	15.00	15.00	15.00	15.00	15.00	6.0
Private Sector		**80.00**	**88.20**	**88.20**	**88.20**	**88.20**	**35.3**
Reliance Industries Ltd. (RIL)		**60.00**	**68.20**	**68.20**	**68.20**	**68.20**	**27.3**
19.	RIL, Jamnagar, Gujarat - 1999	33.00	33.00	33.00	33.00	33.00	13.2
20.	RIL, Jamnagar (SEZ), Gujarat - 2008	27.00	35.20	35.20	35.20	35.20	14.1
Nyara Energy Ltd.		**20.00**	**20.00**	**20.00**	**20.00**	**20.00**	**8.0**
21.	NEL, Vadinar, Gujarat - 2006	20.00	20.00	20.00	20.00	20.00	8.0
Joint Venture (JV)		**15.00**	**17.30**	**19.10**	**19.10**	**19.10**	**7.6**
Bharat Oman Refinery Ltd.		**6.00**	**6.00**	**7.80**	**7.80**	**7.80**	**3.1**
22.	BORL, Bina, Madhya Pradesh - 2011	6.00	6.00	7.80	7.80	7.80	3.1
HPCL Mittal Energy Ltd. (HMEL)		**9.00**	**11.30**	**11.30**	**11.30**	**11.30**	**4.5**
23.	HMEL, Bhatinda, Punjab - 2012	9.00	11.30	11.30	11.30	11.30	4.5
Total Refinery Capacity		**233.97**	**247.57**	**249.37**	**249.87**	**249.22**	**100.0**

Source : Oil & Gas Companies

Figure III. 1 : Trends in Refining Capacity in India



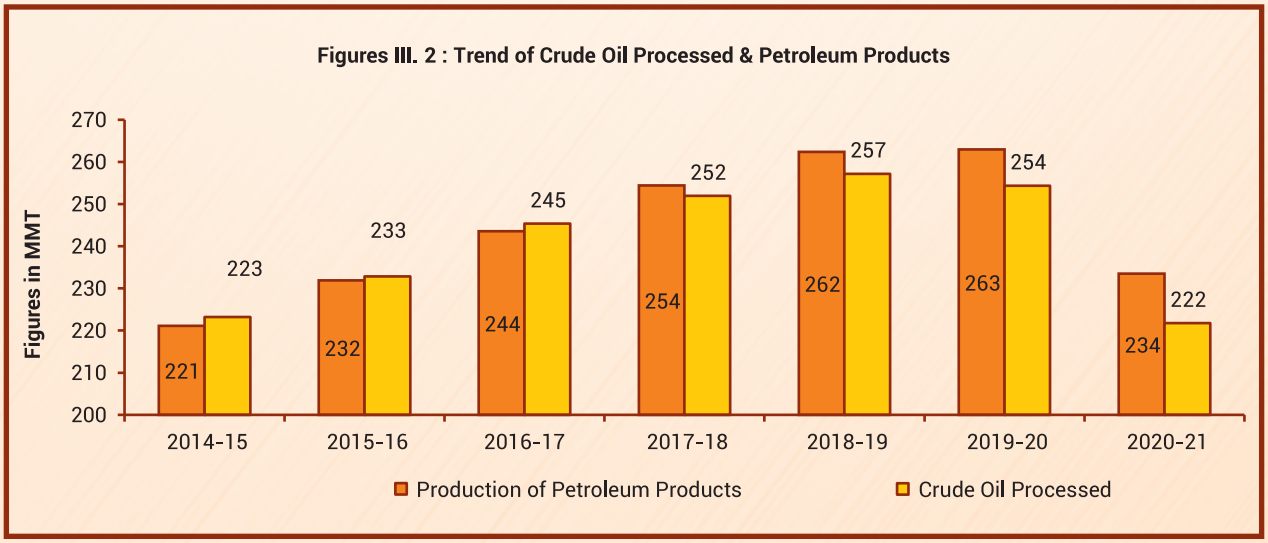
III. 2 : Refinery Crude Oil Processed and Production of Petroleum Products

(Figures in TMT)

Year	Crude Oil Processed			Total	Production of Petroleum Products					
	Refinery									
	CPSEs	Pvt.	JVs		CPSEs	Pvt.	JVs	Total	Fraction-ators	Grand Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(Calendar Year-wise)										
2014	120944	88436	13442	222822	114401	89977	12580	216958	4101	221059
2015	123342	87096	16659	227097	116397	89908	15832	222137	3936	226073
2016	137891	91428	16894	246212	129740	93973	15743	239457	4183	243640
2017	142686	91622	15126	249435	134884	96921	14074	245879	4539	250418
2018	150312	88675	17665	256652	142944	97819	16535	257298	4860	262158
2019	145731	89090	20088	254909	137801	99826	18665	256292	4843	261134
2020	**126552**	**80101**	**17710**	**224363**	**120365**	**95361**	**16453**	**232179**	**4371**	**236550**
(Financial Year-wise)										
2014-15	121183	88533	13526	223242	114462	89997	12682	217141	3994	221136
2015-16	127087	88662	17116	232865	120227	91734	15945	227907	4016	231923
2016-17	137388	91093	16882	245362	129244	94285	15728	239256	4294	243551
2017-18	145234	91163	15538	251935	137835	97498	14464	249797	4608	254405
2018-19	150976	88041	18189	257205	143247	97273	16910	257430	4931	262361
2019-20	144716	89515	20155	254386	137206	102155	18820	258181	4760	262940
2020-21 (P)	**127504**	**78008**	**16262**	**221773**	**121005**	**93223**	**15073**	**229301**	**4212**	**233513**

Note : Total may not tally due to rounding off P : Provisional

Source : Oil Companies



III. 3 : Refinery-wise Crude Oil Processed

(Figures in TMT)

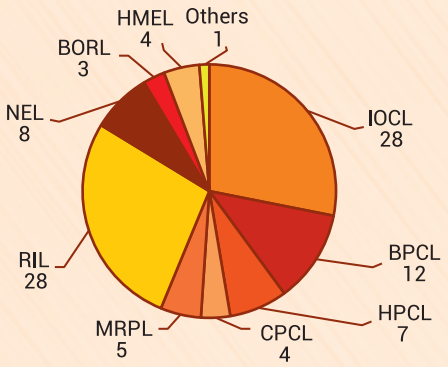
Refinery	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(a) CPSEs Refineries	**121183**	**127087**	**137388**	**145234**	**150976**	**144716**	**127504**	**57.5**
IOCL, Guwahati	1006	904	864	1024	863	892	849	0.4
IOCL, Barauni	5944	6545	6526	5819	6661	6516	5469	2.5
IOCL, Koyali	13285	13820	13994	13811	13505	13075	11603	5.2
IOCL, Haldia	7650	7776	7689	7655	7965	6463	6759	3.0
IOCL, Mathura	8515	8860	9230	9240	9737	8948	8926	4.0
IOCL, Digboi	591	562	533	666	676	664	605	0.3
IOCL, Panipat	14191	15282	15638	15654	15281	15038	13181	5.9
IOCL, Bongaigaon	2403	2442	2486	2402	2513	2045	2450	1.1
IOCL, Paradip	-	1817	8230	12730	14616	15778	12508	5.6
Total IOCL	**53586**	**58007**	**65191**	**69001**	**71816**	**69419**	**62351**	**28.1**
BPCL, Mumbai	12821	13371	13541	14054	14773	15017	12941	5.8
BPCL, Kochi	10356	10712	11820	14095	16051	16515	13282	6.0
Total BPCL	**23177**	**24083**	**25362**	**28149**	**30823**	**31532**	**26222**	**11.8**
HPCL, Mumbai	7408	8013	8510	8641	8671	8065	7374	3.3
HPCL, Vishakhapatnam	8770	9220	9335	9635	9773	9115	9050	4.1
Total HPCL	**16179**	**17234**	**17846**	**18276**	**18444**	**17180**	**16425**	**7.4**
CPCL(MRL), Manali	10251	9100	9725	10289	10271	10161	8243	3.7
CPCL(MRL), Narimanam	531	544	531	500	423	0	0	0.0
Total CPCL	**10782**	**9644**	**10256**	**10789**	**10695**	**10161**	**8243**	**3.7**
NRL, Numaligarh	2777	2520	2683	2809	2900	2383	2707	1.2
MRPL, Mangalore	14632	15532	15965	16130	16231	13953	11475	5.2
ONGC, Tatipaka	51	67	86	80	66	87	81	0.0
(b) JVs Refineries	**13526**	**17116**	**16882**	**15538**	**18189**	**20155**	**16262**	**7.3**
BORL, Bina	6209	6402	6360	6708	5716	7913	6190	2.8
HMEL, Bathinda	7318	10713	10521	8830	12473	12242	10072	4.5
(c) Pvt Refineries	**88533**	**88662**	**91093**	**91163**	**88041**	**89515**	**78008**	**35.2**
RIL, Jamnagar	30867	32428	32823	33153	31752	33019	34100	15.4
RIL, SEZ-Jamnagar	37174	37133	37351	37317	37393	35876	26841	12.1
Total RIL	**68042**	**69561**	**70174**	**70470**	**69145**	**68895**	**60941**	**27.5**
NEL, Vadinar	20491	19101	20919	20693	18896	20620	17067	7.7
Total Crude Oil Processed	**223242**	**232865**	**245362**	**251935**	**257205**	**254386**	**221773**	**100.0**

Note : 1. Total may not tally due to rounding off P : Provisional

2. CPCL CBR refinery is under shutdown due to limitation in meeting required Product specifications with the existing configuration.

Source : Oil Companies

Figure III. 3 : Company wise Crude Oil Processed during 2020-21 (%)



III. 4 : Refinery-wise Production of Petroleum Products

(Figures in TMT)

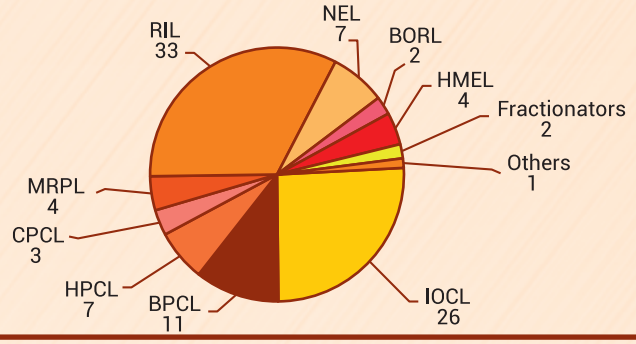
Refinery	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CPSEs Refineries	**114462**	**120227**	**129244**	**137835**	**143247**	**137206**	**121005**	**51.8**
IOCL, Guwahati	1067	1103	1121	1142	1030	1151	1008	0.4
IOCL, Barauni	5412	6079	5881	5507	6276	6073	5166	2.2
IOCL, Koyali	12492	13246	13106	13271	12908	12592	11071	4.7
IOCL, Haldia	7008	7133	6982	7167	7450	5925	6206	2.7
IOCL, Mathura	8243	8640	8916	9151	9560	8793	8747	3.7
IOCL, Digboi	591	541	542	665	676	665	604	0.3
IOCL, Panipat	14110	15501	15833	15889	15777	15366	13651	5.8
IOCL, Bongaigaon	2186	2253	2273	2241	2337	1863	2314	1.0
IOCL, Paradip	-	1107	6920	11447	13230	14240	11159	4.8
Total IOCL	**51110**	**55602**	**61573**	**66480**	**69244**	**66668**	**59925**	**25.7**
BPCL, Mumbai	12346	12802	13013	13638	14193	14514	12519	5.4
BPCL, Kochi	9803	10164	11194	13307	15149	15726	12605	5.4
Total BPCL	**22149**	**22965**	**24206**	**26945**	**29342**	**30240**	**25124**	**10.8**
HPCL, Mumbai	7030	7468	7952	8126	8202	7645	6952	3.0
HPCL, Vishakhapatnam	8241	8558	8653	8901	9095	8292	8408	3.6
Total HPCL	**15271**	**16026**	**16605**	**17027**	**17297**	**15937**	**15360**	**6.6**
CPCL(MRL), Manali	9421	8330	8963	9331	9254	9329	7653	3.3
CPCL(MRL), Narimanam	539	550	532	502	425	1	0	0.0
Total CPCL	**9959**	**8881**	**9496**	**9833**	**9679**	**9330**	**7653**	**3.3**
NRL, Numaligarh	2754	2521	2653	2823	2882	2300	2741	1.2
MRPL, Mangalore	13169	14166	14629	14650	14741	12651	10124	4.3
ONGC, Tatipaka	50	66	82	75	63	80	77	0.0
JVs Refineries	**12682**	**15945**	**15728**	**14464**	**16910**	**18820**	**15073**	**6.5**
BORL, Bina	5782	5916	5767	6094	5113	7219	5456	2.3
HMEL, Bathinda	6900	10029	9961	8370	11797	11601	9617	4.1
Pvt Refineries	**89997**	**91734**	**94285**	**97498**	**97273**	**102155**	**93223**	**39.9**
RIL, Jamnagar	30864	32331	32927	33561	33334	35061	35771	15.3
RIL, SEZ-Jamnagar	39329	41089	41261	44178	45761	47313	40912	17.5
Total RIL	**70192**	**73419**	**74188**	**77739**	**79095**	**82374**	**76683**	**32.8**
NEL, Vadinar	19804	18315	20096	19758	18178	19780	16540	7.1
Total Refinery Production	**217141**	**227907**	**239256**	**249797**	**257430**	**258181**	**229301**	**98.2**
(d) Fractionators	**3994**	**4016**	**4294**	**4608**	**4931**	**4760**	**4212**	**1.8**
Grand Total	**221136**	**231923**	**243551**	**254405**	**262361**	**262940**	**233513**	**100.0**

Note : Total may not tally due to rounding off

P : Provisional

Source : Oil Companies

Figure III. 4 : Company-wise Production of Petroleum Products during 2020-21 (%)



III. 5 : Refinery-wise and Product-wise Production of Petroleum Products during 2020-21 (P)

(Figures in TMT)

Refinery/Plant	LPG	Motor Spirit	Naph-tha	ATF	SKO	HSD	LDO	Furnace Oil	Bitu-men	Lube Oil	Petro-leum Coke	Others	Total Produc-tion	Fuel & Losses	Total Output	Crude Pro-cessed	Total Input
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
IOC, Guwahati	36	186	41	53	49	601	0	0	0	0	43	0	**1008**	118	1119	849	**1119**
IOC, Barauni	364	1035	322	0	431	2819	0	-7	33	0	162	7	**5166**	557	5680	5469	**5680**
IOC, Koyali	414	2002	584	108	121	5371	92	1141	451	0	478	309	**11071**	1230	12358	11603	**12358**
IOC, Haldia	255	605	511	176	631	2656	54	495	444	167	145	68	**6206**	730	6926	6759	**6926**
IOC, Mathura	519	1757	236	206	124	3791	0	854	959	0	0	301	**8747**	655	9405	8926	**9405**
IOC, Digboi	11	98	-1	0	0	325	0	106	0	0	33	31	**604**	80	685	605	**685**
IOC, Panipat	673	1695	1435	939	63	6784	1	189	395	0	678	799	**13651**	1371	14918	13181	**14918**
IOCL,Bongaigoan	102	331	147	2	38	1459	72	37	0	0	112	14	**2314**	279	2520	2450	**2520**
IOCL, Paradip, Odisha	703	2406	138	407	23	5039	0	0	0	25	1044	1375	**11159**	1373	12508	12508	**12508**
BPCL, Mumbai	451	2343	1119	290	52	6074	127	788	505	311	0	460	**12519**	534	13055	12941	**13055**
BPCL, Kochi	869	2712	921	227	112	6433	47	80	271	0	548	385	**12605**	1133	13858	13282	**13858**
HPCL, Mumbai	346	1305	500	186	120	2651	140	544	486	413	0	262	**6952**	603	7528	7374	**7528**
HPCL, Vishakhapatnam	401	1750	286	49	104	3877	196	983	561	0	0	201	**8408**	718	9050	9050	**9050**
CPCL, Manali	331	1037	588	516	115	3747	0	104	473	152	300	290	**7653**	908	8503	8243	**8503**
CPCL, CBR	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	**0**
NRL, Numaligarh	47	636	12	11	49	1809	0	0	0	0	107	69	**2741**	299	3027	2707	**3027**
MRPL, Mangalore	812	1061	1063	448	35	5025	0	0	183	0	577	921	**10124**	1373	11528	11475	**11528**
ONGC, Tatipaka	0	0	30	0	3	19	0	0	0	0	0	25	**77**	4	81	81	**81**
BORL,Bina	227	1138	14	341	134	3423	0	0	0	0	86	94	**5456**	729	6190	6190	**6190**
HMEL,Bathinda	705	1641	22	129	84	4814	0	0	343	0	616	1264	**9617**	612	10122	10072	**10122**
RIL, Jamnagar	878	1857	7275	1794	0	9050	0	677	0	0	3155	11085	**35771**	4020	40700	34100	**40700**
RIL, SEZ-Jamnagar	1148	6921	2606	389	0	15882	0	621	0	0	3020	10325	**40912**	4435	45067	26841	**45067**
NEL, Vadinar	922	3270	572	808	-1	8735	0	269	141	0	1553	270	**16540**	1047	17464	17067	**17464**
Total Refinery	**10213**	**35786**	**18421**	**7077**	**2286**	**100383**	**729**	**6882**	**5245**	**1069**	**12655**	**28556**	**229301**	**22806**	**252293**	**221773**	**252293**
Fractionators	**1859**	**0**	**975**	**15**	**33**	**59**	**0**	**0**	**0**	**0**	**0**	**1271**	**4212**	**-**	**-**	**-**	**-**
Grand Total	**12072**	**35786**	**19396**	**7092**	**2319**	**100441**	**729**	**6882**	**5245**	**1069**	**12655**	**29826**	**233513**	**-**	**-**	**-**	**-**

Note : 1. Total may not tally due to rounding off. P : Provisional

2. Others include Propylene, Solvents (Hexane, Benzene, Toluene, Xylene and Specialty solvents), Reformate, MTO, Carbon Black Feed Stock, Sulphur etc.

3. CPCL-CBR is under shutdown.

Source : Oil Companies

III. 6 : Production of Petroleum Products (Calendar Year-wise)

(Figures in TMT)

Products	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LPG	9953	10301	11285	12094	12751	12768	12231	5.2
Motor Spirit	31800	34056	36421	37567	28422	38604	35383	15.0
Naphtha	17821	17300	19699	20064	20081	19693	19676	8.3
ATF	10926	11084	13929	14211	15506	15457	8403	3.6
Kerosene	7604	7433	6547	4635	4180	3322	2687	1.1
HSD	94693	96391	102718	105975	110272	110849	100869	42.6
LDO	351	410	527	592	711	652	651	0.3
Total Fuel Oils	**12307**	**10278**	**10275**	**9439**	**9566**	**8997**	**7419**	**3.1**
of which								
a) Furnace Oil	11745	9855	10025	9172	8971	8579	7055	3.0
b) LSHS/HHS/RFO	562	423	250	267	595	418	364	0.2
Lube Oils	878	1073	1060	994	1008	919	977	0.4
Bitumen	4756	4769	5394	5076	5735	5461	4949	2.1
Petroleum Coke	10060	9800	13952	14483	14998	14860	13439	5.7
Paraffin Wax	54	57	81	101	92	94	96	0.0
Others	19855	23123	21751	25188	38838	29459	29772	12.6
Total Production of Petroleum Products	**221059**	**226074**	**243640**	**250418**	**262158**	**261134**	**236550**	**100.0**
of which								
Refineries	**216958**	**222137**	**239457**	**245879**	**257298**	**256292**	**232179**	**98.2**
Fractionators	**4101**	**3937**	**4183**	**4539**	**4860**	**4843**	**4371**	**1.8**

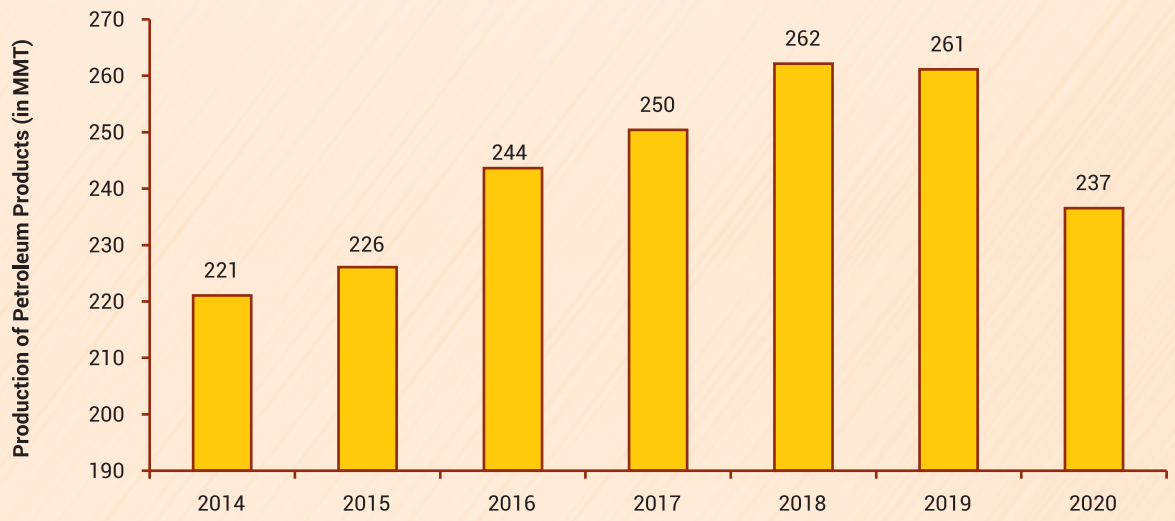
Note :

P : Provisional

1. Total may not tally due to rounding off.
2. Others include Propylene, Solvents (Hexane, Benzene, Toluene, Xylene and Specialty solvents), Reformate, MTO, Carbon Black Feed Stock, Sulphur etc.

Source : Oil Companies

Figure III. 5 : Production of Petroleum Products



III. 7 : Production of Petroleum Products (Financial Year-wise)

(Figures in TMT)

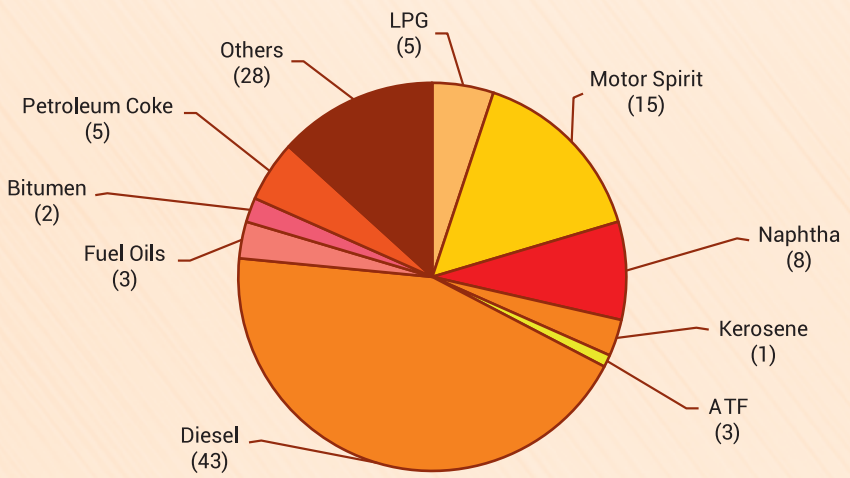
Products	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LPG	9840	10568	11326	12380	12786	12823	12072	**5.2**
Motor Spirit	32325	35321	36593	37784	38039	38616	35779	**15.3**
Naphtha	17391	17861	19946	20006	19786	20679	19403	**8.3**
ATF	11103	11789	13831	14594	15479	15238	7092	**3.0**
Kerosene	7559	7503	6041	4408	4072	3211	2393	**1.0**
HSD	94428	98588	102484	107904	110535	111221	100441	**43.0**
LDO	358	429	629	562	702	620	729	**0.3**
Total Fuel Oils	**11919**	**9727**	**9962**	**9486**	**10032**	**8609**	**7242**	**3.1**
of which								
a) Furnace Oil	11248	9468	9694	9019	9598	8214	6882	**2.9**
b) LSHS/HHS/RFO	671	259	268	468	434	395	360	**0.2**
Lube Oils	946	1037	1029	1036	949	932	1069	**0.5**
Bitumen	4632	5157	5185	5277	5803	5244	5245	**2.2**
Petroleum Coke	12448	13322	13936	14754	14676	15528	12655	**5.4**
Paraffin Wax	51	65	85	104	90	96	97	**0.0**
Others	18137	20557	22504	26111	29413	30124	29296	**12.5**
Total Production of Petroleum Products	**221136**	**231923**	**243551**	**254405**	**262361**	**262940**	**233513**	**100.0**
of which								
Refineries	**217141**	**227907**	**239256**	**249797**	**257430**	**258181**	**229301**	**98.2**
Fractionators	**3994**	**4016**	**4294**	**4608**	**4931**	**4760**	**4212**	**1.8**

Note : P : Provisional

1. Total may not tally due to rounding off.
2. Others include Propylene, Solvents (Hexane, Benzene, Toluene, Xylene and Specialty solvents), Reformate, MTO, Carbon Black Feed Stock, Sulphur etc.

Source : Oil Companies

Figure III. 6 : Distribution of Petroleum Products Produced during 2020-21 (%)



III. 8 : Gross Refining Margins (GRM) of Oil Refineries

(Figures in $/bbl)

Refinery	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PSUs Refineries							
IOCL, Guwahati**	8.68	15.88	22.14	21.88	16.35	14.22	31.87
IOCL, Barauni	-1.20	2.93	6.52	6.60	3.86	-1.24	3.98
IOCL, Koyali	4.79	6.80	7.55	9.44	4.87	1.90	2.83
IOCL, Haldia	-1.51	3.96	6.80	6.86	5.36	-2.44	4.10
IOCL, Mathura	-2.19	3.30	7.01	7.09	4.65	-1.03	5.03
IOCL, Digboi**	13.73	16.17	24.49	24.86	22.74	17.52	28.62
IOCL, Panipat	-1.97	4.15	7.95	7.74	4.66	-0.25	3.23
IOCL, Bongaigaon**	-0.26	11.09	20.15	20.62	16.94	10.49	28.89
IOCL, Paradip	-	-0.65	4.22	7.02	4.46	-1.80	5.35
Total IOCL	**0.27**	**5.06**	**7.77**	**8.49**	**5.41**	**0.08**	**5.64**
BPCL, Mumbai	3.97	6.37	5.36	7.26	4.92	2.88	3.76
BPCL, Kochi	3.17	6.87	5.16	6.44	4.27	2.17	4.36
Total BPCL	**3.62**	**6.59**	**5.26**	**6.85**	**4.58**	**2.51**	**4.06**
HPCL, Mumbai	4.88	8.09	6.95	8.35	5.79	3.63	4.10
HPCL, Vishakhapatnam	1.12	5.46	5.51	6.55	4.31	-1.30	3.67
Total HPCL	**2.84**	**6.68**	**6.20**	**7.40**	**5.01**	**1.02**	**3.86**
CPCL	1.97	5.27	6.05	6.42	3.70	-1.18	7.14
NRL, Numaligarh**	16.67	23.68	28.56	31.92	28.11	24.33	37.23
MRPL, Mangalore	-0.64	5.20	7.75	7.54	4.06	-0.23	3.71
Private Refineries							
RIL	8.60	10.80	11.00	11.60	9.20	8.90	*
NEL, Vadinar	8.37	10.81	9.14	8.95	6.97	5.88	*
Joint Venture Refineries							
BORL, Bina	6.10	11.70	11.80	11.70	9.80	5.60	6.20
HMEL, Bhatinda	*	11.65	13.09	12.07	9.42	*	*

* : Not available

** : GRM of North Eastern refineries are including excise duty benefit.

Source : Centre for High Technology

III. 9 : GRM of NE refineries without Excise Duty benefit

(Figures in $/bbl)

Refinery	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21(P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
IOCL, Guwahati	0.96	1.26	1.12	3.70	0.63	(3.34)	2.13
IOCL, Digboi	5.42	4.16	7.73	8.27	8.84	3.35	3.71
IOCL, Bongaigaon	(6.51)	0.08	6.03	6.22	4.21	(1.84)	3.15
NRL, Numaligarh	9.46	8.06	8.50	11.43	11.8	7.99	4.09

Source : Centre for High Technology

III. 10 : Specific energy consumption (MBN number) of Oil Refineries

Refinery	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21(P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PSUs Refineries							
IOCL, Guwahati	109.4	121.9	113.8	108.0	112.3	121.2	123.7
IOCL, Barauni	84.4	81.0	80.7	77.7	77.9	75.9	78.1
IOCL, Koyali	76.1	75.8	75.2	72.4	75.3	77.4	82.6
IOCL, Haldia	79.0	79.8	83.0	80.8	76.6	88.3	89.3
IOCL, Mathura	78.2	73.4	72.2	68.3	63.9	65.8	63.1
IOCL, Digboi	94.0	112.4	114.3	105.5	101.8	101.7	98.1
IOCL, Panipat	71.7	70.1	64.9	63.2	64.1	64.5	68.0
IOCL, Bongaigaon	98.7	91.3	90.2	91.7	88.6	96.8	108.5
IOCL, Paradip	-	-	117.8	72.8	66.8	64.1	69.0
Total IOCL	**78.2**	**76.6**	**81.8**	**72.6**	**71.0**	**71.8**	**75.5**
BPCL, Mumbai	77.3	74.7	70.6	66.7	64.7	63.0	64.4
BPCL, Kochi	78.5	77.6	85.8	79.2	71.6	68.2	71.7
Total BPCL	**77.8**	**75.9**	**77.1**	**73.2**	**68.8**	**66.1**	**68.5**
HPCL, Mumbai	94.6	89.3	85.7	84.4	82.8	84.8	98.2
HPCL, Vishakhapatnam	83.5	80.7	78.1	77.3	77.3	84.4	81.2
Total HPCL	**88.9**	**84.8**	**81.9**	**80.8**	**80.0**	**84.6**	**89.1**
CPCL(MRL), Manali	92.9	95.8	92.5	88.6	83.0	81.5	86.7
CPCL(MRL), Narimanam	118.6	113.1	117.8	123.7	118.1	-	-
Total CPCL	**93.6**	**96.4**	**93.2**	**89.4**	**83.7**	**81.5**	**86.7**
NRL, Numaligarh	71.4	71.1	72.3	64.7	65.9	64.8	64.4
MRPL, Mangalore	86.3	80.3	79.6	77.1	74.2	75.3	81.4
Private Refineries							
RIL, Jamnagar	51.6	52.6	51.3	50.0	49.0	50.4	48.1
RIL, SEZ-Jamnagar	49.0	49.3	49.0	48.6	48.2	49.1	47.2
Total RIL	**50.2**	**50.8**	**50.0**	**49.2**	**48.6**	**49.7**	**47.6**
NEL, Vadinar	63.8	62.7	58.6	58.9	61.1	59.7	65.2
Joint Venture Refineries							
BORL, Bina	86.2	84.2	68.4	66.9	69.2	64.8	74.1
HMEL, Bathinda	66.0	62.0	62.5	61.1	59.2	59.9	65.7
Grand Total	**66.3**	**65.5**	**65.9**	**63.3**	**62.6**	**63.0**	**64.9**

Note : New MBN from 2014-15 onwards P : Provisional *: Not Available

Source : Centre for High Technology

III. 11 : Distillate Yield of PSU Refineries

(Distillate %)

Refinery	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21(P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
IOCL, Guwahati	81.09	80.81	83.50	82.70	81.00	83.50	82.11
IOCL, Barauni	87.30	88.69	85.30	89.00	87.90	86.90	87.15
IOCL, Koyali	80.15	83.10	81.00	82.50	81.00	79.50	72.08
IOCL, Haldia	69.05	69.57	66.70	66.90	69.90	69.00	72.24
IOCL, Mathura	71.92	74.70	73.60	75.40	76.10	75.60	72.30
IOCL, Digboi	74.82	69.69	75.30	77.90	75.80	72.50	67.89
IOCL, Panipat	82.45	83.80	84.10	84.90	82.80	84.80	80.20
IOCL, Bongaigaon	83.98	84.46	83.80	84.30	84.80	80.80	84.81
IOCL, Paradip	-	-	75.30	79.40	80.80	80.70	79.18
Total IOCL	**78.78**	**80.60**	**78.81**	**80.36**	**80.36**	**80.20**	**77.18**
BPCL, Mumbai	81.76	84.29	86.15	84.30	82.20	84.90	83.66
BPCL, Kochi	84.67	85.70	85.17	83.90	82.50	84.20	83.77
Total BPCL	**83.06**	**84.92**	**85.69**	**84.10**	**82.36**	**84.50**	**83.72**
HPCL, Mumbai	75.90	76.00	77.60	77.40	77.60	77.00	76.23
HPCL, Vishakhapatnam	78.76	75.70	74.00	74.50	74.50	72.10	74.38
Total HPCL	**77.40**	**75.80**	**75.70**	**75.90**	**76.00**	**74.40**	**75.21**
CPCL(MRL), Manali	71.50	71.36	71.60	72.30	75.30	77.60	78.41
CPCL(MRL), Narimanam	71.59	79.27	78.20	79.10	77.30	-	-
Total CPCL	**71.50**	**71.77**	**71.92**	**72.62**	**75.38**	**77.60**	**78.41**
NRL, Numaligarh	90.69	89.90	90.52	86.68	87.10	83.00	86.36
MRPL, Mangalore	72.31	76.90	77.30	76.50	76.80	76.70	78.09
Grand Total (PSUs)	**78.30**	**79.90**	**79.30**	**79.70**	**79.70**	**80.00**	**78.63**

Source : Centre for High Technology

III. 12 : LNG Terminals Operational

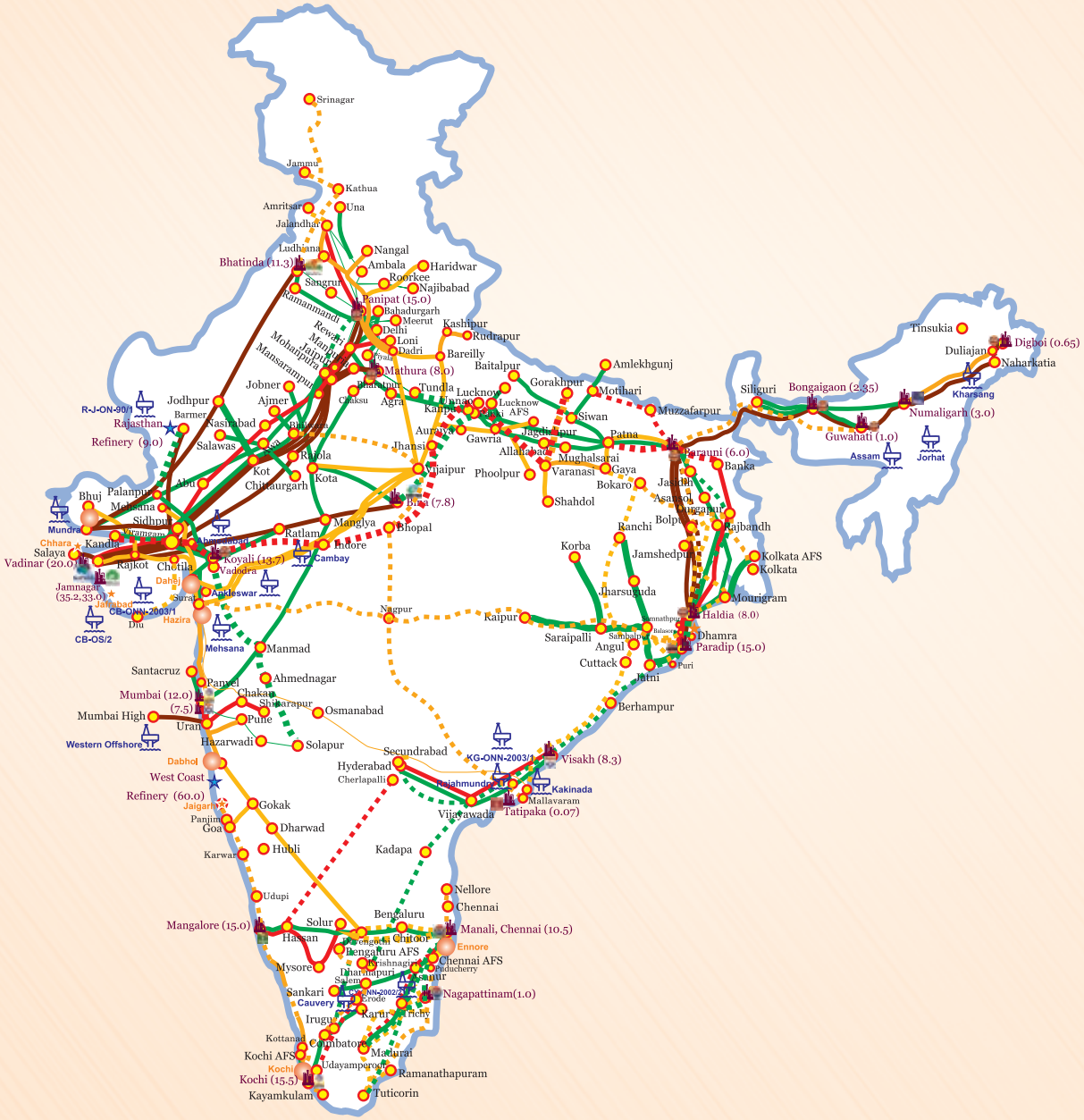
Terminal	Promoters	Capacity (MMTPA) as on 31.03.2021	Capacity Utilization (%)				
			2016-17	2017-18	2018-19	2019-20	2020-21(P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dahej (Gujarat)	Petronet LNG Ltd. (PLL)	17.5	105.31	105.30	106.50	102.08	93.69
Kochi (Kerala)		5	5.46	12.20	9.30	16.59	18.03
Hazira (Gujarat)	Hazira LNG Pvt. Ltd. (HLPL)	5	69.63	58.90	79.90	94.59	76.80
Dabhol (Maharashtra)*	Ratnagiri Gas and Power Pvt. Ltd. (RGPPL- JV of GAIL & NTPC)	5	57.07	64.90	72.10	97.40	75.60
Ennore (Tamilnadu)	IndianOil LNG Pvt. Ltd. (IOLPL)	5	-	-	-	9.0	13.0
Mundra (Gujarat)	GSPC LNG Limited (GLL)	5	-	-	-	29.63	34.80

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

P : Provisional

Source : CPSEs

Oil & Gas Map of India



LEGENDS

Refineries

Refineries (Capacity in MMTPA)

Producing Fields

Major Producing Fields

LNG Terminals

Dabhol, Dahej, Hazira, Kochi, Mundra, Ennore

(Upcoming Terminals) Dhamra, Jafrabad, Jaigarh, Chhara

LEGENDS

Pipelines Network

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

III. 13 : Existing Major Crude Oil Pipelines in India-As on 31.03.2021

Type of Pipeline / Owner/Name of Pipeline	Entity	Length (KM)	Capacity (MMT)	Throughput (MMT) 2020-21 (P)	Capacity Utilisation (%)
(1)	(2)	(3)	(4)	(5)	(6)
Salaya Mathura Pipeline	IOCL	2646	25.00	23.14	92.54
Mundra Panipat Pipeline		1194	8.40	6.09	72.54
Paradip Haldia Barauni Pipeline		1355	15.20	14.90	98.04
Salaya Mathura Pipeline		14	-	-	-
Paradip Haldia Barauni Pipeline		92	-	-	-
CTF Kalol to CTF Nawagam - New	ONGC	63	3.14	1.07	33.93
Nawagam-Koyali (18" New)		80	5.40	3.49	64.63
Nawagam-Koyali (14" Old)		78	3.30	0.00	0.00
Mehsana-Nawagam trunk line - New		77	2.27	1.97	86.98
CTF, Ankleshwar to Koyali pipeline		95	2.20	0.76	34.56
CTF, Ankleshwar to CPF, Gandhar		44	0.39	0.00	0.00
CPF, Gandhar to Saraswani 'T' point		57	1.81	0.62	34.30
Akholjuni- Koyali oil pipe line		66	0.48	0.27	55.28
Lakwa-Moran oil line (New)		15	1.50	0.44	29.37
Lakwa-Moran oil line (Old)		18	1.50	0.00	0.00
Geleki-Jorhat oil line (old)		49	1.50	0.00	0.00
Geleki-Jorhat oil line (new)		48	1.50	0.30	19.77
Borholla- Jorhat (old)		43	0.60	0.00	0.00
Borholla- Jorhat (New)		43	0.60	0.23	38.13
NRM (Narimanam) to CPCL		5	0.74	0.40	54.48
KSP-WGGS to TPK Refinery		14	0.08	0.07	80.71
GMAA EPT		4	0.09	0.02	19.61
Mumbai High - Uran Trunk Pipeline		204	15.63	7.84	50.15
Heera-Uran Trunk Pipeline		81	11.50	3.58	31.16
Bombay-Uran Trunk 30" Pipeline		203	18.00	0.07	0.40
Duliajan-Digboi-Barauni-Bongaigaon Pipeline	OIL	1193	8.95	5.97	66.70
Mundra - Bhatinda Pipeline	HMEL	1017	11.25	10.00	88.92
Vadinar - Bina Pipeline	BORL	937	7.80	6.21	79.67
Mangala- Bhogat Pipeline	CAIRN	660	8.71	5.93	68.06
Bhogat- Marine		28	2.00	1.25	62.30
Total Crude Oil Pipeline		**10419**	**159.54**	**94.61**	**59.30**

Source : Oil & Gas Companies

P : Provisional

III. 14 : Authorized Major Gas Pipelines in India As on 31.03.2021

Type of Pipeline / Owner/Name of Pipeline	Entity	Authorised Length (KM)	Capacity (MMSCMD)	Throughput (MMSCMD) 2020-21 (P)	Capacity Utilisation (%)
(1)	(2)	(3)	(4)	(5)	(6)
Hazira-Vijaipur-Jagdishpur -GREP (Gas Rehabilitation and Expansion Project)-Dahej-Vijaipur HVJ/VDPL	GAIL	4222	53.00	68.68	64.2
Dahej-Vijaipur (DVPL)-Vijaipur-Dadri (GREP) Upgradation DVPL 2 & VDPL		1280	54.00	-	-
Dahej-Uran-Panvel-Dhabhol		815	19.90	15.41	77.4
KG Basin Network		878	16.00	4.13	25.8
Gujarat Regional Network		609	18.00	3.36	18.7
Agartala Regional Network		55	2.26	0.97	42.9
Mumbai Regional Network		129	7.04	4.84	68.8
Cauvery Basin Network		240	8.66	1.80	20.8
Kochi-Koottanad-Bangalore-Mangalore		1104	16.00	3.28	20.5
Chainsa-Jhajjar-Hissar*		455	35.00	0.94	2.7
Dadri-Bawana-Nangal*		886	31.00	6.07	19.6
Dabhol-Bangalore*		1414	16.00	1.60	10.0
Jagdishpur-Haldia-Bokaro Dhamra-Paradip-Barauni-Guwahati *		3546	23.00	0.09	0.4
Srikakulam -Angul*		690	6.65	-	-
Mumbai-Nagpur-Jharsuguda*		1755	16.50	-	-
Dukli-Maharajganj		5	0.08	0.05	-
Dadri Panipat R LNG Pipeline	IOCL	132	20.00	5.47	27.4
Ennore-Tuticorn RLNG *		1431	84.67	2.11	2.5
Gujarat Gas Grid	GSPL	2265	43.00	36.55	85.0
Duliajan to Numaligarh	DNPL	194	1.20	0.82	68.5
Assam Regional Network	AGCL	105	2.10	0.95	45.2
East-West Pipeline	PIL	1459	67	11.99	17.9
Shahdol-Phulpur Pipeline	RGPL	312	3.50	0.82	23.4
20" Uran Trombay Gas Line	ONGC	24	6.00	2.86	47.6
North-East Natural Gas Pipeline Grid*	IGGL	1656	4.75	-	-
Hazira-Ankleshwar (HAPi)	GGL	73	4.20	1.02	24.3
Mehsana-Bhatinda*	GIGL	1850	80.11	2.72	3.4
Bhatinda-Jammu-Srinagar*		740	42.42	0.01	-
Mallavaram-Bhopal-Bhilwara-Vijaipur*	GITL	1850	80.11	0.24	0.3
Kakinada-vizag-Srikakulam*	APGDC	275	90.00	-	-
Others Authorised Pipelines		3315	-	-	-
Total Authorized Gas Pipeline		**33764**	**-**	**-**	**-**
Total Operational Gas Pipelines		**19998**	**-**	**-**	**-**
Total Under construction Gas Pipelines		**15369**	**-**	**-**	**-**

Note :

1. The sum of operational and under construction length of natural gas pipeline may be more than the total authorised length, as the entities are allowed to lay additional pipeline within tariff zone in the line with the provisions of the NGPL Authorisation regulations.
2. The above operational and under construction length of pipelines includes the available length of Sub-Transmission Pipelines owned by the CGD entities.

P : Provisional * : Under Construction

Source : PNGRB & Gas Companies

III. 15 : Existing Major LPG & Petroleum Products Pipelines in India - As on 31.03.2021

Type of Pipeline / Owner/Name of Pipeline	Entity	Length (KM)	Capacity (MMT)	Throughput (MMT) 2020-21 (P)	Capacity Utilisation (%)
(1)	(2)	(3)	(4)	(5)	(6)
Total LPG Pipeline		**3738**	**9.54**	**8.52**	**89.35**
Jamnagar-Loni Pipeline	GAIL	1414	2.50	2.85	114.12
Vizag-Secunderabad Pipeline	GAIL	618	1.33	1.31	98.50
Panipat Jalandhar Pipeline	IOCL	280	0.70	0.59	84.00
Paradip Haldia Durgapur Pipeline	IOCL	873	1.27	1.13	89.06
Uran LPG Pipeline	BPCL	28	0.80	0.68	85.13
Mangalore-Hassan-Mysore-Solur Pipeline	HPCL	356	1.94	1.08	55.52
Uran-Chakan-Shikrapur LPG Pipeline	HPCL	169	1.00	0.88	88.44
Total Product Pipelines (Excl. LPG Pipelines)		**14727**	**101.12**	**66.82**	**66.08**
Koyali Ahmedabad Pipeline	IOCL	79	1.10	0.45	41.09
Koyali Sanganer Pipeline	IOCL	1644	5.00	4.04	80.78
Koyali Ratlam Pipeline	IOCL	265	2.00	0.78	38.95
Koyali Dahej Pipeline	IOCL	197	2.60	0.63	24.38
Barauni Kanpur Pipeline	IOCL	1227	3.50	2.96	84.51
Haldia Mourigram Rajbandh Pipeline	IOCL	277	1.35	1.53	113.48
Haldia Barauni Pipeline	IOCL	526	1.25	1.47	117.92
Guwahati Siliguri Pipeline	IOCL	435	1.40	1.68	119.86
Panipat Bhatinda Pipeline	IOCL	219	1.50	1.30	86.40
Panipat Rewari Pipeline	IOCL	155	2.10	1.47	69.81
Panipat Ambala Jalandhar Pipeline	IOCL	495	3.50	2.60	74.14
Panipat Delhi Pipeline	IOCL	189	3.00	0.76	25.43
Panipat Bijwasan ATF Pipeline	IOCL	111			
Mathura Delhi Pipeline	IOCL	147	3.70	1.76	47.46
Mathura Tundla Pipeline	IOCL	56	1.20	0.43	35.92
Mathura Bharatpur Pipeline	IOCL	21		0.16	
Chennai Trichy Madurai Pipeline	IOCL	683	2.30	2.46	107.00
Chennai Banglore Pipeline	IOCL	290	2.45	1.76	71.80
Chennai Meenambakkam ATF Pipeline	IOCL	95	0.18	0.12	65.56
Devangonthi Devanhalli Pipeline	IOCL	36	0.66	0.30	45.76
Paradip Raipur Ranchi Pipeline	IOCL	1073	5.00	3.46	69.26
Kolkata ATF Pipeline	IOCL	27	0.20	0.06	27.50
Mumbai-Manmad-Bijwasan pipeline	BPCL	1389	6.00	6.78	112.95
Bina-Kota pipeline (BKPL)	BPCL	259	4.40	3.36	76.39
ATF P/L Mumbai Refinery (MR)-Santacruz	BPCL	15	1.40	0.27	19.48
ATF P/L Kochi Refinery (KR)-Kochi Airport	BPCL	34	0.60	0.17	28.01
Kota - Jobner branch pipeline[1]	BPCL	211	1.70	0.43	25.09
Mumbai Refinery- Wadilube Pipeline	BPCL	12	1.30	0.29	22.59
Cochin-Coimbatore-Karur (CCK) pipeline	BPCL	293	3.30	3.29	99.73
Mumbai-Pune-Solapur pipeline	HPCL	508	4.30	3.14	72.96

Contd...

Type of Pipeline / Owner/Name of Pipeline	Entity	Length (KM)	Capacity (MMT)	Throughput (MMT) 2020-21 (P)	Capacity Utilisation (%)
(1)	(2)	(3)	(4)	(5)	(6)
Visakh-Vijaywada-Secunderabad pipeline	HPCL	572	7.70	4.56	59.18
Mundra-Delhi pipeline[2]	HPCL	1054	6.90	3.62	52.49
Branchline: Awa-Salawas pipeline[2]	HPCL	93	-	-	-
Branchline: Palanpur-Vadodara Pipeline[2]	HPCL	235	-	-	-
Branchline: Rewari- Kanpur Pipeline[2]	HPCL	443	-	-	-
Ramanmandi-Bahadurgarh	HPCL	243	7.11	4.93	69.38
Spurline: Bahadurgarh-Tikrikalan pipeline	HPCL	14	0.00	0.00	0.00
Ramanmandi-Bathinda pipeline	HPCL	30	2.10	1.03	48.96
Mumbai - Vashi Black Oil Pipeline	HPCL	21	1.50	0.33	22.33
Mumbai Refinery to Mumbai Airport ATF Pipeline	HPCL	20	0.50	0.18	35.65
Trombay to Wadibundar Lube Oil Pipeline	HPCL	17	1.00	0.43	42.71
Petronet Mangalore-Hassan-Bangalore Pipeline	HPCL	363	5.60	2.14	38.21
OIL: Numaligarh - Siliguri Pipeline	**OIL**	**654**	**1.72**	**1.70**	**98.78**
Total Petroleum Products Pipeline		**18465**	**110.66**	**75.34**	**68.08**

Note :

1. Kota-Jobner Pipeline is a branch pipeline of Mumbai Manmad Bijwasan pipeline with annual capacity of 1.7 MMTPA.Throughput of this pipeline is included in MMBPL & BKPL pipelines.
2. ASPL, PVPL and RKPL are branch lines of MDPL. BTPL is a Spurline of RBPL. MDPL End-Section Rewari-Bahadurgarh can operate in reverse direction. Thus RKPL is fed from MDPL and RBPL Mainlines. Capacities / Throughputs of Branch / Spurline form part of their respective Mainlines.

Source : Oil & Gas Companies

P : Provisional

III. 16 : Tonnage of Indian Tankers Fleet (as on 31st March)

	2015	2016	2017	2018	2019	2020	2021 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. Coastal Trade (Oil Tankers)							
1. Product Carriers							
No. of tankers/Ships	14	14	15	16	16	17	18
Dead Weight Tonnage (in TMT)	44	44	46	47	46	48	94
Gross Registered Tonnage (in TMT)	41	41	43	44	44	46	74
2. Crude Oil Carriers							
No. of tankers/Ships	3	4	4	4	4	5	4
Dead Weight Tonnage (in TMT)	358	403	403	403	403	477	432
Gross Registered Tonnage (in TMT)	190	219	219	219	219	263	234
3. Offshore Supply Vessels							
No. of tankers/Ships	102	106	106	101	101	101	104
Dead Weight Tonnage (in TMT)	110	114	119	114	117	121	126
Gross Registered Tonnage (in TMT)	114	133	138	133	137	137	143
4. Specialized vessels for offshore							
No. of tankers/Ships	36	36	36	37	37	38	38
Dead Weight Tonnage (in TMT)	49	49	49	49	49	48	48
Gross Registered Tonnage (in TMT)	87	87	87	87	87	86	86
Total (1+2+3+4)							
No. of tankers/Ships	155	160	161	158	158	161	164
Dead Weight Tonnage (in TMT)	560	609	617	613	615	694	700
Gross Registered Tonnage (in TMT)	433	481	488	484	488	531	536
B. Overseas Trade (Oil Tankers)							
5. Ore Oil Bulk Carriers							
No. of tankers/Ships	1	1	1	1	1	1	0
Dead Weight Tonnage (in TMT)	46	46	46	46	46	46	0
Gross Registered Tonnage (in TMT)	28	28	28	28	28	28	0
6. Crude Oil Carriers							
No. of tankers/Ships	60	63	65	71	69	70	67
Dead Weight Tonnage (in TMT)	5608	5858	6231	7246	7005	7052	6704
Gross Registered Tonnage (in TMT)	3148	3287	3459	3989	3857	3889	3708
7. Product Carriers							
No. of tankers/Ships	47	50	53	56	63	66	68
Dead Weight Tonnage (in TMT)	3313	3440	3555	3660	3939	3974	3919
Gross Registered Tonnage (in TMT)	1931	2010	2088	2150	2326	2345	2322
8. LPG Carriers							
No. of tankers/Ships	8	11	14	19	19	17	16
Dead Weight Tonnage (in TMT)	223	303	451	696	808	736	723
Gross Registered Tonnage (in TMT)	236	302	431	640	683	622	607
Total Overseas (5+6+7+8)							
No. of tankers/Ships	116	125	133	147	152	154	151
Dead Weight Tonnage (in TMT)	9190	9646	10283	11648	11798	11808	11346
Gross Registered Tonnage (in TMT)	5343	5627	6006	6807	6894	6885	6636
Total Oil Tankers (A+B)							
No. of tankers/Ships	**271**	**285**	**294**	**305**	**310**	**315**	**315**
Dead Weight Tonnage (in TMT)	**9750**	**10256**	**10899**	**12260**	**12413**	**12502**	**12046**
Gross Registered Tonnage (in TMT)	**5776**	**6108**	**6493**	**7292**	**7382**	**7416**	**7172**

Note : Total may not tally due to rounding off

Source : Directorate General of Shipping, Mumbai.

III. 17 : Share of Petroleum Products Traffic in the Total Traffic Handled at Major Ports

(in Million Tonnes)

Name of the port	Year	Total Traffic	POL Traffic	POL as % age of total traffic at the port
(1)	(2)	(3)	(4)	(5)
Kolkata/Haldia	2018-19	63.76	9.52	14.93
	2019-20	63.98	10.33	16.15
	2020-21	61.34	9.36	15.26
Mumbai	2018-19	60.59	37.30	61.56
	2019-20	60.69	38.14	62.84
	2020-21	53.32	34.28	64.29
Chennai	2018-19	53.01	13.30	25.09
	2019-20	46.76	13.42	28.70
	2020-21	43.55	10.23	23.49
Cochin	2018-19	32.02	21.91	68.43
	2019-20	34.04	23.24	68.27
	2020-21	31.51	19.52	61.95
Deendayal (Kandla)	2018-19	115.40	59.31	51.40
	2019-20	122.61	63.89	52.11
	2020-21	117.56	53.26	45.30
Visakhapatnam	2018-19	65.30	16.32	24.99
	2019-20	72.72	18.91	26.00
	2020-21	69.84	16.02	22.94
Mormugao	2018-19	17.68	0.60	3.39
	2019-20	16.02	0.66	4.12
	2020-21	21.95	0.41	1.87
J.N.P.T.	2018-19	70.71	4.79	6.77
	2019-20	68.45	3.87	5.65
	2020-21	64.81	3.60	5.55
Paradip	2018-19	109.28	38.12	34.88
	2019-20	112.69	37.33	33.13
	2020-21	114.55	33.12	28.91
Tuticorin (V.O. Chidambaranar)	2018-19	34.34	0.59	1.72
	2019-20	36.08	0.53	1.47
	2020-21	31.79	0.45	1.42
New Mangalore	2018-19	42.51	25.85	60.81
	2019-20	39.14	22.61	57.77
	2020-21	36.50	21.89	59.97
Kamarajar (Ennore)	2018-19	34.50	4.74	13.74
	2019-20	31.75	5.07	15.97
	2020-21	25.89	4.62	17.84
Grand Total	**2018-19**	**699.10**	**232.35**	**33.24**
	2019-20	**704.93**	**238.00**	**33.76**
	2020-21	**672.61**	**206.76**	**30.74**

Source : Ministry of Shipping.

III. 18 : Movement of POL Traffic on Railways

Year	Tonnes Originating (TMT)	Earnings (in ₹crore)	Average Lead (Kms)	Earnings (Paisa/Tonnes/Kms)	Average Freight (₹/Tonne)
(1)	(2)	(3)	(4)	(5)	(6)
2014-15	41095	5516	662	203	1342
2015-16	43238	5927	678	202	1371
2016-17	42422	5686	672	199	1340
2017-18	43108	5668	685	192	1315
2018-19	43010	5632	682	192	1309
2019-20	44680	5928	689	193	1327
2020-21(P)	**43040**	**5835**	**657**	**136**	**1356**

Source : Ministry of Railways

P : Provisional

III. 19 : State-wise PDS SKO Kerosene allocated and Quantity Uplifted

(Figures in KL)

State	2018-19		2019-20		2020-21	
	Allocation	Sales	Allocation	Sales	Allocation	Sales
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andaman & Nicobar Islands*	4128	3786	1944	1458	0	0
Andhra Pradesh*	0	0	0	0	0	0
Arunachal Pradesh	7920	7158	6444	5239	4752	3699
Assam	245856	242578	181920	176867	155568	153143
Bihar	332592	329588	263028	243927	212736	212355
Chandigarh*	0	0	0	0	0	0
Chhattisgarh	115056	91542	82404	69140	58272	56095
Dadra & Nagar Haveli and Daman & Diu*	0	0	0	0	0	0
Delhi*	**0**	**0**	**0**	**0**	**0**	**0**
Goa	2112	1416	816	648	384	384
Gujarat	249718	248657	138832	120837	84000	83059
Haryana*	0	0	0	0	0	0
Himachal Pradesh	14496	14301	11436	10791	9792	6756
Jammu and Kashmir	58476	53923	44988	38417	44988	36523
Ladakh*	-	-	3528	3428	3528	3518
Jharkhand	186768	150272	135216	107170	90000	83196
Karnataka	156000	112452	84324	66395	42480	38748
Kerala	55632	55620	41700	41700	37056	37056
Lakshadweep	768	768	768	624	768	912
Madhya Pradesh	336192	325926	260736	238544	213408	187132
Maharashtra	286680	241914	106528	52938	46528	21558
Manipur	17904	17680	13260	12656	11088	11252
Meghalaya	19440	19272	19260	18936	18864	17892
Mizoram	4800	4800	3612	3600	3216	3192
Nagaland	10272	9792	9300	8928	8592	8439
Odisha	248448	247739	210568	208283	194304	190291
Puducherry*	0	0	0	0	0	0
Punjab*	0	0	0	0	0	0
Rajasthan	137992	69288	40000	16204	14150	936
Sikkim	3456	3432	2556	2535	2256	2109
Tamil Nadu	193776	193775	145320	145319	129168	129167
Telangana	97920	94297	56592	29800	16032	2880
Tripura	29376	29300	26352	26166	25152	25089
Uttar Pradesh	887856	873517	517888	449490	181702	26526
Uttrakhand	25344	10011	7992	498	2208	374
West Bengal	704016	699313	704016	692683	704016	696512
All India	**4432994**	**4152117**	**3121328**	**2793217**	**2315008**	**2038790**

Note : * : Zero represent PDS kerosene free State/UTs.

Source : Distribution Section, MoPNG

III. 20 : Marketing Infrastructure of PNG Industry in India

	Period	Unit	IOCL	HPCL	BPCL	RIL	NEL	SHELL	Others	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Retail Outlets	31.03.2019	Nos.	27702	15440	14805	1400	5128	145	7	64627
	31.03.2020	Nos.	29085	16476	16234	1400	5702	189	7	69093
	31.03.2021	Nos.	32062	18634	18637	1420	6059	264	18	77094
		%	41.6	24.2	24.2	1.8	7.9	0.3	0.0	100.0
LPG Active Domestic Consumers	31.03.2019	Nos. in Lakh	1240	732	681	-	-	-	-	2654
	31.03.2020	Nos. in Lakh	1311	767	709	-	-	-	-	2787
	31.03.2021	Nos. in Lakh	1358	792	744	-	-	-	-	2895
		%	46.9	27.4	25.7	-	-	-	-	100.0
LPG Distributors	31.03.2019	Nos.	11964	5866	5907	-	-	-	-	23737
	31.03.2020	Nos.	12450	6110	6110	-	-	-	-	24670
	31.03.2021	Nos.	12726	6192	6165	-	-	-	-	25083
		%	50.5	24.8	24.8	-	-	-	-	100.0
SKO/LDO Dealerships	31.03.2019	Nos.	3889	1638	1001	-	-	-	-	6528
	31.03.2020	Nos.	3882	1638	1001	-	-	-	-	6521
	31.03.2021	Nos.	3871	1638	930	-	-	-	-	6439
		%	59.5	25.1	15.4	-	-	-	-	100.0
POL Terminal/ Depots[1]	31.03.2019	Nos.	125	82	78	18	2	-	6	311
	31.03.2020	Nos.	118	81	79	17	2	-	6	303
	31.03.2021	Nos.	118	80	80	17	2	-	6	303
		%	38.9	26.4	26.4	5.6	0.7	-	2.0	100.0
Aviation Fuelling Station[2]	31.03.2019	Nos.	116	43	57	31	-	-	1	248
	31.03.2020	Nos.	119	44	61	31	-	-	1	256
	31.03.2021	Nos.	121	46	60	31	-	-	1	259
		%	46.72	17.76	23.17	11.97	-	-	0.39	100
LPG Bottling Plants[3]	31.03.2019	Nos.	91	49	51	12	-	-	3	206
	31.03.2020	Nos.	93	50	52	14	-	-	3	212
	31.03.2021	Nos.	95	51	53	13	-	-	3	215
		%	44.19	23.72	24.65	6.05	-	-	1.40	100
Capacity of LPG Bottling Plants[4]	31.03.2019	MMTPA	9.70	5.10	4.18	0.11	-	-	0.20	19.29
	31.03.2020	MMTPA	10.04	5.58	4.59	0.12	-	-	0.19	20.52
	31.03.2021	MMTPA	10.39	5.91	4.89	0.12	-	-	0.19	21.49
		%	48.33	27.51	22.75	0.55	-	-	0.86	100

Note :

1. Others of POL terminal/depot includes 6 (MRPL 4 & NRL 2)
2. Others of AFS includes 1 from MRPL.
3. Others of LPG bottling plants includes 3 (CPCL 1, NRL 1 & OIL 1)
4. Others of LPG bottling plants capacities includes 0.19 MMTPA (CPCL 0.12 MMT, NRL 0.042 MMT & OIL 0.023 MMT)

Source : Oil Companies

III. 21 : State-wise Number of Retail Outlets

States/UT's	2017	2018	2019	2020	2021
(1)	(2)	(3)	(4)	(5)	(6)
Andaman & Nicobar Islands	12	14	14	16	**16**
Andhra Pradesh	3197	3336	3430	3721	**4047**
Arunachal Pradesh	74	85	94	116	**152**
Assam	828	871	895	980	**1104**
Bihar	2604	2695	2859	2968	**3158**
Chandigarh	41	41	42	42	**47**
Chhattisgarh	1176	1249	1278	1462	**1808**
Dadra & Nagar Haveli and Daman & Diu	63	63	62	61	**61**
Delhi	**396**	**397**	**398**	**398**	**400**
Goa	115	116	118	118	**122**
Gujarat	3765	4025	4159	4575	**5149**
Haryana	2726	2862	2932	3060	**3412**
Himachal Pradesh	414	432	439	494	**563**
Jammu and Kashmir	494	503	509	530	**552**
Jharkhand	1189	1207	1215	1358	**1535**
Karnataka	4027	4215	4386	4811	**5500**
Kerala	2048	2100	2140	2238	**2395**
Ladakh	0	0		3	**12**
Lakshadweep	0	0		0	**0**
Madhya Pradesh	3528	3711	3832	4230	**4981**
Maharashtra	5684	5970	6159	6458	**7048**
Manipur	85	97	104	136	**160**
Meghalaya	198	203	209	225	**238**
Mizoram	37	41	43	45	**55**
Nagaland	70	73	79	94	**120**
Odisha	1639	1681	1707	1894	**2070**
Puducherry	160	165	165	164	**174**
Punjab	3380	3427	3452	3551	**3772**
Rajasthan	4116	4476	4661	4967	**5615**
Sikkim	50	51	51	55	**57**
Tamil Nadu	5039	5387	5627	5805	**6355**
Telangana	2434	2625	2768	3077	**3571**
Tripura	68	71	72	79	**94**
Uttar Pradesh	7069	7473	7763	8210	**9315**
Uttarakhand	570	590	602	629	**686**
West Bengal	2299	2333	2363	2523	**2750**
TOTAL	**59595**	**62585**	**64627**	**69093**	**77094**

Source : Oil Companies

III. 22 : State-wise Number of Active LPG Domestic Consumers

States/UT's	2017	2018	2019	2020	2021
(1)	(2)	(3)	(4)	(5)	(6)
Andaman & Nicobar Islands	77048	77818	95216	111914	**116534**
Andhra Pradesh	11628019	13164722	13400938	13698139	**14288832**
Arunachal Pradesh	196643	212424	247144	265723	**284368**
Assam	3290532	4626873	6380250	7114327	**7368622**
Bihar	9943156	12958952	16405554	17586885	**18649169**
Chandigarh	270006	272930	274506	278565	**281659**
Chhattisgarh	3112980	4017727	4787168	5204320	**5320754**
Dadra & Nagar Haveli and Daman & Diu	138552	140829	148710	159187	**162637**
Delhi	**4780716**	**4824565**	**4942352**	**4955648**	**5053091**
Goa	454979	469977	481802	501716	**518919**
Gujarat	7757798	8587610	10059531	10534513	**10895030**
Haryana	5413035	5952169	6614281	6901299	**7210546**
Himachal Pradesh	1407236	1527088	1726749	1966911	**2053143**
Jammu and Kashmir	1964174	2266050	2983661	3147033	**3242616**
Jharkhand	2583493	3365159	5172328	5615407	**5766773**
Karnataka	11529133	13080566	15412792	16016923	**16702757**
Kerala	8015385	8287720	8608602	8794625	**9100272**
Ladakh				79971	**84215**
Lakshadweep	3956	5390	7691	8267	**10076**
Madhya Pradesh	9425246	10792567	14114369	14963370	**15372920**
Maharashtra	22192528	24102724	26928428	27628751	**28757177**
Manipur	334555	400301	503977	550390	**593423**
Meghalaya	143813	189129	298297	318746	**332316**
Mizoram	243837	249976	283205	300109	**321037**
Nagaland	180406	196934	246597	264534	**280710**
Odisha	4497851	5928365	7977388	8588263	**8886588**
Puducherry	344318	355032	369483	370003	**380597**
Punjab	6901373	7353947	8307357	8549514	**8850563**
Rajasthan	11052001	12285550	15446522	16251372	**16702775**
Sikkim	115544	122969	136529	146170	**159701**
Tamil Nadu	17170554	18428977	20691449	21114555	**21687145**
Telangana	8921099	9436266	10555226	10895927	**11363991**
Tripura	440158	505271	698279	738083	**759240**
Uttar Pradesh	27547819	30212427	37597958	40379541	**42319240**
Uttarakhand	2116878	2239506	2521811	2650520	**2786682**
West Bengal	14569049	17627457	20939075	22058515	**22819027**
TOTAL	**198763870**	**224265967**	**265365225**	**278709736**	**289483145**

Source : Central Public Sector Enterprises

III. 23 : State-wise Number of LPG Distributors

States/UT's	2017	2018	2019	2020	2021
(1)	(2)	(3)	(4)	(5)	(6)
Andaman & Nicobar Islands	5	5	9	9	**9**
Andhra Pradesh	876	940	1015	1057	**1062**
Arunachal Pradesh	59	66	83	83	**85**
Assam	447	468	522	559	**590**
Bihar	1076	1109	1799	1938	**1993**
Chandigarh	27	27	27	27	**26**
Chhattisgarh	374	443	523	534	**534**
Dadra & Nagar Haveli and Daman & Diu	5	6	6	6	**6**
Delhi	**321**	**321**	**323**	**322**	**321**
Goa	51	52	54	55	**55**
Gujarat	759	774	901	968	**1006**
Haryana	479	540	614	621	**623**
Himachal Pradesh	166	168	196	203	**206**
Jammu and Kashmir	246	253	282	269	**269**
Jharkhand	392	401	491	536	**572**
Karnataka	1007	1043	1171	1238	**1261**
Kerala	594	610	659	675	**691**
Ladakh			0	18	**18**
Lakshadweep	1	1	1	1	**1**
Madhya Pradesh	1240	1268	1450	1507	**1528**
Maharashtra	1756	1827	2134	2184	**2206**
Manipur	82	84	99	99	**101**
Meghalaya	49	51	62	62	**64**
Mizoram	54	54	58	59	**59**
Nagaland	60	61	78	81	**83**
Odisha	576	753	912	938	**955**
Puducherry	25	27	27	27	**28**
Punjab	759	808	851	856	**857**
Rajasthan	1063	1099	1333	1372	**1385**
Sikkim	15	16	22	24	**26**
Tamil Nadu	1245	1353	1567	1623	**1632**
Telangana	694	715	764	777	**785**
Tripura	62	63	73	74	**77**
Uttar Pradesh	2959	3395	4052	4110	**4126**
Uttarakhand	253	268	306	313	**314**
West Bengal	1009	1077	1273	1445	**1529**
TOTAL	**18786**	**20146**	**23737**	**24670**	**25083**

Source : Central Public Sector Enterprises

III. 24 : State-wise Number of SKO/LDO Dealerships

States/UT's	2017	2018	2019	2020	2021
(1)	(2)	(3)	(4)	(5)	(6)
Andaman & Nicobar Islands	2	2	2	2	**2**
Andhra Pradesh	413	413	394	394	**384**
Arunachal Pradesh	33	33	33	33	**33**
Assam	359	359	359	359	**359**
Bihar	372	372	371	371	**362**
Chandigarh	12	12	12	12	**12**
Chhattisgarh	108	108	108	108	**108**
Dadra & Nagar Haveli and Daman & Diu	7	7	7	7	**7**
Delhi	**116**	**116**	**116**	**116**	**111**
Goa	22	22	22	22	**22**
Gujarat	478	476	473	473	**470**
Haryana	141	141	141	141	**139**
Himachal Pradesh	26	26	26	26	**26**
Jammu and Kashmir	45	45	47	45	**45**
Jharkhand	87	87	87	87	**87**
Karnataka	323	318	315	315	**311**
Kerala	237	237	237	237	**234**
Ladakh	2	2	0	2	**2**
Lakshadweep	0	0	0	0	**0**
Madhya Pradesh	284	284	284	284	**284**
Maharashtra	767	767	767	766	**752**
Manipur	36	36	36	36	**36**
Meghalaya	35	35	35	35	**35**
Mizoram	19	19	19	19	**19**
Nagaland	19	19	19	19	**19**
Odisha	177	177	177	177	**176**
Puducherry	8	8	8	8	**8**
Punjab	237	237	237	237	**237**
Rajasthan	250	250	250	250	**248**
Sikkim	12	12	12	12	**12**
Tamil Nadu	466	466	466	465	**458**
Telangana	183	183	202	202	**202**
Tripura	40	40	40	40	**40**
Uttar Pradesh	696	696	695	691	**675**
Uttarakhand	73	73	73	73	**69**
West Bengal	458	458	458	457	**455**
All India	**6543**	**6536**	**6528**	**6521**	**6439**

Source : Central Public Sector Enterprises

III. 25 : State-wise Number of PMUY connections issued

State / UT	2017	2018	2019	2020	2021
(1)	(2)	(3)	(4)	(5)	(6)
Andaman & Nicobar Islands	1189	1711	7889	12436	**12602**
Andhra Pradesh	63428	80044	342598	391860	**391625**
Arunachal Pradesh	0	6362	39315	44699	**44670**
Assam	2	1128139	2835940	3484901	**3474326**
Bihar	2476953	4913150	7894786	8537893	**8523573**
Chandigarh	0	0	88	88	**87**
Chhattisgarh	1105441	1952120	2692704	2989440	**2988523**
Dadra & Nagar Haveli	3211	11437	14108	14747	**14739**
Daman & Diu	73	203	422	427	**427**
Delhi	**516**	**677**	**73797**	**76855**	**76190**
Goa	954	984	1072	1082	**1081**
Gujarat	752354	1269014	2521066	2901059	**2899233**
Haryana	278751	357112	680456	730928	**726751**
Himachal Pradesh	1601	29741	112918	135966	**135960**
Jammu & Kashmir	263889	370227	1042680	1230997	**1230134**
Ladakh	1898	2693	10338	11083	**11072**
Jharkhand	536912	1203543	2904575	3261556	**3258502**
Karnataka	15840	909014	2822822	3146300	**3143099**
Kerala	11241	38393	209923	256302	**256136**
Lakshadweep	0	134	290	290	**292**
Madhya Pradesh	2239821	3315172	6445785	7154600	**7143875**
Maharashtra	858808	1877378	4063804	4428682	**4419772**
Manipur	25	32617	130377	156598	**156398**
Meghalaya	0	36844	140311	150744	**150526**
Mizoram	0	902	25781	28118	**28122**
Nagaland	0	9225	49402	55140	**54096**
Odisha	1011955	2300335	4226289	4740385	**4736666**
Puducherry	760	2621	13374	13577	**13568**
Punjab	245008	382351	1208962	1224218	**1219883**
Rajasthan	1722694	2625634	5695525	6368525	**6359564**
Sikkim	0	687	7798	8752	**8752**
Tamil Nadu	272749	1018051	3141843	3242217	**3237695**
Telangana	41	41	923841	1072321	**1071393**
Tripura	0	46379	238393	271888	**271530**
Uttar Pradesh	5531159	6486116	12963097	14756494	**14733034**
Uttarakhand	113866	137440	352921	404566	**403234**
West Bengal	2520479	5056785	8062319	8856695	**8839050**
All India	**20031618**	**35603276**	**71897609**	**80162429**	**80036180**

Source : Central Public Sector Enterprises

III. 26 : State-wise Number of Operational POL Terminal / Depots (as on 1st April)

State / UT	2019	2020	2021
(1)	(2)	(3)	(4)
Andaman & Nicobar Islands	1	1	**1**
Andhra Pradesh	23	22	**21**
Arunachal Pradesh	1	1	**1**
Assam	7	7	**7**
Bihar	9	9	**9**
Chandigarh	1	1	**1**
Chhattisgarh	5	3	**3**
Dadra & Nagar Haveli and Daman & Diu	2	0	**0**
Delhi	4	4	**4**
Goa	3	2	**2**
Gujarat	17	18	**18**
Haryana	9	9	**9**
Himachal Pradesh	4	2	**2**
Jammu and Kashmir	7	7	**7**
Jharkhand	8	7	**7**
Karnataka	22	22	**22**
Kerala	9	9	**9**
Ladakh	0	2	**2**
Lakshadweep	0	0	**0**
Madhya Pradesh	17	18	**18**
Maharashtra	33	33	**34**
Manipur	1	1	**1**
Meghalaya	0	0	**0**
Mizoram	1	1	**1**
Nagaland	1	1	**1**
Odisha	10	10	**10**
Puducherry	0	0	**0**
Punjab	11	10	**10**
Rajasthan	14	14	**14**
Sikkim	2	2	**2**
Tamil Nadu	22	22	**22**
Telangana	8	8	**8**
Tripura	1	1	**1**
Uttar Pradesh	32	31	**31**
Uttarakhand	7	7	**7**
West Bengal	19	18	**18**
All India	**311**	**303**	**303**

Source : Oil Companies

III. 27 : State-wise Number of Aviation Fuelling Station (as on 1st April)

State / UT	2019	2020	2021
(1)	(2)	(3)	(4)
Andaman & Nicobar Islands	2	2	**2**
Andhra Pradesh	12	12	**13**
Arunachal Pradesh	3	4	**4**
Assam	12	12	**13**
Bihar	6	6	**7**
Chandigarh	1	1	**1**
Chhattisgarh	6	6	**7**
Dadra & Nagar Haveli and Daman & Diu	2	2	**2**
Delhi	8	8	**7**
Goa	4	4	**4**
Gujarat	18	18	**19**
Haryana	2	2	**2**
Himachal Pradesh	3	3	**3**
Jammu and Kashmir	9	7	**7**
Jharkhand	4	5	**5**
Karnataka	15	16	**15**
Kerala	13	13	**13**
Ladakh	0	2	**2**
Lakshadweep	0	1	**1**
Madhya Pradesh	9	8	**8**
Maharashtra	20	21	**22**
Manipur	2	2	**2**
Meghalaya	2	2	**2**
Mizoram	1	1	**1**
Nagaland	2	2	**2**
Odisha	8	9	**9**
Puducherry	1	1	**1**
Punjab	11	12	**12**
Rajasthan	13	13	**13**
Sikkim	1	1	**1**
Tamil Nadu	20	21	**20**
Telangana	6	6	**6**
Tripura	2	2	**2**
Uttar Pradesh	17	18	**18**
Uttarakhand	2	2	**2**
West Bengal	11	11	**11**
All India	**248**	**256**	**259**

Source : Oil & Gas Companies

III. 28 : LPG Bottling Plants in the Country (as on 1st April)

State / UT	No. of LPG Bottling Plants			Capacity (in MMTPA)		
	2019	2020	2021	2019	2020	2021
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andaman & Nicobar Islands	1	1	1	0.01	0.01	**0.01**
Andhra Pradesh	9	9	9	0.90	1.02	**1.02**
Arunachal Pradesh	1	1	0	0.01	0.01	**0.00**
Assam	8	9	8	0.65	0.64	**0.63**
Bihar	6	8	8	0.87	1.05	**1.11**
Chandigarh	0	0	0	0.00	0.00	**0.00**
Chhattisgarh	3	3	3	0.21	0.27	**0.27**
Dadra & Nagar Haveli and Daman & Diu	0	0	0	0.00	0.00	**0.00**
Delhi	**2**	**2**	**2**	**0.42**	**0.48**	**0.48**
Goa	2	2	2	0.09	0.09	**0.09**
Gujarat	17	17	17	1.04	1.16	**1.22**
Haryana	6	6	6	0.84	0.84	**0.90**
Himachal Pradesh	2	2	2	0.09	0.09	**0.09**
Jammu and Kashmir	4	3	3	0.16	0.15	**0.18**
Jharkhand	4	4	4	0.31	0.31	**0.31**
Karnataka	11	11	11	1.51	1.51	**1.57**
Kerala	7	7	7	0.69	0.69	**0.69**
Ladakh	0	0	0	0.00	0.01	**0.01**
Lakshadweep	0	0	0	0.00	0.00	**0.00**
Madhya Pradesh	10	10	10	0.82	0.88	**0.94**
Maharashtra	24	25	25	2.27	2.39	**2.39**
Manipur	1	1	1	0.03	0.03	**0.03**
Meghalaya	0	0	0	0.00	0.00	**0.00**
Mizoram	1	1	1	0.00	0.00	**0.00**
Nagaland	1	1	1	0.01	0.01	**0.01**
Odisha	4	4	6	0.36	0.42	**0.51**
Puducherry	1	1	1	0.05	0.05	**0.05**
Punjab	6	7	8	0.72	0.84	**0.90**
Rajasthan	12	13	12	0.99	1.00	**1.06**
Sikkim	1	1	1	0.01	0.01	**0.01**
Tamil Nadu	18	19	20	1.61	1.79	**1.86**
Telangana	5	5	5	0.66	0.66	**0.66**
Tripura	1	1	1	0.02	0.02	**0.02**
Uttar Pradesh	25	24	26	2.56	2.64	**2.91**
Uttarakhand	3	3	3	0.18	0.18	**0.18**
West Bengal	10	10	10	1.21	1.27	**1.39**
All India	**206**	**212**	**215**	**19.29**	**20.52**	**21.49**

Source : Oil & Gas Companies

III. 29 : CNG activities in India

State/UT (s)	Company name	(Sales in TMT) #				
		2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh*	Bhagyanagar Gas Limited, Godavari Gas Private Limited, Megha Engineering & Infrastructure Limited	28.53	31.65	30.94	20.89	13.43
Assam	Assam Gas Company Limited	0.00	0.00	0.00	0.02	0.05
Bihar	GAIL (India) Limited, Think Gas Begusarai Pvt Limited	0.00	0.00	0.00	2.02	4.72
Chandigarh, Haryana, Punjab & Himachal Pradesh	Indian Oil-Adani Gas Pvt. Ltd.	0.00	5.19	14.65	21.05	13.82
Dadra & Nagar Haveli**	Gujarat Gas Limited	0.00	0.00	0.00	2.80	2.09
Daman and Diu	Indian Oil-Adani Gas Pvt. Ltd.	0.00	0.92	1.70	2.20	1.37
Delhi NCT***	Indraprastha Gas Ltd .	803.84	1016.14	1143.96	1032.84	785.17
Goa	Goa Natural Gas Private Limited, Indian Oil-Adani Gas Pvt Ltd	0.00	0.00	0.00	0.03	0.15
Gujarat **	Adani Total Gas Limited, Charotar Gas Sahakari Mandali Limited, Gujarat Gas Limited , Hindustan Petroleum Corporation Limited, IRM Energy Private Limited, Sabarmati Gas Limited, Torrent Gas Private Limited, Vadodara Gas Limited	546.31	612.01	662.41	744.70	649.49
Gujarat & UT of Daman and Diu	IRM Energy Private Limited	0.00	0.00	0.00	0.07	1.36
Haryana	Adani Gas Limited, GAIL Gas Limited, Haryana City Gas Distribution Limited, HPOIL Gas Private Limited, IndianOil-Adani Gas Private Limited, Indraprastha Gas Limited, Hindustan Petroleum Corporation Limited, Haryana City Gas (KCE) Private Limited, Haryana City Gas Distribution (Bhiwadi) Limited, Bharat Gas Resources Limited	109.00	144.32	178.61	196.67	173.33
Haryana & Himachal Pradesh	Indian Oil-Adani Gas Private Limited	0.00	0.00	0.00	0.00	0.08
Haryana & Punjab	Gujarat Gas Limited	0.00	0.00	0.00	0.00	1.45
Jharkhand	GAIL (India) Limited	0.00	0.00	0.00	0.34	1.16
Karnataka	AGP City Gas Private Limited, GAIL Gas Ltd, IndianOil-Adani Gas Pvt Ltd, Maharashtra Natural Gas Limited, Megha Engineering & Infrastructure Limited, Unison Enviro Private Limited	0.01	0.03	0.27	1.44	2.77
Kerala	AGP City Gas Private Limited, Indian Oil-Adani Gas Pvt Ltd.	0.00	0.00	1.39	5.82	4.37
Madhya Pradesh	Aavantika Gas Limited, GAIL Gas Limited, Gujarat Gas Limited, Naveriya Gas Private Limited, Rajasthan State Gas Limited, Think Gas Bhopal Private Limited, Indian Oil Corporation Limited (Vijaypur CNG Station)	21.59	24.77	30.64	34.13	23.59
Madhya Pradesh & Rajasthan	Gujarat Gas Limited	0.00	0.00	0.00	0.00	0.26
Maharashtra	Bharat Gas Resources Limited, Gujarat Gas Limited, HPOIL Gas Private Limited, Mahanagar Gas Limited, Maharashtra Natural Gas Limited, Torrent Gas Pune Limited, Unison Enviro Private Limited	592.59	630.17	701.81	738.19	503.81
Maharashtra & Gujarat	Maharashtra Natural Gas Limited	0.00	0.00	0.00	0.00	1.42
Odisha	GAIL (India) Limited, GAIL Gas Limited	0.00	0.06	1.14	3.28	2.36
Puducherry (UT) & Tamil Nadu	Torrent Gas Private Limited	0.00	0.00	0.00	0.00	0.00

Contd...

State/UT (s)	Company name	(Sales in TMT) #				
		2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Punjab	Bharat Gas Resources Limited, Gujarat Gas Limited, Gujarat State Petronet Limited, IRM Energy Private Limited, Think Gas Ludhiana Private Limited, Torrent Gas Private Limited	0.00	0.00	1.27	6.54	13.96
Rajasthan	Adani Total Gas Limited, AGP City Gas Private Limited, Dholpur CGD Private Limited, Gujarat Gas Limited, Rajasthan State Gas Limited, Torrent Gas Private Limited	4.27	4.87	7.40	9.49	14.98
Tamil Nadu	AGP City Gas Private Limited	0.00	0.00	0.00	0.00	0.00
Telangana*	Bhagyanagar Gas Limited, Torrent Gas Private Limited	0.00	0.00	0.00	13.01	8.93
Tripura	Tripura Natural Gas Company Limited	12.30	13.29	14.65	16.26	18.08
Uttar Pradesh	Adani Gas Limited, Central UP Gas Limited, GAIL (India) Limited, GAIL Gas Limited, Green Gas Limited, IndianOil-Adani Gas Private Limited, Indraprastha Gas Limited, Sanwariya Gas, Torrent Gas Private Limited, Bagpat Green Energy Pvt. Ltd.	245.42	152.80	282.26	392.04	339.29
Uttar Pradesh & Uttarakhand	Hindustan Petroleum Corporation Limited	0.00	0.00	0.00	0.00	0.36
Uttar Pradesh & Madhya Pradesh	Adani Gas Limited	0.00	0.00	0.00	0.00	0.40
Uttarakhand	GAIL GAs Limited, Haridwar Natural Gas Private Limited, IndianOil-Adani Gas Private Limited,	0.00	0.00	0.12	1.06	5.01
West Bengal	Bengal Gas Company Limited, Great Eastern Energy Corporation Ltd. , IndianOil-Adani Gas Private Limited, Hindustan Petroleum Corporation Limited	1.64	2.02	2.50	2.42	1.86
Total		**2365.50**	**2638.23**	**3075.73**	**3247.31**	**2589.11**

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

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

*** Delhi contains information for Delhi NCT only.

Source : PPAC

III. 30 : CNG Stations Status (as on 31.03.2021) (P)

State/Union Territory	Geographical Area/ CGD Networks	Authorized CGD Entity	CNG Stations
Andhra Pradesh	Kakinada, West Godavari District, East Godavari District (EAAA), Vijaywada , Krishna District (EAAA)	Bhagyanagar Gas Limited, Godavari Gas Private Limited, Megha Engineering & Infrastructure Limited	85
Assam	Upper Assam	Assam Gas Company Limited	1
Bihar	Patna District, Begusarai District, Aurangabad, Kaimur & Rohtas Districts	GAIL (India) Limited, Think Gas Begusarai Private Limited, Indian Oil Corporation Limited	13
Chandigarh (UT), Haryana, Punjab & Himachal Pradesh	Chandigarh	Indian-Oil Adani Gas Private Limited	17
Dadra & Nagar Haveli (UT)	UT of Dadra & Nagar Haveli	Gujarat Gas Limited	7
Daman & Diu (UT)	UT of Daman	Indian-Oil Adani Gas Private Limited	4
Daman and Diu & Gujarat	Diu & Gir Somnath Districts	IRM Energy Private Limited	9
Goa	North Goa District, South Goa District	Goa Natural Gas Private Limited, Indian-Oil Adani Gas Private Limited	7
Gujarat	Surat, Bharuch, Ankleshwar, Ahmedabad City and Daskroi Area, Rajkot, Gandhinagar Mehsana Sabarkantha, Vadodara, Gandhinagar, Valsad, Navsari, Nadiad, Anand District (EAAA), Bhavnagar, Hazira, Anand area including Kanjari & Vadtal Villages (in Kheda District), Banaskantha District, Jamnagar, Panchmahal District, Patan District, Amreli District, Dahod District, Kutch (West), Dahej Vagra Taluka, Vadodara, Narmada (Rajpipla) District, Ahmedabad City (Only for CNG), Kheda District (EAAA) & Mahisagar District, Junagadh District, Ahmedabad District (EAAA), Surendranagar District (EAAA) & Morbi District (EAAA), Navsari District (EAAA), Surat District (EAAA), Tapi District (EAAA) & the Dangs District, Porbandar District, Barwala & Ranpur Talukas	Gujarat Gas Limited, Adani Gas Limited, Sabarmati Gas Limited, Vadodara Gas Limited, Charotar Gas Sahakari Mandali Limited, IRM Energy Private Limited, Hindustan Petroleum Corporation Limited, Torrent Gas Private Limited	779
Haryana	Faridabad, Sonipat, Gurugram, Panipat District, Rewari District, Kaithal District, Karnal District, Ambala & Kurukshetra Districts, Yamunanagar District, Nuh and Palwal Distircts, Rohtak District, Jhajjar District, Bhiwani, Charkhi Dadri & Mahendragarh Districts, Sonipat District (EAAA) & Jind District, Hisar District, Gurugram	Adani Gas Limited, GAIL Gas Limited, Haryana City Gas Distribution Limited, Indian-Oil Adani Gas Private Limited, Indraprastha Gas Limited, HPOIL Gas Private Limited, Bharat Petroleum Corporation Limited, Haryana City Gas (KCE) Private Limited, Hindustan Petroleum Corporation Limited, HCG (KCE) Private Limited	175
Haryana & Himachal Pradesh	Panchkula District (EAAA), Sirmaur, Shimla & Solan (EAAA) Districts	Indian-Oil Adani Gas Private Limited	5
Haryana & Punjab	Sirsa, Fatehabad and Mansa (Punjab) Districts	Gujarat Gas Limited	8
Himachal Pradesh	Bilaspur, Hamirpur & Una Districts	Bharat Gas Resources Limited	1
Jharkhand	Ranchi District, East Singhbhum District, Giridih & Dhanbad Districts, Seraikela-Kharsawan District, Bokaro, Hazaribagh & Ramgarh Districts	GAIL (India) Limited, GAIL Gas Limited, Indian Oil Corporation Limited	25
Karnataka	Bengaluru Rural and Urban Districts, Tumkur District, Dharwad District, Belgaum District, Dakshina Kannada District*, Ramanagara District, Ballari & Gadag Districts, Udupi District, Chitradurga & Davanagere Districts, Mysuru, Mandya and Chamarajanagar Districts, Bidar District	GAIL Gas Limited, Megha Engineering & Infrastructure Limited, Indian-Oil Adani Gas Private Limited, Maharashtra Natural Gas Limited, Bharat Gas Resources Limited, Unison Enviro Private Limited, Adani Gas Limited, AGP City Gas Private Limited	72

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State/Union Territory	Geographical Area/ CGD Networks	Authorized CGD Entity	CNG Stations
Kerala	Ernakulam District, Palakkad & Thrissur Districts, Alapuzzha, Kollam and Thiruvananthapuram Districts, Kozhikode & Wayanad Districts, Malappuram District	Indian-Oil Adani Gas Private Limited, AGP City Gas Private Limited	27
Madhya Pradesh	Indore (including Ujjain City), Gwalior, Dewas, Satna & Shandol Districts, Rewa District, Dhar District, Guna District, Raisen, Shajapur and Sehore Districts, Bhopal & Rajgarh Districts, Ujjain (EAAA) District, Dewas (EAAA) District and Indore (EAAA) District, Gwalior (EAAA) District and Sheopur District, Shivpuri District	Aavantika Gas Limited, GAIL Gas Limited, Bharat Gas Resources Limited, Indian Oil Corporation Limited, Naveriya Gas Private Limited, Think Gas Bhopal Private Limited, Gujarat Gas Limited, Rajasthan State Gas Limited	94
Madhya Pradesh and Rajasthan	Jhabua, Banswara, Ratlam and Dungarpur Districts	Gujarat Gas Limited	8
Madhya Pradesh and Uttar Pradesh	Jhansi (EAAA) District, Bhind, Jalaun, Lalitpur and Datia Districts	Adani Gas Limited	6
Maharashtra	Mumbai & Greater Mumbai,Thane urban and adjoining Municipalities, Pune City including Pimpri - Chichwad & adjoining contigeneous areas Hinjewadi, Chakan, Talegaon, Raigarh District (EAAA), Kolhapur District, Pune District (EAAA), Sindhudurg District, Ratnagiri District, Palghar District & Thane Rural, Sangli & Satara Districts, Ahmednagar & Aurangabad Districts, Latur & Osmanabad Districts	Mahanagar Gas Limited, Maharashtra Natural Gas Limited, HPOIL Gas Private Limited, Torrent Gas Pune Limited, Unison Enviro Private Limited, Gujarat Gas Limited, Bharat Gas Resources Limited	456
Maharashtra & Gujarat	Valsad (EAAA), Dhule & Nashik Districts	Maharashtra Natural Gas Limited	32
National Capital Territory of Delhi (UT)	National Capital Territory of Delhi	Indraprastha Gas Limited	436
Odisha	Khordha District, Cuttack District, Ganjam, Nayagarh & Puri Districts, Sundargarh & Jharsuguda Districts, Balasore, Bhadrak & Mayurbhanj Districts	GAIL (India) Limited, GAIL Gas Limited, Adani Gas Limited	24
Puducherry & Tamil Nadu	Karaikal & Nagapattinam Districts	Torrent Gas Private Limited	2
Punjab	Rupnagar District, Amritsar District, Fatehgarh Sahib District, Bhatinda District, Ludhiana District (EAAA), Barnala & Moga Districts, SAS Nagar District (EAAA), Patiala & Sangrur Districts, Hoshiarpur and Gurdaspur Districts, Jalandhar District (EAAA), Kapurthala & SBS Nagar Districts, Jalandhar, Ludhiana, Ferozepur, Faridkot and Sri Muktsar Sahib Districts	Bharat Petroleum Corporation Limited, Gujarat Gas Limited, IRM Energy Private Limited, Think Gas Ludhiana Private Limited, Torrent Gas Private Limited, Jay Madhok Energy Private Limited led Consortium,	93
Rajasthan	Ajmer, Pali and Rajsamand Districts, Kota, Bhiwadi (in Alwar District), Barmer, Jaisalmer & Jodhpur Districts, Kota District (EAAA), Baran & Chittorgarh (Only Rawatbhata Taluka) Districts, Chittorgarh (Other than Rawatbhata Taluka) & Udaipur Districts*, Jalore and Sirohi Districts, Bhilwara & Bundi Districts, Dholpur District, CNG (DBS) NOC	Indraprastha Gas Limited, Rajasthan State Gas Limited , Haryana City Gas Distribution (Bhiwadi) Limited, AGP CGD India Private Limited, Torrent Gas Private Limited, Adani Gas Limited, Gujarat Gas Limited, Dholpur CGD Private Limited	61
Tamil Nadu	Tiruppur District, Cuddalore, Nagapattinam & Tiruvarur Districts, Ramanathapuram District	Adani Gas Limited, AGP CGD India Private Limited	21
Telangana	Hyderabad, Medak, Siddipet & Sangareddy Districts	Bhagyanagar Gas Limited, Torrent Gas Private Limited	97
Tripura	Agartala, West Tripura (EAAA) District, Gomati District	Tripura Natural Gas Company Limited	12

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State/Union Territory	Geographical Area/ CGD Networks	Authorized CGD Entity	CNG Stations
Uttar Pradesh	Gautam Budh Nagar District, Ghaziabad & Hapur Districts, Kanpur, Agra, Lucknow, Meerut, Varanasi District, Allahabad, Bareilly, Meerut District (EAAA), Muzaffarnagar & Shamli Districts, Kanpur (EAAA) District, Fatehpur and Hamirpur Districts, Moradabad, Saharanpur District, Khurja, Mathura, Amethi, Pratapgarh & Raebareli Districts, Mirzapur, Chandauli and Sonbhadra Districts, Jhansi, Faizabad & Sultanpur Districts, Moradabad (EAAA) District, Auraiya, Kanpur Dehat & Etawah Districts, Allahabad District (EAAA), Bhadohi & Kaushambi Districts, Basti and Ambedkarnagar Districts, Gonda and Barabanki Districts, Azamgarh, Mau and Ballia Districts, Farrukhabad, Etah and Hardoi Districts, Bareilly (EAAA) District, Pilibhit and Rampur Districts, Bulandshahr District (EAAA), Aligarh & Hathras Districts, Shahjahanpur and Budaun Districts, Bulandshahr (part) District, Mainpuri and Kannauj Districts, Bagpat District, Bagpat District, Jaunpur and Ghazipur Districts, Jaunpur and Ghazipur Districts, Unnao (EAAA) District, Gorakhpur, Sant Kabir Nagar & Kushinagar Districts	Indraprastha Gas Limited, Central UP Gas Limited, Green Gas Limited, GAIL (India) Limited, Indian-Oil Adani Gas Private Limited, Torrent Gas Moradabad Limited, Bharat Petroleum Corporation Limited, Adani Gas Limited, Sanwariya Gas Limited, Bharat Gas Resources Limited, Central UP Gas Limited, Torrent Gas Private Limited, Hindustan Petroleum Corporation Limited, Bagpat Green Energy Private Limited,	453
Uttar Pradesh & Rajasthan	Firozabad (Taj Trapezium Zone)	GAIL Gas Limited	27
Uttar Pradesh and Uttrakhand	Bijnor and Nainital Districts	Hindustan Petroleum Corporation Limited	6
Uttrakhand	Haridwar District, Udham Singh Nagar District, Dehradun District	Haridwar Natrural Gas Private Limited, Indian-Oil Adani Gas Private Limited, GAIL Gas Limited	16
West Bengal	Kolkata Muncipal Corporation and Parts of Adjoining Districts, Burdwan District, Howrah (EAAA) District and Hoogly (EAAA) District, Nadia (EAAA) District and North 24 Parganas (EAAA) District, CNG Stations	Bengal Gas Company Limited, Hindustan Petroleum Corporation Limited, Great Eastern Energy Corporation Limited (GEECL)	16
Grand Total			**3,095**

Source : PPAC

Note :

1. All the GAs where PNG connections/CNG Stations have been established is considered as Operational.
2. Under normal conditions, operation of any particular GA commences within around one year of authorization.
3. EAAA stands for Excluding/Except Area Already Authorized | * stands for Sub-Judice

III. 31 : PNG Connection Status (as on 31.03.2021)

State/Union Territory	Geographical Area/ CGD Networks	Authorized CGD Entity	Domestic	Commercial	Industrial
Andhra Pradesh	Kakinada, Vijayawada, East Godavari District (EAAA), West Godavari District, Krishna District (EAAA), Chittoor, Kolar and Vellore Districts	Bhagyanagar Gas Limited, Godavari Gas Private Limited, Megha Engineering & Infrastructure Limited, AGP City Gas Private Limited	211603	288	19
Assam	Upper Assam, Cachar, Hailakandi & Karimganj Districts	Assam Gas Company Ltd., Purba Bharati Gas Pvt Ltd.	36691	1179	404
Bihar	Patna District	GAIL (India) Limited	30336	11	0
Chandigarh	Chandigarh	Indian-Oil Adani Gas Private Limited	111737	37	11
Dadra & Nagar Haveli	UT of Dadra & Nagar Haveli	Gujarat Gas Limited	7458	54	54
Daman and Diu	UT of Daman	Indian-Oil Adani Gas Private Limited	4817	30	29
Delhi	National Capital Territory of Delhi	Indraprastha Gas Limited	1065662	2683	1589
Goa	North Goa District	Goa Natural Gas Private Limited	5963	2	9
Gujarat	Surat, Bharuch, Ankleshwar, Ahmedabad City and Daskroi Area, Rajkot, Gandhinagar Mehsana Sabarkantha, Vadodara, Gandhinagar, Valsad, Navsari, Nadiad, Anand District (EAAA), Bhavnagar, Hazira, Anand area including Kanjari & Vadtal Villages (in Kheda District).	Gujarat Gas Limited, Adani Gas Limited, Sabarmati Gas Limited, Vadodara Gas Limited, Charotar Gas Sahakari Mandali Limited, IRM Energy Private Limited	2421755	20243	5411
Haryana	Faridabad, Sonipat, Gurugram, Panipat District, Rewari District, Kaithal District, Ambala & Kurukshetra Districts, Yamunanagar District, Nuh and Palwal Distircts, Rohtak District, Jhajjar District, Gurugram,	Adani Gas Limited, GAIL Gas Limited, Haryana City Gas Distribution Limited, Indian-Oil Adani Gas Private Limited, Indraprastha Gas Limited, HPOIL Gas Private Limited, Bharat Petroleum Corporation Limited, Haryana City Gas (KCE) Private Limited	190054	521	895
Himachal Pradesh	Bilaspur, Hamirpur & Una Districts	Bharat Gas Resources Limited	1000	0	0
Jharkhand	Ranchi District , East Singhbhum District, Giridih & Dhanbad Districts, Seraikela-Kharsawan District	GAIL (India) Limited, GAIL Gas Limited	41986	0	0
Karnataka	Bengaluru Rural and Urban Districts, Tumkur District, Dharwad District, Belgaum District, Dakshina Kannada District*, Ramanagara District	GAIL Gas Limited, Indian Oil-Adani Gas Private Limited, Megha Engineering & Infrastructure Limited, Maharashtra Natural Gas Limited	247039	416	199
Kerala	Ernakulum District, Alapuzzha, Kollam and Thiruvananthapuram Districts	Indian Oil-Adani Gas Private Limited, AGP City Gas Private Limited	42429	12	12
Madhya Pradesh	Indore (including Ujjain City), Gwalior, Dewas, Satna & Shandol Districts, Rewa District, Dhar District, Guna District, Raisen, Shajapur and Sehore Districts, Bhopal & Rajgarh Districts,	Think Gas Bhopal Private Limited, Aavantika Gas Limited, GAIL Gas Limited, Indian Oil Corporation Limited, Naveriya Gas Private Limited, Bharat Gas Resources Limited	103963	181	287

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State/Union Territory	Geographical Area/ CGD Networks	Authorized CGD Entity	Domestic	Commercial	Industrial
Maharashtra	Mumbai & Greater Mumbai, Thane urban and adjoining Municipalities, Pune City including Pimpri - Chichwad & adjoining contigeneous areas Hinjewadi, Chakan, Talegaon, Raigarh District (EAAA), Kolhapur District, Pune District (EAAA), Sindhudurg District, Ratnagiri District, Palghar District & Thane Rural, Sangli & Satara Districts	Gujarat Gas Limited, HPOIL Gas Private Limited, Mahanagar Gas Limited, Maharashtra Natural Gas Limited, Unison Enviro Private Limited, Torrent Gas Pune Limited, Bharat Gas Resources Limited	1968976	4502	394
Maharashtra & Gujarat	Valsad (EAAA), Dhule & Nashik Districts	Maharashtra Natural Gas Limited	25023	0	0
Odisha	Khordha District, Cuttack District, Sundargarh & Jharsuguda Districts, Ganjam, Nayagarh & Puri Districts	GAIL (India) Limited, GAIL Gas Limited	26790	0	0
Punjab	Rupnagar District, Amritsar District, Fatehgarh Sahib District, Bhatinda District, Ludhiana District (EAAA), Barnala & Moga Districts, SAS Nagar District (EAAA), Patiala & Sangrur Districts	Bharat Petroleum Corporation Limited, Gujarat Gas Limited, IRM Energy Private Limited, Gujarat Gas Limited, Think Gas Ludhiana Private Limited, Torrent Gas Private Limited,	10981	54	51
Rajasthan	Ajmer, Pali and Rajsamand Districts, Kota, Bhiwadi (in Alwar District), Barmer, Jaisalmer & Jodhpur Districts, Kota District (EAAA), Baran & Chittorgarh (Only Rawatbhata Taluka) Districts	Indraprastha Gas Limited, Rajasthan State Gas Limited, Haryana City Gas Distribution (Bhiwadi) Limited, AGP CGD India Private Limited, Torrent Gas Private Limited	56209	18	70
Telangana	Hyderabad, Medak, Siddipet & Sangared-dy Districts	Bhagyanagar Gas Limited, Torrent Gas Private Limited	143248	28	49
Tripura	Agartala, West Tripura (EAAA) District	Tripura Natural Gas Company Limited	49107	491	62
Uttar Pradesh	Gautam Budh Nagar District, Ghaziabad & Hapur Districts, Kanpur, Agra, Lucknow, Meerut, Varanasi District, Allahabad, Bareilly, Meerut District (EAAA), Muzaffarnagar & Shamli Districts, Kanpur (EAAA) District, Fatehpur and Hamirpur Districts, Moradabad, Saharanpur District, Khurja, Mathura, Amethi, Pratapgarh & Raebareli Districts, Mirzapur, Chandauli and Sonbhadra Districts, Jhansi, Faizabad & Sultanpur Districts, Moradabad (EAAA) District, Auraiya, Kanpur Dehat & Etawah Districts, Allahabad District (EAAA), Bhadohi & Kaushambi Districts, Gorakhpur, Sant Kabir Nagar & Kushinagar Districts,	Adani Gas Limited, Central UP Gas Limited, GAIL (India) Limited, GAIL Gas Limited, Green Gas Limited, Indian Oil-Adani Gas Private Limited, Indraprastha Gas Limited, Sanwariya Gas, Torrent Gas Private Limited, Bharat Petroleum Corporation Limited, Bharat Gas Resources Limited	960573	1555	1877
Uttar Pradesh & Rajasthan	Firozabad (Taj Trapezium Zone)	GAIL Gas Limited	18000	1	341
Uttarakhand	Udham Singh Nagar District, Haridwar District, Dehradun District	Indian Oil-Adani Gas Private Limited, Haridwar Natural Gas Private Limited, GAIL Gas Limited	38987	33	40
West Bengal	CNG stations at Asansol, Raniganj, Kultora, Durgapur, Burdwan District	Great Eastern Energy Corporation Limited, Indian Oil-Adani Gas Private Limited,	0	0	0
Total			**7820387**	**32339**	**11803**

Source : PPAC/PNGRB

Note :

1. All the GAs where PNG connections/CNG Stations have been established is considered as Operational.
2. Under normal conditions, operation of any particular GA commences within around one year of authorization.
3. EAAA stands for Excluding/Except Area Already Authorized | * stands for Sub-Judice.

CHAPTER-IV

Prices

CHAPTER HIGHLIGHTS

Wholesale Price Index (WPI) inflation for all commodities stood at 1.3% in 2020-21 as compared to 1.7% in 2019-20. The WPI growth during 2020-21, in Crude Petroleum, Natural Gas and Petroleum Products stood at (-) 15.8%, (-) 21.5% and (-) 14.2% respectively with respect to growth of the respective commodities as (-) 12.7, 6.6 and (-) 4.6% in 2019-20.

Out of all Petroleum Products, Inflation was observed only in Lube oil (4.2%) and Petroleum Coke (3%) in 2020-21 vis-a-vis 2019-20. Deflation was observed for other Petroleum Products namely LPG (2.7%), Petrol (11.8%), Naphtha (20.9%), Kerosene (32.4%), Aviation Turbine Fuel (35.7%), High Speed Diesel Oil (14.4%), Furnace Oil (16.2%) and Bitumen (5.9%) in 2020-21 vis-a-vis 2019-20.

Index of Eight Core Industries stood at (-) 6.5 in 2020-21 as compared to 0.4 in 2019-20. During 2020-21, Crude Oil production (weight: 8.98%) declined by 5.2%, Net Natural Gas production (weight: 6.88 per cent) declined by 8.2% and Petroleum Refinery production (weight: 28.04 per cent) declined by 11.2% over the 2019-20.

Domestic price of Natural Gas reduced by around 25.1% from 2.39(USD/MMBTU) as on 1st April, 2020 to 1.79(USD/MMBTU) as on 1st April, 2021.

International crude oil price (Indian basket) dipped by 25.9% from 60.47 US $/bbl during 2019-20 to 44.82 US $/bbl during 2020-21. Among major Petroleum products, the highest reduction (38.2%) in International FOB price is observed for Kerosene and the least reduction (8.5%) is observed for LPG comparing 2020-21 vis-à-vis 2019-20.

Share of petroleum sector in total subsidy/ under-recovery on Petroleum Products & Natural Gas has decreased by 50.1% in 2020-21 (₹ 12231 crore) as compared to 2019-20 (₹ 26620 crore).

As on 1st April, 2021, Retail Selling Prices of Liquefied Petroleum Gas (₹/14.2 Kg Cylinder) for metropolitan cities of India namely Delhi, Kolkata, Mumbai and Chennai are ₹ 809, ₹ 835.50, ₹ 809 and ₹ 825 respectively.

IV. 1 : Indices of Selected Oil & Gas Products (Base Year 2011-12=100)

Items	Weight (%)	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Wholesale Price Index								
All commodities	**100.00**	**113.90**	**109.70**	**111.60**	**114.90**	**119.80**	**121.80**	**123.40**
Crude Petroleum & Natural Gas	**2.41**	**103.50**	**76.60**	**73.10**	**73.00**	**92.40**	**85.30**	**70.40**
Crude Petroleum	1.95	95.20	60.90	63.80	65.00	84.30	73.60	62.00
Natural Gas	0.46	138.50	142.60	112.30	106.40	126.20	134.50	105.60
Total Petroleum Products (Mineral Oils)	**7.95**	**108.70**	**73.90**	**73.30**	**82.50**	**96.70**	**92.30**	**79.20**
LPG	0.64	103.50	76.70	72.00	82.20	92.10	84.50	82.20
Petrol	1.60	108.60	75.70	72.40	80.30	88.40	85.60	75.50
Naphtha	0.87	103.00	66.90	66.50	74.50	92.60	82.30	65.10
Kerosene	0.19	103.50	88.40	94.30	117.80	152.40	172.80	116.80
Aviation Turbine Fuel	0.32	105.10	69.50	69.30	78.70	102.80	97.20	62.50
High Speed Diesel Oil	3.10	114.80	73.40	74.40	84.40	97.10	93.70	80.20
Furnace Oil	0.67	93.60	54.30	58.10	68.80	94.70	81.00	67.90
Lube Oil	0.29	118.80	120.80	116.80	114.00	124.80	131.70	137.20
Bitumen	0.23	106.10	77.10	68.00	71.30	85.60	82.80	77.90
Petroleum Coke	0.05	94.30	78.30	93.00	117.20	149.70	128.60	132.40
Index of Eight Core Industries								
Overall Index	**100.00**	**111.73**	**115.06**	**120.53**	**125.69**	**131.18**	**131.65**	**123.10**
Index of Coal	10.33	112.55	117.99	121.75	124.88	134.10	133.62	131.13
Index of Crude Oil	8.98	98.35	96.99	94.54	93.68	89.80	84.46	80.06
Index of Natural Gas	6.88	70.55	67.22	66.52	68.42	68.98	65.09	59.77
Index of Petroleum Refinery Products	28.04	108.83	114.13	119.71	125.20	129.11	129.40	114.88
Index of Fertilizers	2.63	99.38	106.36	106.58	106.61	106.98	109.83	111.47
Index of Steel	17.92	121.74	120.19	133.09	140.51	147.67	152.62	138.94
Index of Cement	5.37	118.06	123.51	121.99	129.72	146.98	145.69	129.10
Index of Electricity	19.85	126.63	133.83	141.64	149.18	156.87	158.35	157.57

Source : Office of Economic Adviser, Ministry of Commerce & Industry

IV. 2 : Consumer and Producer Prices of Natural Gas

Effective Date	Consumer Prices		Producer Prices			Calorific Value (K. Cal / SCM)	Domestic Price of Natural Gas	Gas Price Ceiling
	Off-shore (Land-fall point) and On-shore	For North-East States	ONGC	ONGC (North-East States)	OIL (North-East States)		(USD/ MMBTU)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
01.04.2014	10168	6101	10168	10168	10168	10000	-	-
01.11.2014	12292	7375	12292	12292	12292	10000	-	-
01.04.2015	11548	6929	11548	11548	11548	10000	4.66	-
01.10.2015	10038	6023	10038	10038	10038	10000	3.82	-
01.04.2016	8138	4883	8138	8138	8138	10000	3.06	6.61
01.10.2016	6621	3973	6621	6621	6621	10000	2.50	5.3
01.04.2017	6483	3890	6483	6483	6483	10000	2.48	5.56
01.10.2017	7390	4434	7390	7390	7390	10000	2.89	6.3
01.04.2018	7895	4737	7895	7895	7895	10000	3.06	6.78
01.10.2018	9629	5789	9629	9629	9629	10000	3.36	7.67
01.04.2019	10174	6093	10174	10174	10174	10000	3.69	9.32
01.10.2019	9143	5491	9143	9143	9143	10000	3.23	8.43
01.04.2020	7052	4219	7052	7052	7052	10000	2.39	5.61
01.10.2020	5219	3120	5219	5219	5219	10000	1.79	4.06
01.04.2021	5170	3091	5170	5170	5170	10000	1.79	3.62

Notes :

1. GOI has issued the New Domestic Gas Pricing Guidelines on 25.10.2014. In line with these guidelines, PPAC declared the price of natural gas half yearly.
2. Producer Price as well as Consumer price of natural gas produced by the NOCs including ONGC is fixed by the MoPNG, Government of India from time to time. Till 31.10.2014, different gas prices were applicable for APM (Administrative Price Mechanism) and non-APM customers. MoPNG has notified "New Domestic Natural Gas Pricing Guidelines, 2014" on 25 Oct'14. These guidelines are effective from 01 Nov'14.
3. The above guidelines shall not be applicable to:

i) The Gas to be produced from Discoveries in Deepwater, Ultra Deepwater, and High Pressure-High Temperature areas, in terms of MoPNG letter dated 21.03.16 (Marketing including pricing freedom).

ii) CBM gas, in terms of Government Notification dt. 11.04.17.

Source : ONGC, OIL and PPAC

IV. 3 : Month-wise & Year-wise Average International Crude Oil Prices (Indian Basket)

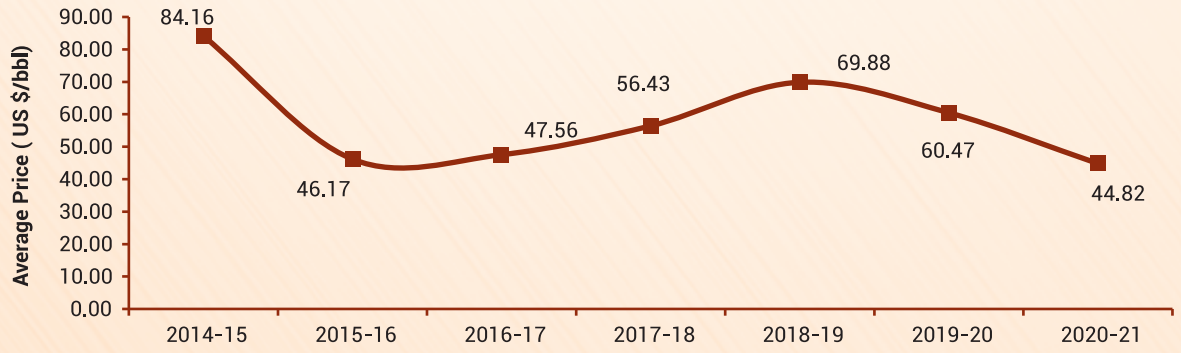
(in US$/bbl.)

Year/Month	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	% Growth in 2020-21 over 2019-20
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
April	105.56	59.07	39.88	52.49	69.22	71.00	19.00	-73.24
May	106.85	63.82	45.01	50.57	75.25	70.01	30.61	-56.28
June	109.05	61.75	46.96	46.56	73.83	62.37	40.63	-34.86
July	106.30	56.30	43.52	47.86	73.47	63.63	43.35	-31.87
August	101.89	47.33	44.38	50.63	72.53	59.35	44.19	-25.54
September	96.96	46.10	44.48	54.52	77.88	61.72	41.35	-33.01
October	86.83	46.68	49.25	56.06	80.08	59.70	40.66	-31.90
November	77.58	42.50	44.46	61.32	65.40	62.53	43.34	-30.69
December	61.21	35.68	52.74	62.29	57.77	65.50	49.84	-23.91
January	46.59	28.08	54.08	67.06	59.27	64.31	54.79	-14.80
February	56.43	30.53	54.86	63.54	64.53	54.63	61.22	12.07
March	55.18	36.42	51.47	63.80	66.74	33.36	64.73	94.04
Year Average	**84.16**	**46.17**	**47.56**	**56.43**	**69.88**	**60.47**	**44.82**	**-25.88**
Ratio	**72.04:27.96**	**72.28:27.72**	**71.03:28.97**	**72.38:27.62**	**74.77:25.23**	**75.50:24.50**	**75.62:24.38**	**-**

Note : The composition of Indian Basket of Crude represents Average of Oman & Dubai for sour grades and Brent (Dated) for sweet grade in the ratio of crude processed during previous financial year, e.g. ratio of crude processed as indicated in the table above.

Source : IOCL & PPAC

Figure IV. 1 : Year-wise Average International Crude Oil Prices (Indian Basket)



IV. 4 : International FOB Prices of Crude Oil & Major Petroleum Products

Period	Crude Oil (Indian Basket)	Petrol	Diesel	Kerosene	FO	Naphtha	LPG
	($/BBL)				($/MT)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2014-15	84.16	95.45	96.64	96.98	471.99	717.44	681.42
2015-16	46.17	61.72	55.02	55.71	235.13	420.14	394.08
2016-17	47.56	58.10	56.59	56.81	258.92	415.17	393.17
2017-18	56.43	67.83	68.19	67.65	327.50	494.73	485.92
2018-19	69.88	75.58	82.51	82.24	420.93	573.72	526.00
2019-20	60.47	66.94	71.78	70.56	321.19	471.08	453.75
2020-21	**44.82**	**47.68**	**47.86**	**43.60**	**259.30**	**378.93**	**415.17**
% Growth in 2020-21 over 2019-20	**-25.88**	**-28.77**	**-33.32**	**-38.21**	**-19.27**	**-19.56**	**-8.50**

Notes : FOB: Freight on Board

1. Price of kerosene ,Diesel, Naphtha & FO is for Arab Gulf Market. LPG Price is Monthly Saudi Aramco CP based on 60:40 butane / propane ratio.
2. From 01.04.2017, the Diesel price is for 0.005% Sulphur, From 02.01.2013 the Diesel price in Arab Gulf Market is for 0.05% Sulphur, and for earlier years the price is for 0.5% Sulphur. Price of Petrol is 92 RON unleaded for Singapore market.
3. FOB prices does not include Trade premium/discounts.

Source : IOCL & PPAC

IV. 5 : Weighted Average Crude Oil Prices

(in ₹/MT)

Year		Basic Price	Royalty	OID Cess	Sales Tax/ VAT/CST
(1)	(2)	(3)	(4)	(5)	(6)
2014-15	Offshore crude	40129	3392	4500	1294
	Onshore crude	37089	5685	4500	1727
	Offshore and Onshore crude	39215	4081	4500	1425
2015-16	Offshore crude	24453	2066	4450	781
	Onshore crude	22149	3307	4404	1055
	Offshore and Onshore crude	23799	2418	4437	859
2016-17	Offshore crude	26078	2157	4105	820
	Onshore crude	23831	3578	3778	1113
	Offshore and Onshore crude	25433	2565	4011	904
2017-18	Offshore crude	28378	2395	4541	931
	Onshore crude	26648	4027	4227	1237
	Offshore and Onshore crude	27866	2878	4448	1022
2018-19	Offshore crude	36494	3232	6074	1253
	Onshore crude	34579	5555	5755	1707
	Offshore and Onshore crude	35886	3968	5973	1397
2019-20	Offshore crude	31604	2819	5254	1077
	Onshore crude	30488	4781	5157	1570
	Offshore and Onshore crude	31237	3464	5222	1239
2020-21	Offshore crude	24187	2105	4018	783
	Onshore crude	23081	3806	3897	1151
	Offshore and Onshore crude	23832	2651	3979	901

Notes :

1. Basic Price is all inclusive gross (pre-discount) price and linked to international crude price, though ONGC net price realization has been lower due to sharing of under-recoveries of OMCs by extending discount, as per the directives of MoPNG.
2. Basic Price up to 2017-18 is inclusive of VAT/CST.
3. VAT/CST and Royalty are worked out based on Gross (Pre-discount) Price. However, the above levies are actually paid on post - discount price.
4. From the Second Quarter of 2015-16 onwards, no subsidy discount has been extended by ONGC to refineries /OMCs.
5. Royalty and OID Cess are production levies and are part of cost.
6. NCCD @ ₹ 50/MT is also paid on crude oil & Education Cess @ 3% on OID Cess and NCCD were paid till 2014-15.
7. OID Cess in ₹ /MT is worked out considering specific rate of ₹ 4,500/MT from 17.03.12 till Feb'16 and "20% ad-valorem" w.e.f. 01.03.2016

Source : ONGC

IV. 6 : Rates of Dealers' Commission for MS, HSD and LPG in India

Effective	MS (₹/Kilolitre)	HSD (₹/Kilolitre)	Effective	LPG (Packed Domestic) 14.2 Kg (₹/Cylinder)	LPG (Packed Domestic) 5Kg (₹/Cylinder)	LPG (Packed Domestic) Additional commission for sale at market determined price (₹/14.2 KG cyl.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
01.04.2017	₹ 2020.38/KL + 0.859% of Product Billable Price	₹ 1502.13/KL + 0.267% of Product Billable Price	01.04.2017	47.48	23.74	0.40
			01.05.2017	47.48	23.74	0.27
			01.06.2017	47.48	23.74	0.15
01.07.2017	₹ 2025.97/KL + 0.859% of Product Billable Price	₹ 1506.81/KL + 0.267% of Product Billable Price	01.07.2017	47.48	23.74	0.13
01.08.2017	₹ 2674.74/KL + 0.859% of Product Billable Price	₹ 2031.38/KL + 0.257% of Product Billable Price	01.08.2017	47.48	23.74	0.06
			01.09.2017	47.48	23.74	0.16
			30.09.2017	48.89	24.20	0.16
			01.10.2017	48.89	24.20	0.23
			01.11.2017	48.89	24.20	0.36
			01.01.2018	48.89	24.20	0.35
			01.02.2018	48.89	24.20	0.34
			01.03.2018	48.89	24.20	0.28
			01.04.2018	48.89	24.20	0.23
			01.06.2018	48.89	24.20	0.29
			01.07.2018	48.89	24.20	0.36
			01.08.2018	48.89	24.20	0.42
			01.09.2018	48.89	24.20	0.46
			01.10.2018	48.89	24.20	0.54
			01.11.2018	48.89	24.20	0.63
			07.11.2018	50.58	25.29	0.63
			01.12.2018	50.58	25.29	0.45
			01.01.2019	50.58	25.29	0.28
			01.02.2019	50.58	25.29	0.24
19.02.2019	₹ 2637.80/KL + 0.859% of Product Billable Price	2000.60/KL + 0.257% of Product Billable Price	01.03.2019	50.58	25.29	0.30
01.04.2019	₹ 2637.80/KL + 0.859% of Product Billable Price	2000.60/KL + 0.257% of Product Billable Price	01.04.2019	50.58	25.29	0.31
			01.06.2019	50.58	25.29	0.35
			01.07.2019	50.58	25.29	0.21
			01.08.2019	56.20	28.10	-
			01.09.2019	59.02	29.51	-
			01.10.2019	61.84	30.92	-
01.04.2020	₹ 2637.80/KL + 0.859% of Product Billable Price	₹ 2000.60/KL + 0.257% of Product Billable Price	01.04.2020	61.84	30.92	-
01.04.2021	₹ 2637.80/KL + 0.859% of Product Billable Price	₹ 2000.60/KL + 0.257% of Product Billable Price	01.04.2021	61.84	30.92	-

Note : In addition to above, for Petrol and Diesel effective 1st August 2017, slab based incentive is also given to eligible dealers through credit notes, The applicable average slab based incentive effective 01.04.2021 is Rs. 310.20/KL for both petrol and diesel

Source : PPAC

IV. 7 : Subsidy Provided by the Government & Oil Companies on Petroleum Products

(in ₹ crore)

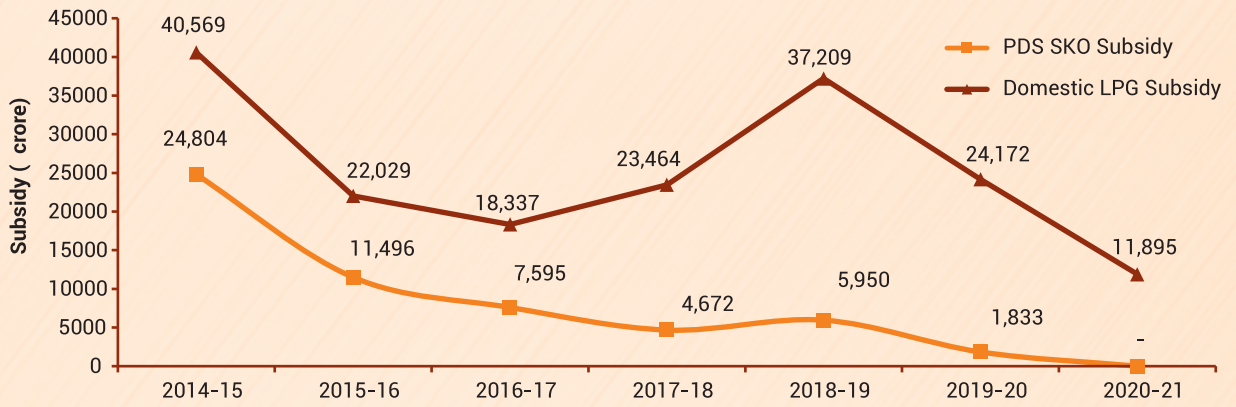
Particulars		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
Under recovery on Diesel		10,935	-	-	-	-	-	-
Under recovery on PDS Kerosene		24,799	11,496	7,595	4,672	5,950	1,833	-
Under recovery on Domestic LPG		36,580	18	-	-	-	-	-
Total Under-recoveries (A)		**72,314**	**11,515**	**7,595**	**4,672**	**5,950**	**1,833**	**-**
DBTL subsidy		3,971	16,056	12,052	20,880	31,447	22,635	3,559
Permanent Advance[1]			5,755	853				-
Project Management Expenditure[1]		-	200	-	25	92	91	99
Total DBTL related subsidies (B)		**3,971**	**22,011**	**12,905**	**20,905**	**31,539**	**22,726**	**3,658**
PMUY		-	-	2,999	2,496	5,636	1,403	(34)
PME & IEC under PMUY[1]		-	-	-	63	34	43	110
Total PMUY related subsidy (C)		**-**	**-**	**2,999**	**2,559**	**5,670**	**1,446**	**76**
DBTK subsidy (D)[2]		**-**	**-**	**11**	**113**	**98**	**42**	**-**
PDS Kerosene and Domestic LPG Subsidy Scheme, 2002[1]	SKO[4]	-	-	860	-	-	-	-
	LPG[4]	-	-	2,433	-	-	-	-
Freight Subsidy (For Far-Flung Areas) Scheme, 2002[1]	SKO	5	-	-	-	-	-	-
	LPG	18	-	-	-	-	-	-
Natural Gas Subsidy for North East		765	781	498	435	557	574	336
Other Subsidies (E)		**788**	**781**	**3,791**	**435**	**557**	**574**	**336**
PMGKY 3[(F)]		**-**	**-**	**-**	**-**	**-**	**-**	**8,162**
Total Subsidy/ Under-recovery on Petroleum Products & Natural Gas (A+B+C+D+E + F)		**77,073**	**34,307**	**27,300**	**28,684**	**43,814**	**26,620**	**12,231**
Compensation								
By the Government		32,067	33,037	27,300	28,684	43,814	26,620	12,231
Upstream/Midstream Oil/Gas Companies		42,822	1,251	-	-	-	-	-
Borne by the OMCs		2,184	18	-	-	-	-	-

Note :

1. on payment basis.
2. DBTK subsidy excludes cash incentive/assistance for establishment of institutional mechanism for direct transfer of subsidy paid to States/Uts and DBTK Subsidy for the year 2019-20 is for the period upto October 2019.
3. PMGKY figures are upto December 2020
4. The payment relates to the year 2014-15 has been received in the year 2016-17.

Source : PPAC

Figure IV. 2 : Subsidy by Government & Oil Companies on PDS SKO & Domestic LPG



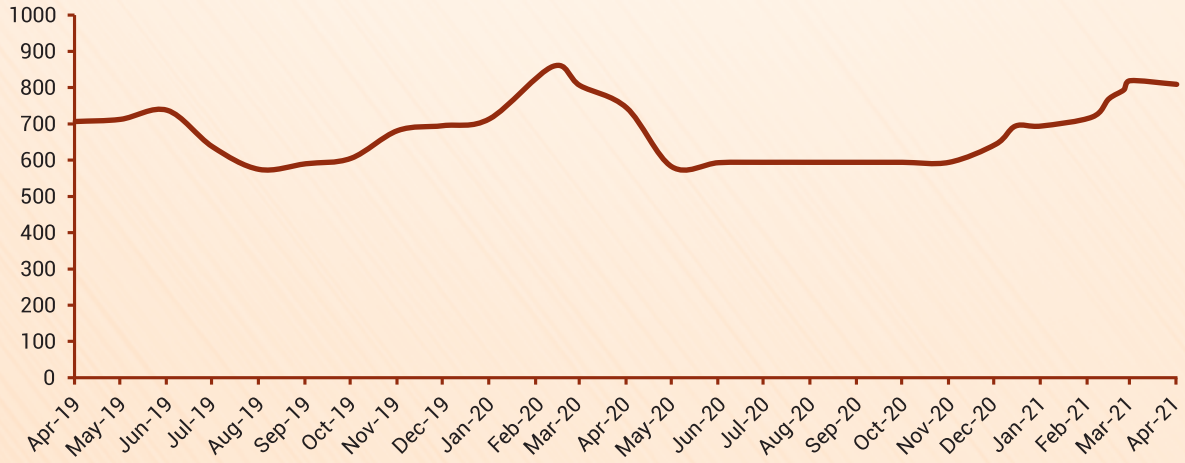
IV. 8 : Price Build-up and Retail Selling Prices of Liquefied Petroleum Gas in Metropolitan Cities in India

Elements/State	Delhi	Kolkata	Mumbai	Chennai
(1)	(2)	(3)	(4)	(5)
Trends in Retail Selling Prices of Liquefied Petroleum Gas (₹/14.2 Kg Cylinder)				
01.04.2014	414.00	416.00	451.50	401.00
01.04.2015	417.82	419.82	458.07	405.32
01.04.2016	419.13	421.13	455.99	406.63
01.04.2017	440.90	442.90	476.50	428.40
01.04.2018	491.35	494.33	489.04	479.44
01.04.2019	706.50	732.50	678.50	722.00
01.04.2020	744.00	774.50	714.50	761.50
01.04.2021	**809.00**	**835.50**	**809.00**	**825.00**
Price Build-up of Retail Selling Prices of Liquefied Petroleum Gas (₹/14.2 Kg Cylinder) as on 01.04.2021				
Market Determined Price (as per PAHAL Scheme)	708.64	733.87	708.64	723.87
Add : GST (including GST on Distributor Commission)	38.52	39.79	38.52	39.29
Add : Distributor Commission	61.84	61.84	61.84	61.84
Retail Selling Price	**809.00**	**835.50**	**809.00**	**825.00**
Retail Selling Price (Rounded)	809.00	835.50	809.00	825.00
Less: Cash Compensation to Consumer under DBTL	0.00	19.57	0.00	24.95
Effective Cost to Consumer after Subsidy	**809.00**	**815.93**	**809.00**	**800.05**

Note : Since May 2020, there is no separate bifurcation of Cash Transfer for PMUY and Non-PMUY customers.

Source : IOCL

Figure IV. 3 : Trends in Retail Selling Prices of LPG (/14.2 Kg Cylinder) in Delhi

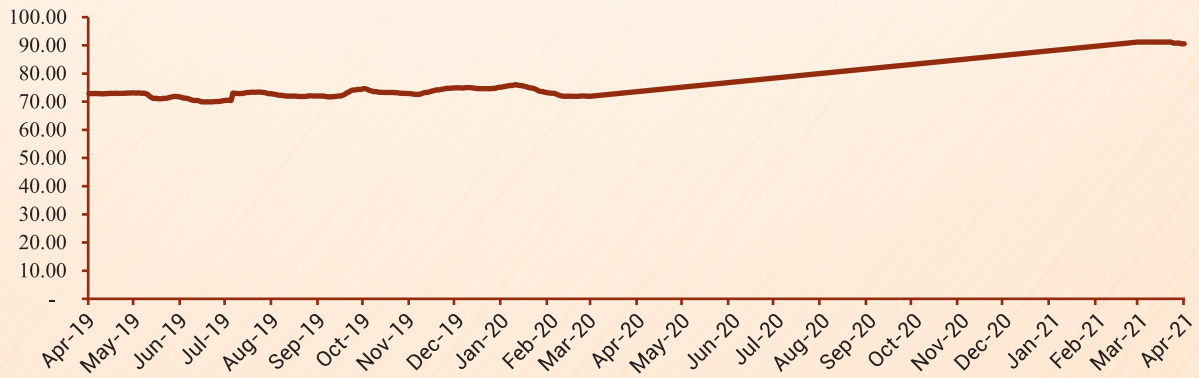


IV. 9 : Price Build-up and Retail Selling Prices of Motor Spirit in Metropolitan Cities in India

Elements/State	Delhi	Kolkata	Mumbai	Chennai
(1)	(2)	(3)	(4)	(5)
Trends in Retail Selling Prices of Motor Spirit (₹/Litre)				
1-Apr-14	72.26	80.13	80.89	75.49
1-Apr-15	60.49	67.88	68.04	63.26
1-Apr-16	59.68	63.76	65.79	59.13
1-Apr-17	66.29	68.97	72.66	69.28
1-Apr-18	73.73	76.44	81.59	76.48
1-Apr-19	72.86	74.88	78.43	75.62
1-Apr-20	69.59	73.30	76.31	72.28
1-Apr-21	**90.56**	**90.77**	**96.98**	**92.58**
Price Build-up of Retail Selling Prices of Motor Spirit (₹/Litre) as on 01.04.2021				
Base Price	32.79	32.79	32.79	32.79
Freight etc	0.28	3.90	0.21	0.23
Price Charged to Dealers (excluding Excise Duty and VAT)	33.07	36.69	33.00	33.02
Add : Excise Duty	**32.90**	**32.90**	**32.90**	**32.90**
Add : Dealer Commission (Average)	3.69	3.70	3.75	3.71
Add : VAT (including VAT on Dealer Commission)	20.90	17.48	27.33	22.95
Retail Selling Price (₹/Litre)	**90.56**	**90.77**	**96.98**	**92.58**

Source : IOCL

Figure IV. 4 : Trends in Retail Selling Prices of Motor Spirit (₹/Litre) in Delhi

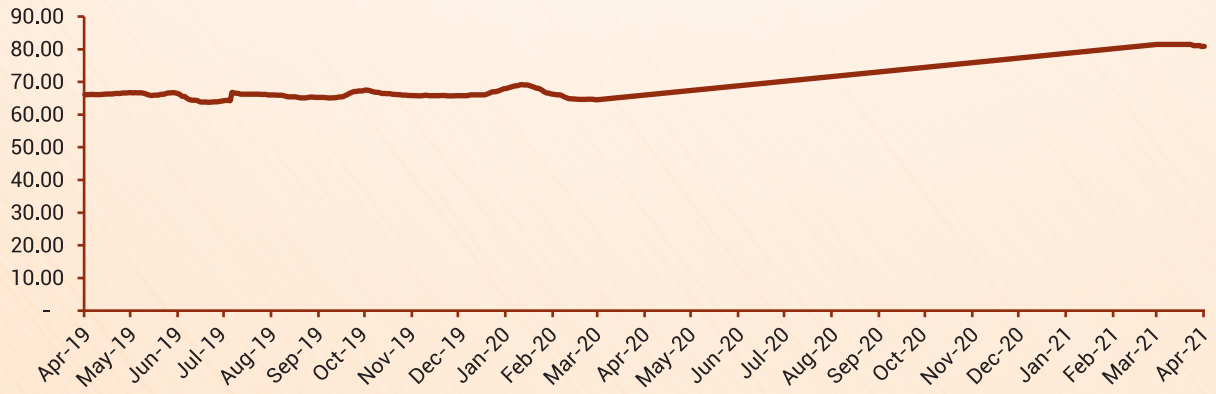


IV. 10 : Price Build-up and Retail Selling Prices of High Speed Diesel Oil in Metropolitan Cities in India

Elements/State	Delhi	Kolkata	Mumbai	Chennai
(1)	(2)	(3)	(4)	(5)
Trends in Retail Selling Prices of High Speed Diesel Oil (₹/Litre)				
01.04.2014	55.49	60.11	63.86	59.18
01.04.2015	49.71	54.31	57.03	52.92
01.04.2016	48.33	50.75	55.06	49.09
01.04.2017	55.61	57.86	61.27	58.82
01.04.2018	64.58	67.27	68.77	68.12
01.04.2019	66.09	67.83	69.17	69.78
01.04.2020	62.29	65.62	66.21	65.71
01.04.2021	**80.87**	**83.75**	**87.96**	**85.88**
Price Build-up of Retail Selling Prices of High Speed Diesel Oil (₹/Litre) as on 01.04.2021				
Base Price	34.46	34.46	34.46	34.46
Freight etc	0.25	3.12	0.16	0.13
Price Charged to Dealers (excluding Excise Duty and VAT)	34.71	37.58	34.62	34.59
Add : Excise Duty	**31.80**	**31.80**	**31.80**	**31.80**
Add : Dealer Commission (Average)	2.51	2.52	2.53	2.53
Add : VAT (including VAT on Dealer Commission)	11.85	11.85	19.01	16.96
Retail Selling Price (/Litre)	**80.87**	**83.75**	**87.96**	**85.88**

Source : IOCL

Figure IV. 5 : Trends in Retail Selling Prices of High Speed Diesel Oil (/Litre) in Delhi



IV. 11 : Price Build-up and Retail Selling Prices of Superior Kerosene Oil in Metropolitan Cities in India

Elements/State	Delhi	Kolkata	Mumbai	Chennai
(1)	(2)	(3)	(4)	(5)
Trends in Retail Selling Prices of Superior Kerosene Oil (₹/Litre)				
01.04.2014	14.96	15.25	15.25	13.70
01.04.2015	14.96	16.08	15.24	13.69
01.04.2016	14.96	16.00	15.42	13.70
01.04.2017	-	20.19	19.03	13.60
01.04.2018	-	26.30	23.96	13.60
01.04.2019	-	32.79	30.87	13.60
01.04.2020	-	27.85	25.72	13.60
01.04.2021	**-**	**39.18**	**36.78**	**15.00**
Price Build-up of Retail Selling Prices of Superior Kerosene Oil (₹/Litre) as on 01.04.2021				
Ex-Storage Price	Kerosene free state	32,386.00	32,386.00	32,386.00
Siding Charge		19.37	-	-
Ass. Value		32,405.37	32,386.00	32,386.00
Other State Levies/ State Govt Subsidy		-	-	(20,027.00)
Sub Total		32,405.37	32,386.00	12,359.00
GST %		5.00	5.00	5.00
Sales/GST Tax Amount		1,620.27	1,619.30	617.95
Sub Total		34,025.64	34,005.30	12,976.95
Ex-Mi/ Depot Price/KL-Oil Co.		34,025.64	34,005.30	12,976.95
Ex-Mi/ Depot Price/KL-St. Govt.		34,025.64	34,005.30	12,976.95
Wholesales Margin		1,341.88	1,341.88	1,341.88
Transport Charges		816.60	450.33	216.80
Toll		-	70.00	-
Handling Charges		374.05	99.00	-
Rounding Up		-	6.36	-
GST On Wholesale Margin		126.63	98.38	67.09
Wholesales Price/KL		36,684.80	36,071.25	14,602.72
Retailer Margin		1,048.30	675.00	360.00
Handling Charges		948.76	-	-
Retailer Transportation		386.60	-	40.00
GST On Retailer Margin		119.18	33.75	18.00
Retail Selling Price/KL		39,187.64	36,780.00	15,020.72
Retail Selling Price (₹/Litre)		**39.18**	**36.78**	**15.00**

Note :

(a) Selling price for Superior Kerosene Oil is for Public Distribution System (PDS)

(b) Delhi is declared as Kerosene free city, hence no PDS SKO rate declared.

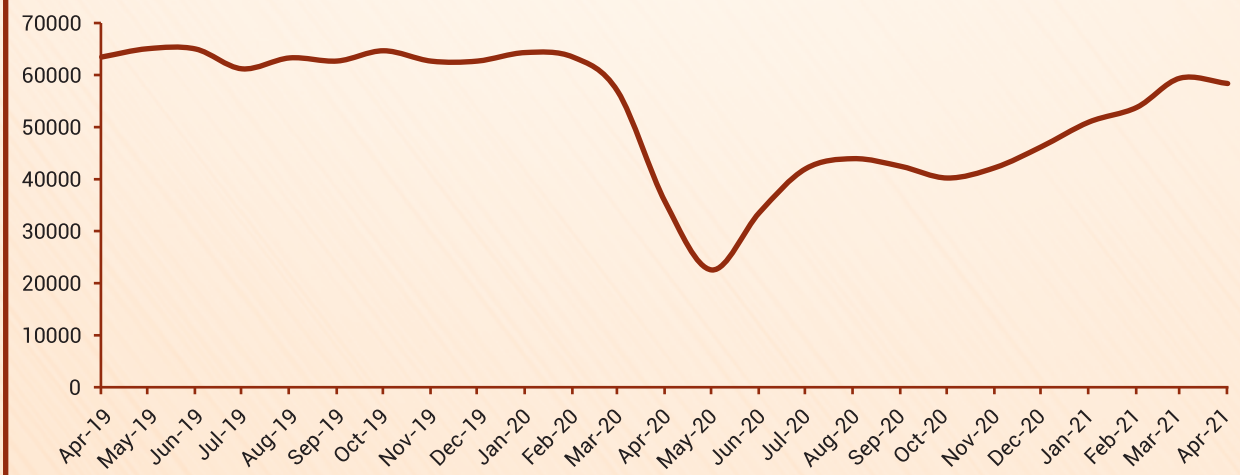
Source : IOCL

IV. 12 : Price Build-up and Retail Selling Prices of ATF Domestic prices in Metropolitan Cities in India

Elements/State	Delhi	Kolkata	Mumbai	Chennai
(1)	(2)	(3)	(4)	(5)
Trends in Retail Selling Prices of ATF Domestic prices (₹/KL)				
01.04.2014	71800.21	82139.53	74105.16	78375.96
01.04.2015	49337.68	58613.90	50712.93	54473.15
01.04.2016	42157.01	47094.08	41768.99	44821.08
01.04.2017	51481.85	56267.50	50895.90	54323.54
01.04.2018	61449.97	65985.36	61024.61	64615.19
01.04.2019	63472.22	69242.21	63447.54	64713.18
01.04.2020	35490.12	40902.59	35068.56	36923.17
01.04.2021	**58374.16**	**62732.69**	**56479.02**	**59541.72**
Price Build-up of Retail Selling Prices of ATF Domestic prices (₹/KL) as on 01.04.2021				
Base Price	37080.00	36930.00	36610.00	36800.00
Freight & Cost etc	4991.47	7112.75	4095.60	4782.31
Excise Duty and Cess	4627.86	4973.40	4477.62	4574.05
State Taxes & Levies	11674.83	13716.54	11295.80	13385.35
Retail Selling Price (₹/KL)	**58374.16**	**62732.69**	**56479.02**	**59541.71**

Source : IOCL

Figure IV. 6 : Trends in Retail Selling Prices of ATF Domestic prices (₹/KL) in



CHAPTER-V

Consumption

CHAPTER HIGHLIGHTS

Total consumption of petroleum products in the country during FY 2020-21 was 194.30 million metric tonnes (MMT) registering negative growth rate of 9.3% vis-à-vis FY 2019-20 (214.13 MMT) due to COVID-19. The Growth rate was observed in consuming of LPG (4.7%), LDO (34.2%), Bitumen (12.0%) and Lubes & Greases (6.9%) only for all other petroleum products, negative growth rate was observed in FY 2020-21 vis-à-vis FY 2019-20.

During FY 2020-21, Diesel (HSD+LDO) accounted for the highest consumption share (37.9%) followed by Petrol/Motor Spirit (14.4%), LPG (14.2%), Petroleum Coke (8.0%), Naphtha (7.3%), Bitumen (3.9%), Fuel Oil (2.9%), ATF (1.9%), Lubes & Greases (2.1%) and Kerosene (0.9%).

During FY 2020-21, the share of Public and Private sector consumption stood at 76.9% and 23.1% respectively. Highest market share in FY 2020-21 contributed by IOCL (37.4%) followed by BPCL (19.3%) and HPCL (18%) across CPSEs.

Highest consumption of LPG in FY 2020-21 was in Domestic Distribution sector (91.2%). Across various State/UTs, highest LPG consumption share contributed by Uttar Pradesh with 3.82 MMT (13.9%) followed by Maharashtra (11.2%) and Tamil Nadu (8.3%).

Highest consumption of Naphtha in FY 2020-21 was in Petrochemical sector (80.4%). Across various States/UTs, highest Naphtha consumption share contributed by Gujarat with 7.79 MMT (55.3%) followed by Haryana (21.3%) and West Bengal (6%).

During FY 2020-21, highest consumption of Kerosene was in Domestic PDS sector (88.4%). Across various States/UTs, highest kerosene consumption share contributed by West Bengal with 0.54 MMT (30.3%) followed by Bihar (9.2%) and Odisha (8.3%).

During FY 2020-21, highest consummation of Petrol and High Speed Diesel were majorly in Resellers/Retail sector i.e. 99.6% and 87.2% respectively. Across various States/UTs, Uttar Pradesh holds the highest share in consumption of Petrol with 3.21 MMT (11.5%) and High Speed Diesel with 9.39 MMT (12.9%).

During FY 2020-21, highest consumption of ATF was in Indian Airlines Sector (79.9%). Across various States/UTs, highest ATF consumption share contributed by Delhi with 9.82 MMT (26.6%) followed by Maharashtra (14.9%) and Karnataka (10.2%).

During FY 2020-21, highest consumption of LDO, Furnace Oil and LSHS were in Manufacturing Industry i.e. 36.1%, 36.0% and 51.9% respectively.

During FY 2020-21, highest consumption of Lubes & Greases was in Maharashtra (8.1%), Petcoke in Rajasthan (7.7%) and Bitumen in Utter Pradesh (10.3%).

V. 1 : Product-wise Consumption of Petroleum Products (Calendar Year-wise)

(Figures in TMT)

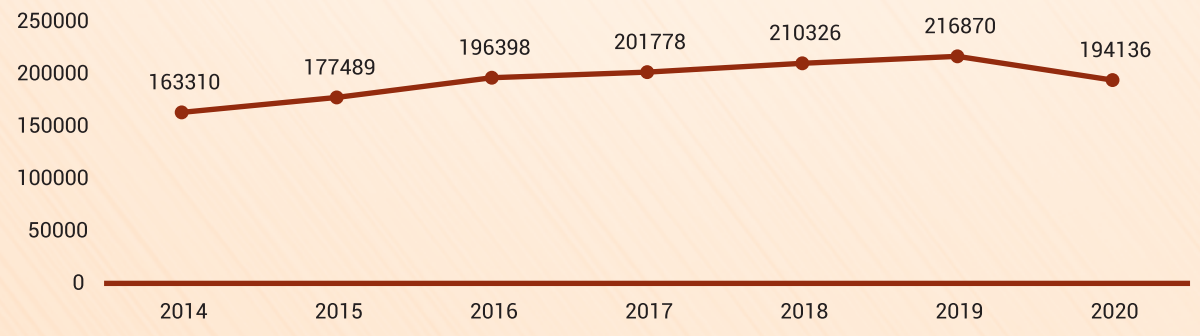
Products	2014	2015	2016	2017	2018	2019	2020 (P)	% Share to Total 2020	% Growth[2]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LPG	17671	19040	21231	22942	24207	26276	27384	14.1	4.2
Motor Spirit	18384	21089	23660	25393	27665	30061	27268	14.0	-9.3
Naphtha	10965	12910	13493	12538	14146	13805	14346	7.4	3.9
SKO	7127	6887	5931	4086	3541	2725	1861	1.0	-31.7
ATF	5678	6095	6805	7447	8220	8182	4262	2.2	-47.9
HSDO	69021	72665	76740	79298	82801	84092	71891	37.0	-14.5
LDO	354	403	458	476	580	639	737	0.4	15.3
Furnace Oil	5464	6031	7382	6646	6244	5858	5379	2.8	-8.2
LSHS	415	196	113	64	339	396	373	0.2	-5.8
Lubes/Greases	3421	3366	3664	3569	3802	3902	3891	2.0	-0.3
Bitumen/Asphalt	5128	5570	6108	5839	6541	6797	6975	3.6	2.6
Petroleum Coke	13842	17006	24414	25784	21164	22443	17572	9.1	-21.7
Waxes	168	166	174	192	259	300	217	0.1	-27.4
Others	5673	6066	6226	7504	10817	11395	11981	6.2	5.1
Total Consumption	**163310**	**177489**	**196398**	**201778**	**210326**	**216870**	**194136**	**100.0**	**-10.5**
Refinery Boiler Fuel and Losses (RBF)	17536	18349	20197	20910	21359	22809	23110	-	1.3
Grand Total	**180846**	**195838**	**216595**	**222689**	**231686**	**239679**	**217247**	**-**	**-9.4**

Note : Total may not tally due to rounding off. P : Provisional

1. Consumption includes sales by oil companies, own consumption & direct private imports.
2. Growth rate in 2020 over 2019.

Source : Petroleum Planning & Analysis Cell.

Figure V. 1 : Trend of Consumption of Petroleum Products (in TMT)



V. 2 : Product-wise Consumption of Petroleum Products (Financial Year-wise)

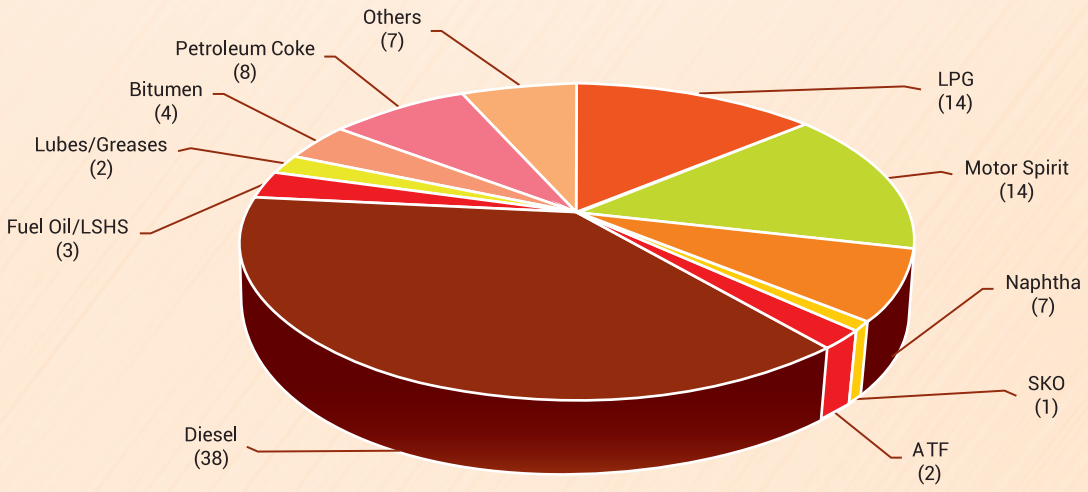
(Figures in TMT)

Products	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% to Total Cons. 2020-21	% Growth[2]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LPG	18000	19623	21608	23342	24907	26330	27558	14.2	4.7
Motor Spirit	19075	21847	23765	26174	28284	29975	27969	14.4	-6.7
Naphtha	11082	13271	13241	12889	14131	14268	14100	7.3	-1.2
SKO	7087	6826	5397	3845	3459	2397	1798	0.9	-25.0
ATF	5723	6262	6998	7633	8300	7999	3698	1.9	-53.8
HSDO	69416	74647	76027	81073	83528	82602	72713	37.4	-12.0
LDO	365	407	449	524	598	628	855	0.4	36.2
Furnace Oil (FO)	5584	6482	7046	6605	6195	5912	5208	2.7	-11.9
LSHS	377	150	104	116	369	390	378	0.2	-2.9
Fuel Oil (FO+LSHS)	5961	6632	7150	6721	6564	6302	5586	2.9	-11.3
Lubes/Greases	3310	3571	3470	3884	3668	3833	4097	2.1	6.9
Bitumen	5073	5938	5936	6086	6708	6720	7524	3.9	12.0
Petroleum Coke	14557	19297	23964	25657	21346	21708	15605	8.0	-28.1
Waxes	156	173	182	199	286	278	222	0.1	-20.1
Others	5715	6179	6411	8139	11437	11087	12569	6.5	13.4
Total Consumption	**165520**	**184674**	**194597**	**206166**	**213216**	**214127**	**194295**	**100.0**	**-9.3**
Refinery fuel and losses (RBF)	17669	18773	20070	21164	21454	23613	22806	-	-3.4
Grand Total	**183189**	**203447**	**214667**	**227330**	**234670**	**237739**	**217101**	**-**	**-8.7**

Note : Total may not tally due to rounding off. P : Provisional

1. Consumption includes sales by oil companies, own consumption & direct private imports.
2. Growth rate in 2020-21 over 2019-20.

Figure V. 2 : Share of different Petroleum Products in total consumption during 2020-21 (%)



V. 3 : Product-wise Consumption of Petroleum Products Aross Public & Private Sector

(Figures in TMT)

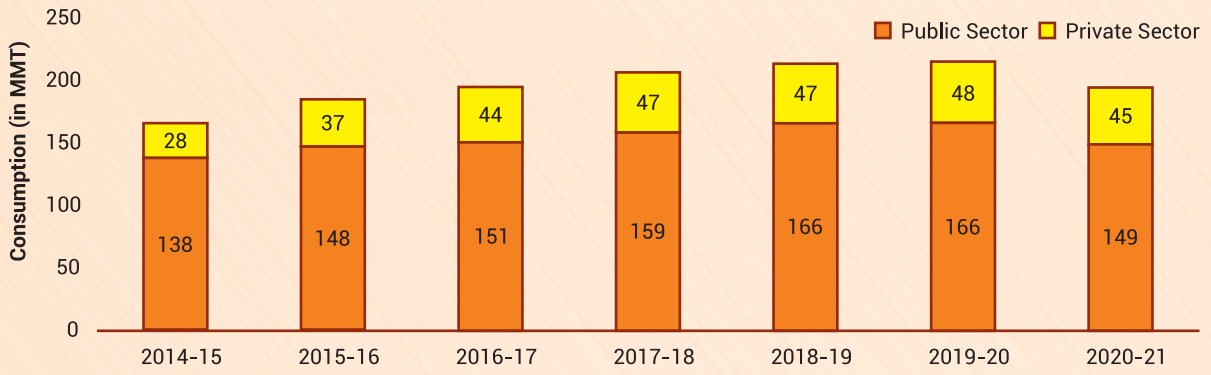
Products	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% to Total Cons. 2020-21	% Growth[2]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
A. PUBLIC SECTOR									
LPG	17571	19134	21179	22977	24591	26126	27494	14.2	5.2
Motor Spirit	18588	21079	22518	24329	25959	27179	25168	13.0	-7.4
Naphtha	4814	4790	4905	5207	5583	6479	6050	3.1	-6.6
SKO	7087	6826	5397	3845	3459	2397	1795	0.9	-25.1
ATF	5319	5629	6186	6988	7683	7598	3525	1.8	-53.6
HSDO	68701	72092	71450	74382	75775	73825	64504	33.2	-12.6
LDO	365	407	449	519	577	602	713	0.4	18.3
Furnace Oil	4790	5514	5905	5566	5278	4835	4594	2.4	-5.0
LSHS	377	150	104	99	318	338	330	0.2	-2.2
Lubes/Greases	1162	1312	1339	1345	1313	1317	1475	0.8	12.1
Bitumen/Asphalt	4366	4819	4721	4883	5683	4995	5356	2.8	7.2
Petroleum Coke	2391	3483	3952	5176	5770	5634	4415	2.3	-21.6
Paraffin Wax	56	58	90	95	92	90	99	0.1	10.0
Others	2029	2241	2708	3326	4097	4292	3858	2.0	-10.1
Total (A)	**137616**	**147535**	**150904**	**158739**	**166178**	**165704**	**149378**	**76.9**	**-9.9**
B. PRIVATE SECTOR									
LPG	429	489	429	364	316	204	64	0.0	-68.5
Motor Spirit	487	768	1247	1846	2326	2797	2801	1.4	0.2
Naphtha	6268	8481	8335	7681	8548	7789	8051	4.1	3.4
ATF	404	632	812	645	617	400	172	0.1	-56.9
HSDO	715	2555	4577	6692	7753	8777	8208	4.2	-6.5
Furnace Oil	794	968	1142	1056	968	1129	614	0.3	-45.6
Lubes/Greases	2148	2259	2131	2539	2355	2517	2622	1.4	4.2
Bitumen/Asphalt	707	1118	1214	1202	1024	1725	2168	1.1	25.6
Petroleum Coke	12167	15815	20012	20480	15576	16074	11190	5.8	-30.4
Paraffin Wax	99	115	171	104	194	188	123	0.1	-34.4
Others	3685	3938	3624	4817	7361	6821	8904	4.6	30.5
Total (B)	**27904**	**37139**	**43693**	**47427**	**47038**	**48422**	**44918**	**23.1**	**-7.2**
TOTAL (A+B)	**165520**	**184674**	**194597**	**206166**	**213216**	**214127**	**194295**	**100.0**	**-9.3**

Note : Total may not tally due to rounding off. P : Provisional

1. Consumption includes sales by oil companies, own consumption & direct private imports.
2. Growth rate in 2020-21 over 2019-20.

Source : Petroleum Planning & Analysis Cell.

Figure V. 3 : Consumption of Petroleum Products Across Public & Private Sector



V. 4 : Consumption of Petroleum Products and Market Share of Oil Companies in India

(Figures in TMT)

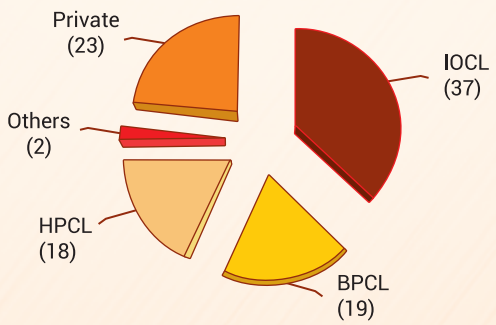
Year	Consumption	IOCL	BPCL	HPCL	Other	Private	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2014-15	in TMT	71653	33394	30746	1824	27904	165520
	in %	43.3	20.2	18.6	1.1	16.9	100.0
2015-16	in TMT	75946	35514	33585	2490	37139	184674
	in %	41.1	19.2	18.2	1.3	20.1	100.0
2016-17	in TMT	77324	36376	34441	2763	43693	194597
	in %	39.7	18.7	17.7	1.4	22.5	100.0
2017-18	in TMT	80207	39524	35979	3029	47427	206166
	in %	38.9	19.2	17.5	1.5	23.0	100.0
2018-19	in TMT	83184	41338	37678	3978	47038	213216
	in %	39.0	19.4	17.7	1.9	22.1	100.0
2019-20	in TMT	81935	41851	37416	4502	48422	214127
	in %	38.3	19.5	17.5	2.1	22.6	100.0
2020-21 (P)	in TMT	72740	37552	34942	4144	44918	194295
	in %	37.4	19.3	18.0	2.1	23.1	100.0

Note : P : Provisional

1. Other companies include CPCL, GAIL, MRPL, NRL & ONGC
2. Private includes sales by private oil companies, own consumption & direct private imports
3. Total may not tally due to rounding off.

Source : Petroleum Planning & Analysis Cell.

Figure V. 4 : Market share of oil companies in India during 2020-21 (%)



V. 5 : Deliveries made to International/Coastal Bunkers

(Figures in TMT)

Items	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
INTERNATIONAL BUNKERS							
F.O	398.9	436.8	523.5	368.2	469.5	319.3	555.4
H.S.D	32.4	35.0	39.9	30.1	37.4	55.0	53.1
L.D.O	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	**431.3**	**471.8**	**563.4**	**398.3**	**506.9**	**374.4**	**608.5**
COASTAL BUNKERS							
F.O	202.4	232.8	232.1	312.1	371.3	401.4	313.3
H.S.D	763.3	727.8	673.0	588.7	652.1	700.9	557.7
L.D.O	1.9	2.6	6.9	4.6	5.3	2.1	2.0
TOTAL	**967.6**	**963.2**	**911.9**	**905.4**	**1028.7**	**1104.4**	**873.0**
TOTAL BUNKERS							
F.O	601.3	669.6	755.6	680.3	840.8	720.7	868.7
H.S.D	795.7	762.8	712.8	618.8	689.5	755.9	610.8
L.D.O	1.9	2.6	6.9	4.6	5.3	2.1	2.0
TOTAL	**1398.9**	**1435.0**	**1475.2**	**1303.6**	**1535.6**	**1478.8**	**1481.6**

P : Provisional

Note : Total may not tally due to rounding off.

Source : Petroleum Planning & Analysis Cell.

V. 6 : Sector-wise Consumption (end use) of Liquefied Petroleum Gas (LPG)

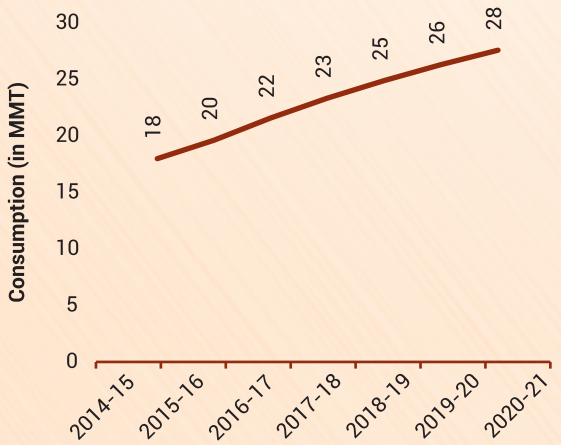
(Figures in TMT)

Sector	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Domestic Distribution	**16040.4**	**17181.7**	**18871.4**	**20351.8**	**21728.0**	**23076.0**	**25128.1**	**91.2**
2. Non-Domestic/Industry/Commercial	**1051.0**	**1464.4**	**1775.9**	**2085.8**	**2364.4**	**2614.4**	**1886.0**	**6.8**
3. Transport	**164.6**	**171.8**	**168.1**	**185.1**	**181.1**	**172.8**	**119.0**	**0.4**
(i) Auto LPG	163.8	170.9	167.3	184.4	180.3	171.9	118.4	0.4
(ii) Railways	0.8	0.9	0.8	0.7	0.8	0.9	0.7	0.0
4. Power Generation	**3.1**	**2.7**	**2.2**	**1.3**	**1.8**	**1.5**	**0.4**	**0.0**
5. Agriculture Sector	**6.1**	**7.1**	**7.8**	**7.5**	**22.0**	**25.7**	**28.1**	**0.1**
6. Mining	**0.0**	**0.0**	**0.0**	**0.0**	**0.3**	**0.1**	**1.5**	**0.0**
7. Manufacturing (Bulk LPG)	**207.9**	**201.7**	**220.0**	**204.6**	**204.2**	**153.4**	**215.0**	**0.8**
(i) Chemicals	35.0	5.2	12.4	6.0	24.2	20.7	36.0	0.1
(ii) Engineering	1.8	2.1	2.5	2.6	3.0	3.0	2.7	0.0
(iii) Electronics	4.8	3.9	4.5	3.9	5.5	5.5	5.3	0.0
(iv) Mechanical	13.9	12.4	13.2	13.9	18.6	15.4	11.9	0.0
(v) Metallurgical	125.3	134.1	138.9	131.6	94.0	61.3	108.6	0.4
(vi) Textiles	2.2	2.5	2.3	2.1	2.3	2.6	2.1	0.0
(vii) Other Consumer/Industrial Goods	24.8	41.5	46.3	44.4	56.7	45.0	48.4	0.2
8. Resellers/Retail	**45.2**	**44.9**	**67.0**	**74.3**	**0.0**	**0.0**	**0.9**	**0.0**
9. Miscellaneous (Bulk)	**52.7**	**59.9**	**66.6**	**67.1**	**88.9**	**81.9**	**115.4**	**0.4**
Total Sales	**17525.7**	**19089.3**	**21178.9**	**22977.4**	**24590.8**	**26125.7**	**27494.3**	**99.8**
10. Pvt Imports	**429.2**	**489.0**	**429.3**	**364.5**	**316.0**	**204.0**	**64.2**	**0.2**
Total Consumption	**18000.1**	**19623.2**	**21608.2**	**23341.8**	**24906.8**	**26329.8**	**27558.4**	**100.0**

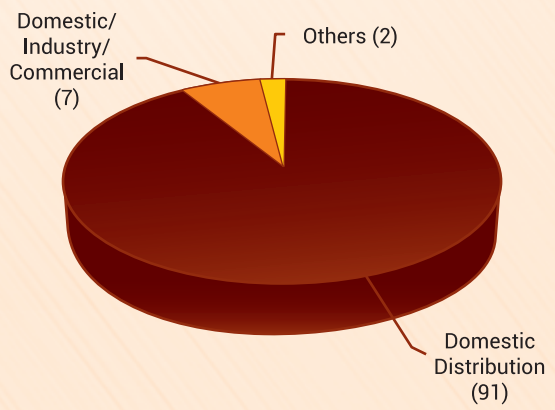
Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

Figure V. 5 : Trend of LPG Consumption



Figures V. 6 : Sector-wise Consumption of LPG during 2020-21 (%)



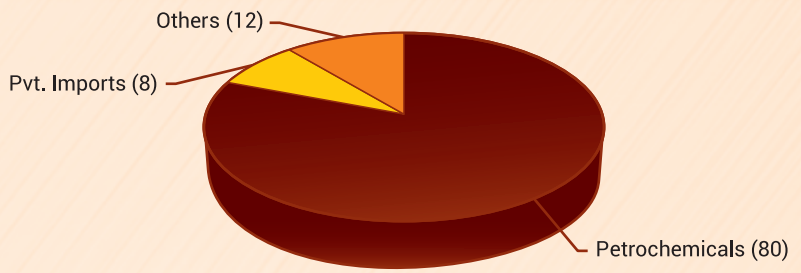
V. 7 : State-wise Consumption of Liquefied Petroleum Gas (LPG)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andaman & Nicobar Islands	7.9	8.7	9.5	10.2	11.0	12.2	12.1	0.0
Andhra Pradesh	871.6	923.0	1014.4	1098.5	1150.2	1190.0	1293.0	4.7
Arunachal Pradesh	15.6	16.5	17.8	19.9	21.6	23.2	23.8	0.1
Assam	267.1	294.7	325.0	372.6	420.9	450.9	505.7	1.8
Bihar	665.9	768.9	943.9	1127.6	1234.8	1404.4	1643.0	6.0
Chandigarh	42.3	45.7	52.2	55.1	55.7	56.4	46.5	0.2
Chhattisgarh	177.3	197.7	232.4	257.4	272.5	294.8	344.2	1.2
Dadra & Nagar Haveli And Daman & Diu	21.9	25.5	26.7	29.1	29.2	31.3	30.5	0.1
Delhi	732.4	776.7	797.8	807.6	824.9	822.6	733.0	2.7
Goa	56.0	57.9	62.6	66.0	69.7	71.1	65.4	0.2
Gujarat	819.9	868.2	970.9	1041.7	1105.2	1173.6	1186.3	4.3
Haryana	585.9	629.5	674.7	740.3	805.0	858.2	869.5	3.2
Himachal Pradesh	120.5	130.5	142.4	153.0	165.1	180.1	183.8	0.7
Jammu & Kashmir	157.1	162.0	165.3	181.9	197.5	204.4	210.0	0.8
Jharkhand	195.7	215.9	249.8	294.1	340.6	378.0	424.6	1.5
Karnataka	1238.7	1330.4	1448.5	1573.7	1687.3	1769.7	1840.7	6.7
Kerala	712.8	774.1	852.3	931.9	989.2	1033.3	1071.7	3.9
Ladakh	5.9	7.0	6.9	6.9	7.3	7.8	6.5	0.0
Lakshadweep	0.2	0.3	0.3	0.4	0.5	0.6	0.8	0.0
Madhya Pradesh	708.9	751.0	838.8	914.4	995.3	1068.2	1137.0	4.1
Maharashtra	2284.9	2425.2	2634.6	2799.1	2989.6	3123.6	3089.0	11.2
Manipur	22.3	23.6	23.7	28.4	35.7	40.8	48.6	0.2
Meghalaya	16.1	17.1	18.8	21.3	25.1	26.6	27.4	0.1
Mizoram	21.1	21.6	22.1	21.7	25.1	27.0	29.0	0.1
Nagaland	17.2	18.7	19.9	22.2	22.6	24.2	24.8	0.1
Odisha	324.5	391.9	476.8	533.6	548.5	553.1	692.0	2.5
Puducherry	34.9	38.8	41.5	43.0	44.2	44.9	47.2	0.2
Punjab	732.1	779.7	823.9	873.9	937.5	980.7	991.5	3.6
Rajasthan	916.6	995.2	1107.9	1193.8	1292.5	1389.9	1412.8	5.1
Sikkim	11.3	12.0	12.9	14.0	15.6	16.8	16.2	0.1
Tamil Nadu	1680.3	1818.6	1910.3	2019.0	2114.3	2178.1	2292.6	8.3
Telangana	670.1	762.5	836.5	891.7	963.5	1001.4	1027.4	3.7
Tripura	31.6	35.4	37.6	44.1	49.2	52.9	60.0	0.2
Uttar Pradesh	**2132.0**	**2351.4**	**2703.4**	**2923.7**	**3166.2**	**3531.7**	**3819.4**	**13.9**
Uttarakhand	213.6	232.0	249.7	268.5	288.1	308.2	304.5	1.1
West Bengal	1058.5	1226.3	1427.1	1597.2	1689.7	1794.9	1983.9	7.2
Total Sales	**17570.9**	**19134.2**	**21178.9**	**22977.4**	**24590.8**	**26125.7**	**27494.3**	**99.8**
Pvt Imports	429.2	489.0	429.3	364.5	316.0	204.0	64.2	0.2
Total Consumption	**18000.1**	**19623.2**	**21608.2**	**23341.8**	**24906.8**	**26329.8**	**27558.4**	**100.0**

Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

Figures V. 7 : Sector-wise Consumption of Naphtha during 2020-21 (%)



V. 8 : Sector-wise/State-wise Consumption (end use) of Naphtha

(Figures in TMT)

Sector & State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sector-wise Consumption (end use) of Naphtha								
Fertilizers	301.5	315.9	349.3	367.7	351.6	149.7	65.7	0.5
Petrochemicals	9530.1	10350.2	10350.9	10010.9	10601.6	10874.5	11339.4	80.4
Power	199.2	50.3	60.2	66.5	5.3	0.4	70.2	0.5
Steel Plants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	207.5	37.1	57.6	404.9	461.7	879.6	885.2	6.3
Total Sales	**10238.3**	**10753.5**	**10818.0**	**10850.1**	**11420.2**	**11904.2**	**12360.4**	**87.7**
Pvt Imports	843.7	2517.4	2422.8	1768.9	1727.5	1305.5	1133.5	8.0
SEZ data	-	-	-	269.6	983.6	1058.0	606.5	4.3
Total Consumption	**11082.0**	**13270.8**	**13240.8**	**12888.6**	**14131.2**	**14267.8**	**14100.4**	**100.0**
State-wise Consumption (end use) of Naphtha								
Andhra Pradesh	53.3	48.2	29.4	30.1	24.7	26.1	26.5	0.2
Assam	-	25.0	58.3	152.5	204.6	303.2	320.1	2.3
Gujarat	5503.2	6068.3	5854.9	5683.0	6107.4	6710.8	7791.7	55.3
Haryana	3258.9	3405.1	3459.0	3340.1	3444.1	3199.0	3003.9	21.3
Jharkhand	-	-	-	-	0.6	1.5	2.6	0.0
Karnataka	123.9	161.7	315.6	300.5	146.4	157.5	65.7	0.5
Kerala	181.1	23.5	-	4.0	-	0.4	3.0	0.0
Madhya Pradesh	-	-	-	-	-	1.2	2.8	0.0
Maharashtra	295.5	296.6	401.2	370.8	363.1	344.7	290.9	2.1
Odisha	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.0
Punjab	-	0.0	-	-	-	-	-	0.0
Rajasthan	-	0.5	0.3	1.5	1.6	-	-	0.0
Sikkim	-	-	-	-	0.0	1.4	-	0.0
Tamil Nadu	368.2	206.9	248.6	198.2	179.1	1.7	3.7	0.0
Telangana	-	-	-	-	-	-	0.1	0.0
Uttar Pradesh	-	0.7	1.1	2.0	1.3	-	0.0	0.0
West Bengal	454.1	517.0	449.5	767.3	947.2	1156.8	849.2	6.0
Total Sales	**10238.3**	**10753.5**	**10818.0**	**10850.1**	**11420.2**	**11904.2**	**12360.4**	**87.7**
Pvt Imports	843.7	2517.4	2422.8	1768.9	1727.5	1305.5	1133.5	8.0
SEZ data	-	-	-	269.6	983.6	1058.0	606.5	4.3
Total Consumption	**11082.0**	**13270.8**	**13240.8**	**12888.6**	**14131.2**	**14267.8**	**14100.4**	**100.0**

Note : Total may not tally due to rounding off.

P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 9 : Sector-wise Consumption (end use) of Kerosene

(Figures in TMT)

Sector & State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sector-wise Consumption (end use) of Kerosene								
Domestic PDS	6917.3	6648.9	5204.1	3633.6	3231.2	2173.7	1586.6	88.2
Commercial/ Industry	60.1	63.9	77.1	97.0	97.3	86.5	68.6	3.8
Others	109.3	113.4	115.6	114.5	131.0	136.6	142.7	7.9
Grand Total	**7086.7**	**6826.3**	**5396.8**	**3845.1**	**3459.5**	**2396.8**	**1797.9**	**100.0**
State-wise Consumption (end use) of Kerosene								
Andaman & Nicobar Islands	4.5	4.6	3.8	3.2	3.0	1.2	0.1	0.0
Andhra Pradesh	225.9	183.2	151.3	23.4	1.6	0.9	0.7	0.0
Arunachal Pradesh	15.3	14.2	13.2	11.7	12.0	10.0	10.5	0.6
Assam	256.8	251.6	225.4	192.0	190.1	138.8	120.3	6.7
Bihar	626.1	618.6	549.0	381.7	256.6	189.9	165.4	9.2
Chandigarh	2.0	0.7	0.1	0.2	0.2	0.1	0.1	0.0
Chhattisgarh	130.6	124.1	94.8	72.3	71.5	54.1	43.8	2.4
Dadra & Nagar Haveli And Daman & Diu	2.3	2.2	1.7	0.4	0.2	0.1	0.02	0.0
Delhi	0.7	0.7	0.8	0.8	1.0	0.7	0.1	0.0
Goa	4.1	3.9	2.0	1.1	1.1	0.5	0.3	0.0
Gujarat	525.5	515.3	387.1	266.8	197.3	97.6	68.2	3.8
Haryana	70.6	57.7	31.4	2.4	3.2	2.5	1.5	0.1
Himachal Pradesh	22.7	22.7	17.6	14.5	14.7	11.9	8.7	0.5
Jammu & Kashmir	113.0	105.4	98.2	89.1	88.6	83.8	79.0	4.4
Jharkhand	208.1	202.8	170.5	137.2	117.0	83.5	64.8	3.6
Karnataka	395.2	379.2	205.7	104.3	99.8	64.5	41.4	2.3
Kerala	93.9	97.1	80.0	66.7	70.2	58.1	53.1	3.0
Ladakh	30.6	36.3	38.0	37.8	35.8	36.3	47.3	2.6
Lakshadweep	0.8	0.8	0.7	0.6	0.6	0.5	0.7	0.0
Madhya Pradesh	458.2	452.8	333.5	262.5	254.0	185.9	145.9	8.1
Maharashtra	551.3	486.4	413.1	305.0	200.2	54.0	23.8	1.3
Manipur	19.6	18.6	12.2	14.6	14.2	10.3	9.1	0.5
Meghalaya	20.4	19.9	17.8	15.2	15.1	14.9	14.0	0.8
Mizoram	5.8	5.2	4.7	3.7	3.7	2.8	2.5	0.1
Nagaland	13.5	13.2	7.2	7.5	7.8	7.1	6.7	0.4
Odisha	308.3	299.8	220.3	190.2	192.9	162.1	148.1	8.3
Puducherry	3.3	3.3	3.0	0.5	0.0	0.02	0.0	0.0
Punjab	71.0	66.5	50.9	1.9	2.3	4.5	1.2	0.1
Rajasthan	388.7	377.0	279.0	87.8	56.6	14.2	2.5	0.1
Sikkim	11.3	11.8	10.1	10.5	10.1	8.8	10.2	0.6
Tamil Nadu	308.7	304.7	281.8	204.7	196.4	153.9	130.4	7.3
Telangana	142.9	133.5	105.2	79.3	74.3	23.9	2.7	0.1
Tripura	30.5	29.9	26.9	22.9	22.8	20.4	19.5	1.1
Uttar Pradesh	1237.7	1215.9	915.2	707.4	686.4	353.5	23.8	1.3
Uttarakhand	31.3	30.9	27.7	13.8	11.5	3.8	4.1	0.2
West Bengal	755.7	736.0	616.6	511.4	546.7	541.7	544.5	30.3
Total Sales	**7086.7**	**6826.3**	**5396.8**	**3845.1**	**3459.5**	**2396.8**	**1795.1**	**100.0**
Pvt Imports							2.8	
Total Consumption	**7086.71819**	**6826.30659**	**5396.81339**	**3845.11811**	**3459.458265**	**2396.824502**	**1797.9**	

Note : Total may not tally due to rounding off.

P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 10 : Sector-wise Consumption (end use) MS (Petrol)

(Figures in TMT)

Sector & State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sector-wise Consumption (end use) of MS (Petrol)								
Retail/Resellers	18960.6	21727.5	23642.0	26050.2	28156.2	29849.3	27847.1	99.6
Others	114.8	119.1	123.0	124.2	128.2	126.1	121.8	0.4
Grand Total	**19075.4**	**21846.6**	**23764.9**	**26174.5**	**28284.4**	**29975.5**	**27969.0**	**100.0**
State-wise Consumption (end use) of MS (Petrol)								
Andaman & Nicobar Islands	12.4	14.0	15.1	16.8	18.1	18.9	13.8	0.0
Andhra Pradesh	795.0	844.9	944.5	1061.8	1161.9	1278.4	1321.9	4.7
Arunachal Pradesh	27.9	31.4	35.4	39.9	46.2	51.8	50.6	0.2
Assam	219.5	267.4	307.8	356.7	411.6	445.1	431.9	1.5
Bihar	432.3	545.4	610.1	697.0	793.0	852.1	848.9	3.0
Chandigarh	85.2	100.7	96.9	104.6	122.6	126.8	91.4	0.3
Chhattisgarh	357.4	418.2	452.8	517.8	559.6	613.1	604.3	2.2
Dadra & Nagar Haveli And Daman & Diu	30.9	35.4	40.2	42.9	42.8	38.9	30.0	0.1
Delhi	831.3	901.5	906.1	926.7	903.1	876.0	668.8	2.4
Goa	141.1	151.3	162.2	174.6	183.6	186.1	145.1	0.5
Gujarat	1339.1	1526.0	1665.6	1817.2	1976.0	2066.8	1860.2	6.7
Haryana	723.6	782.8	873.3	937.9	978.5	1029.4	1011.6	3.6
Himachal Pradesh	137.4	162.9	183.1	207.9	224.6	238.0	233.1	0.8
Jammu & Kashmir	163.0	190.2	199.2	237.8	262.2	290.6	273.1	1.0
Jharkhand	302.5	349.4	375.1	425.2	487.0	526.5	512.5	1.8
Karnataka	1430.5	1664.0	1799.1	1974.3	2142.7	2270.5	2123.9	7.6
Kerala	1009.4	1129.8	1238.0	1380.9	1462.6	1558.8	1371.1	4.9
Ladakh	7.8	9.4	10.5	11.5	12.5	13.4	12.5	0.0
Lakshadweep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madhya Pradesh	897.7	1037.7	1109.5	1257.4	1372.1	1463.7	1461.1	5.2
Maharashtra	2483.2	2836.5	3025.0	3225.6	3358.1	3462.0	3014.4	10.8
Manipur	41.4	43.5	41.8	54.0	61.2	68.2	62.1	0.2
Meghalaya	59.1	65.3	73.0	85.5	93.7	99.8	81.3	0.3
Mizoram	22.6	23.6	24.9	25.4	28.2	31.2	26.0	0.1
Nagaland	24.8	26.3	34.4	37.3	36.8	39.2	31.9	0.1
Odisha	472.1	553.8	614.9	703.8	775.9	834.5	782.4	2.8
Puducherry	100.9	113.1	120.1	129.9	132.9	133.8	108.4	0.4
Punjab	662.7	745.3	805.9	847.3	879.2	960.2	888.4	3.2
Rajasthan	1024.8	1183.5	1298.3	1440.3	1550.7	1657.0	1549.4	5.5
Sikkim	14.7	16.1	16.5	17.5	19.7	21.1	15.8	0.1
Tamil Nadu	1848.9	2052.0	2254.7	2420.7	2602.0	2735.4	2580.6	9.2
Telangana	757.0	915.4	976.8	1092.3	1198.8	1288.3	1199.5	4.3
Tripura	32.6	37.9	41.5	47.6	54.1	57.7	53.7	0.2
Uttar Pradesh	**1816.2**	**2164.4**	**2423.4**	**2759.5**	**3119.2**	**3319.9**	**3210.1**	**11.5**
Uttarakhand	215.9	252.9	263.8	286.9	309.2	326.3	293.0	1.0
West Bengal	554.5	654.6	725.5	812.1	904.1	996.1	997.5	3.6
Total Sales	**19075.4**	**21846.6**	**23764.9**	**26174.5**	**28284.4**	**29975.5**	**27960.3**	**100.0**
Pvt Imports							8.7	
Total Consumption	**19075.4**	**21846.6**	**23764.9**	**26174.5**	**28284.4**	**29975.5**	**27969.0**	

Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 11 : Sector-wise Consumption (end use) of Aviation Turbine Fuel (ATF)

(Figures in TMT)

Sector & State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sector-wise Consumption (end use) of ATF								
Foreign airlines	1167.4	1211.1	1433.5	1524.5	1815.8	1853.4	733.3	19.8
Indian airlines	3658.6	3988.8	4317.8	4768.7	6216.2	6136.1	2955.3	79.9
Others	759.3	789.1	910.5	1041.6	11.3	9.1	8.3	0.2
Total Sales	5585.3	5988.9	6661.8	7334.8	8043.3	7998.6	3696.9	99.98
Pvt Imports	139.6	274.7	337.5	300.1	258.8	0.0	0.9	0.02
Total Consumption	**5724.9**	**6263.7**	**6999.4**	**7634.9**	**8302.1**	**7998.6**	**3697.8**	**100.0**
State-wise Consumption (end use) ATF								
Andaman & Nicobar Islands	21.1	22.0	23.6	26.7	25.1	22.3	7.9	0.2
Andhra Pradesh	47.8	71.8	75.6	70.2	79.6	73.7	38.3	1.0
Arunachal Pradesh	1.3	1.0	1.2	1.2	1.5	1.2	1.6	0.0
Assam	100.9	107.8	146.5	139.4	167.8	159.3	105.1	2.8
Bihar	19.6	22.6	25.7	34.0	38.3	38.5	19.8	0.5
Chandigarh	47.9	46.1	28.6	23.4	21.1	23.1	31.1	0.8
Chhattisgarh	22.6	30.2	32.0	35.7	42.8	42.3	21.8	0.6
Dadra & Nagar Haveli And Daman & Diu	0.9	0.9	0.9	0.9	1.3	1.3	1.2	0.0
Delhi	1500.8	1605.2	1725.5	1941.5	2064.8	2047.7	982.0	26.6
Goa	117.1	126.6	137.8	142.0	154.0	159.5	48.6	1.3
Gujarat	151.6	185.8	230.8	241.5	274.8	250.1	117.1	3.2
Haryana	34.7	29.8	40.2	60.1	40.6	26.0	25.0	0.7
Himachal Pradesh	7.9	7.6	6.8	7.6	7.8	6.7	4.7	0.1
Jammu & Kashmir	45.1	39.9	40.1	41.8	46.4	44.5	29.8	0.8
Jharkhand	25.1	22.9	32.6	47.0	49.5	51.0	15.5	0.4
Karnataka	419.7	424.5	479.0	543.1	631.8	698.6	376.1	10.2
Kerala	358.2	382.2	428.1	473.7	475.1	533.1	181.1	4.9
Ladakh	2.5	4.1	3.9	3.3	3.6	2.5	4.1	0.1
Lakshadweep	0.0	0.0	0.0	0.0	0.0	0.03	0.1	0.0
Madhya Pradesh	67.2	77.4	78.2	63.6	65.6	78.4	49.6	1.3
Maharashtra	1329.0	1374.3	1466.2	1618.4	1639.0	1399.5	550.6	14.9
Manipur	3.0	2.9	3.2	4.8	9.4	10.5	3.6	0.1
Meghalaya	0.0	0.0	0.0	0.003	0.2	0.3	0.1	0.0
Mizoram	1.4	1.6	1.1	1.2	1.8	1.8	0.5	0.0
Nagaland	1.3	3.7	2.9	2.6	3.1	2.9	1.9	0.1
Odisha	47.2	47.9	61.9	76.7	102.1	92.0	54.2	1.5
Puducherry	0.0	0.0	0.0	0.5	0.7	0.5	0.0	0.0
Punjab	44.6	68.9	106.3	135.2	165.4	163.9	97.6	2.6
Rajasthan	120.2	134.4	151.3	156.6	194.5	171.4	93.2	2.5
Sikkim	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0
Tamil Nadu	442.7	415.5	474.8	530.0	614.3	638.5	250.6	6.8
Telangana	265.1	268.3	311.7	365.6	531.0	541.1	242.3	6.6
Tripura	2.7	3.7	4.2	6.8	9.5	9.2	2.8	0.1
Uttar Pradesh	120.3	186.5	190.4	214.6	243.7	256.3	165.4	4.5
Uttarakhand	1.8	2.9	8.7	11.9	13.4	15.6	5.6	0.2
West Bengal	213.9	269.8	342.2	313.2	323.5	435.6	168.2	4.5
Total Sales	**5585.3**	**5988.9**	**6661.8**	**7334.8**	**8043.3**	**7998.6**	**3696.9**	**99.98**
Pvt Imports	139.6	274.7	337.5	300.1	258.8	-	0.9	0.02
Total Consumption	**5724.9**	**6263.7**	**6999.4**	**7634.9**	**8302.1**	**7998.6**	**3697.8**	**100.0**

Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 12 : Sector-wise Consumption (end use) of High Speed Diesel (HSD) Oil

(Figures in TMT)

Sector	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Transport	**4617**	**5765**	**5658**	**5999**	**6210**	**6011**	**3257**	**4.5**
(i) Road Transport	1580	2671	2709	2731	2727	2660	1374	1.9
(ii) Aviation	1	1	2	3	3	3	2	0.003
(iii) Shipping	344	366	296	629	763	808	658	0.9
(iv) Railways	2693	2726	2651	2636	2716	2539	1222	1.7
2. Agriculture	**575**	**630**	**607**	**618**	**639**	**616**	**571**	**0.8**
3. Power Generation	**197**	**224**	**208**	**223**	**222**	**214**	**204**	**0.3**
4. Mining & Quarrying	**998**	**1184**	**1224**	**1255**	**1465**	**1542**	**1642**	**2.3**
5. Manufacturing Industry	**794**	**1096**	**1033**	**1155**	**1264**	**1334**	**1355**	**1.9**
(i) Iron & Steel (Metallurgy)	162	170	159	153	148	135	126	0.17
(ii) Textile	59	46	35	32	25	20	16	0.02
(iii) Cement	149	204	159	185	255	266	266	0.4
(iv) Ceramic & Glass	8	8	8	8	8	7	5	0.01
(v) Chemicals & Allied	103	110	110	122	120	123	106	0.1
(vi) Aluminium	19	18	24	16	16	13	15	0.02
(vii) Civil Engineering	136	299	317	416	480	582	655	0.9
(vii) Elec./Electronics	18	24	15	13	15	13	9	0.01
(ix) Mechanical	78	137	144	138	135	117	106	0.1
(x) Fertilizers	6	7	6	5	5	6	5	0.01
(xi) Other Consumer/ Industrial Goods	56	73	56	65	57	52	47	0.1
6. Resellers/Retail	**60403**	**63772**	**65089**	**69846**	**71697**	**70704**	**63374**	**87.2**
7. Miscellaneous	1748	1922	2161	1887	1938	2064	2232	3.1
Total Sales	**69333**	**74592**	**75980**	**80983**	**83435**	**82485**	**72634**	**99.9**
8. Pvt Imports	**83**	**55**	**46**	**90**	**93**	**117**	**79**	**0.1**
Total Consumption	**69416**	**74647**	**76027**	**81073**	**83528**	**82602**	**72713**	**100.0**

Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 8 : Sector-wise Consumption of HSD during 2020-21 (%)

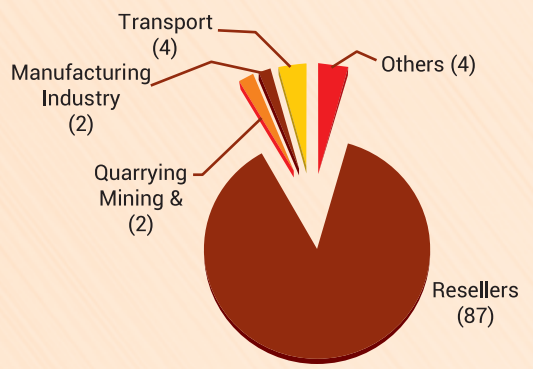
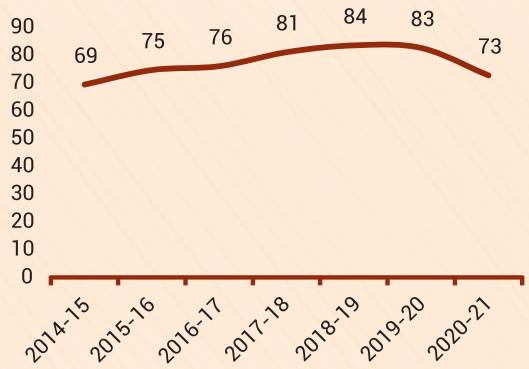


Figure V. 9 : Trend of HSD Consumption (in MMT)



V. 13 : State-wise Consumption of High Speed Diesel (HSD) Oil

(Figures in TMT)

Sector	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andaman & Nicobar Islands	119.8	124.3	126.7	140	149	157	132	0.2
Andhra Pradesh	3649.8	3298.3	3467.4	3664	3947	3834	3405	4.7
Arunachal Pradesh	109.0	118.5	132.4	146	150	161	175	0.2
Assam	777.2	851.7	860.7	926	985	1024	904	1.2
Bihar	1980.6	2254.8	2184.0	2278	2442	2367	2137	2.9
Chandigarh	83	115	102	130	192	198	127	0.2
Chhattisgarh	1302	1461	1495	1649	1699	1648	1608	2.2
Dadra & Nagar Haveli And Daman & Diu	203	232	309	312	291	234	162	0.2
Delhi	1269	1508	1267	1194	1021	835	499	0.7
Goa	283	309	344	329	316	306	233	0.3
Gujarat	4591	5077	4994	5278	5430	5608	5090	7.0
Haryana	5029	5014	4952	5147	4847	4717	4435	6.1
Himachal Pradesh	521	576	586	616	646	668	610	0.8
Jammu & Kashmir	523	590	539	631	640	623	576	0.8
Jharkhand	1554	1602	1633	1766	1901	1968	1742	2.4
Karnataka	5056	5747	5937	6610	6905	6602	5574	7.7
Kerala	2498	2537	2537	2609	2576	2557	1923	2.6
Ladakh	40	45	47	54	57	58	56	0.1
Lakshadweep	14	14	13	13	14	15	16	0.0
Madhya Pradesh	2966	3283	3212	3562	3797	3655	3369	4.6
Maharashtra	7302	7814	8071	8672	9292	9529	8031	11.0
Manipur	83	88	80	103	116	118	109	0.1
Meghalaya	302	295	299	326	344	356	281	0.4
Mizoram	54	57	61	68	73	75	69	0.1
Nagaland	57	59	64	70	77	90	89	0.1
Odisha	1943	2232	2331	2506	2613	2662	2535	3.5
Puducherry	284	330	338	333	314	290	211	0.3
Punjab	3216	3302	3348	3363	3217	3214	2742	3.8
Rajasthan	5038	5316	5212	5477	5440	5272	4337	6.0
Sikkim	54	58	61	69	78	78	60	0.1
Tamil Nadu	5962	6312	6468	6448	6354	6191	5007	6.9
Telangana	2668	3078	3295	3685	3753	3622	3253	4.5
Tripura	82	93	90	100	94	87	89	0.1
Uttar Pradesh	**6420**	**7098**	**7706**	**8608**	**9453**	**9485**	**9385**	**12.9**
Uttarakhand	660	747	722	713	762	744	657	0.9
West Bengal	2640	2955	3096	3391	3449	3439	3008	4.1
Total Sales	**69333**	**74592**	**75980**	**80983**	**83435**	**82485**	**72634**	**99.9**
Pvt Imports	83	55	46	90	93	117	79	0.1
Total Consumption	**69416**	**74647**	**76027**	**81073**	**83528**	**82602**	**72713**	**100.0**

Note : Total may not tally due to rounding off.

P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 14 : Sector-wise Consumption (end use) of Light Diesel Oil (LDO)

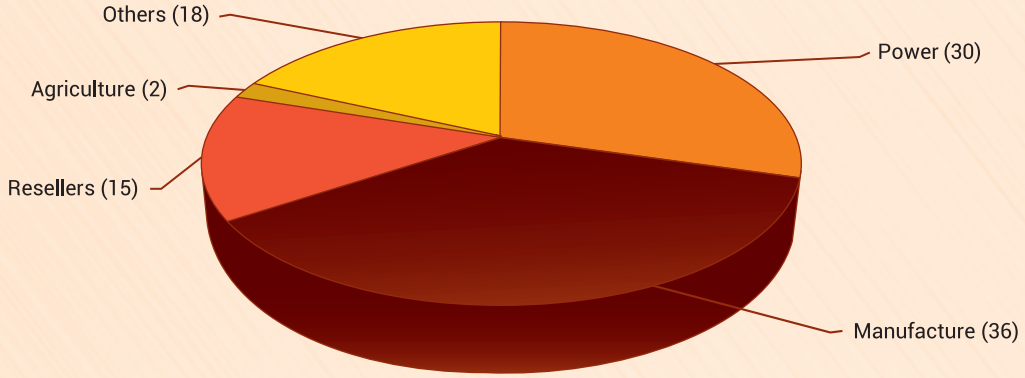
(Figures in TMT)

Sector	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Transport	5.0	3.7	7.2	7.2	10.0	4.6	5.0	0.6
Road Transport	2.2	0.2	0.0	2.6	4.5	1.9	1.5	0.2
Shipping	2.1	2.9	6.7	4.1	5.0	2.2	3.2	0.4
Railways	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.0
Agriculture	**1.1**	**1.3**	**2.0**	**9.3**	**15.6**	**12.5**	**15.3**	**1.8**
Power Generation	**132.2**	**154.2**	**174.3**	**142.9**	**276.5**	**342.1**	**252.3**	**29.5**
Mining & Quarrying	**3.8**	**2.2**	**2.3**	**6.1**	**22.4**	**14.4**	**7.7**	**0.9**
Manufacturing Industry	**54.6**	**60.7**	**59.5**	**148.8**	**174.8**	**153.3**	**308.7**	**36.1**
Civil Engineering	4.6	10.3	20.2	33.2	41.9	43.1	136.6	16.0
Metallurgical	30.1	26.8	19.3	54.7	67.7	64.0	78.2	9.1
Textile & Fibre	1.1	1.1	1.4	2.1	2.4	1.9	3.9	0.5
Cement	1.2	1.2	1.7	8.0	4.8	11.7	17.0	2.0
Ceramic & Glass	0.0	0.0	0.1	0.4	0.4	0.5	0.9	0.1
Chemicals & Allied	9.0	12.0	8.9	10.8	17.4	16.5	50.4	5.9
Aluminium	6.9	3.3	3.9	31.7	28.4	5.4	5.7	0.7
Elec./Electronics	0.0	0.2	0.1	0.7	1.0	0.1	1.1	0.13
Mechanical	0.7	4.1	2.1	2.9	6.1	6.2	8.6	1.0
Other Consumer/ Industrial Goods	1.0	1.6	1.8	4.3	4.6	3.8	6.0	0.7
Resellers	**3.8**	**1.1**	**1.0**	**2.6**	**33.3**	**37.5**	**124.8**	**14.6**
Miscellaneous	**164.8**	**183.8**	**202.5**	**206.9**	**65.3**	**63.3**	**128.9**	**15.1**
Total Sales	**365.3**	**407.1**	**449.0**	**523.8**	**598.0**	**627.8**	**842.7**	**98.6**
Pvt Imports	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**12.4**	**1.4**
Total Consumption	**365.3**	**407.1**	**449.0**	**523.8**	**598.0**	**627.8**	**855.1**	**100.0**

Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 10 : Sector-wise Consumption of LDO during 2020-21 (%)



V. 15 : State-wise Consumption (end use) of Light Diesel Oil (LDO)

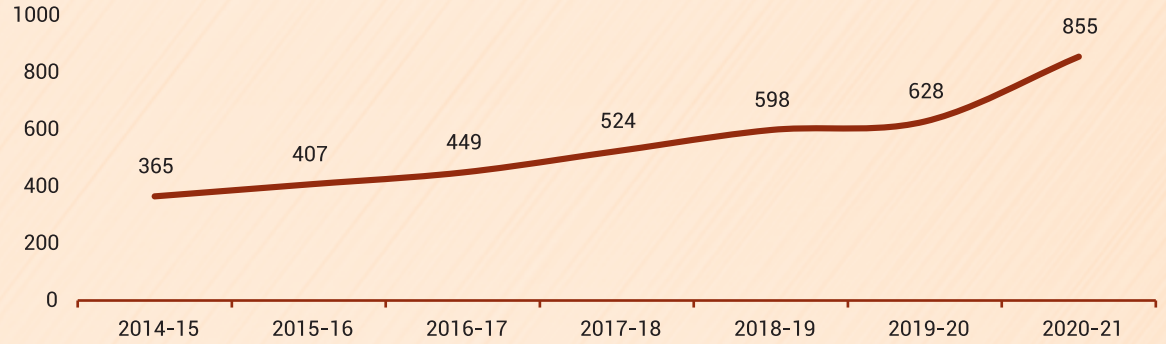
(Figures in TMT)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andhra Pradesh	12.8	20.0	21.1	17.8	21.9	20.4	35.5	4.2
Assam	1.5	5.1	3.8	3.1	5.1	3.6	3.8	0.4
Bihar	21.0	13.5	20.7	30.5	23.7	42.8	40.4	4.7
Chandigarh	0.4	0.4	0.6	0.7	0.5	0.4	0.4	0.0
Chhattisgarh	29.7	28.5	27.2	35.6	42.4	42.5	43.2	5.1
Dadra & Nagar Haveli And Daman & Diu	0.3	0.3	0.2	0.3	0.3	0.6	0.6	0.1
Delhi	3.5	0.8	0.5	6.5	2.2	0.7	2.1	0.2
Goa	0.2	0.3	0.3	0.3	0.6	0.2	0.3	0.0
Gujarat	9.3	22.1	23.6	20.3	34.5	29.4	108.4	12.7
Haryana	4.3	5.7	8.4	24.2	35.0	25.4	23.1	2.7
Himachal Pradesh	0.1	0.1	0.2	0.6	0.3	0.2	1.3	0.1
Jammu & Kashmir	0.7	0.7	0.4	1.7	0.9	0.8	2.7	0.3
Jharkhand	18.2	10.9	18.1	15.4	19.1	18.9	38.9	4.5
Karnataka	3.9	11.0	29.6	31.0	17.3	20.2	22.3	2.6
Kerala	0.1	0.1	0.3	0.8	2.0	5.8	16.5	1.9
Ladakh	0.7	0.4	0.4	0.1	0.1	0.1	0.1	0.0
Madhya Pradesh	27.4	24.8	13.1	23.2	34.0	55.2	34.3	4.0
Maharashtra	**88.4**	**88.3**	**98.2**	**88.6**	**77.8**	**80.7**	**140.5**	**16.4**
Manipur		0.1	0.0	0.0	0.0	0.1	0.2	0.0
Meghalaya		0.0	0.0	0.0		0.1	0.3	0.0
Mizoram	0.1	0.2	0.0				0.4	0.0
Nagaland	0.0	0.0			0.1	0.1	0.4	0.0
Odisha	21.7	23.6	18.1	26.0	48.5	55.9	48.7	5.7
Puducherry			0.0		0.3	0.1	0.6	0.1
Punjab	7.7	5.3	6.1	8.2	9.4	9.2	12.3	1.4
Rajasthan	10.5	13.4	20.0	32.7	61.6	48.6	70.2	8.2
Sikkim					0.1	1.7	3.7	0.4
Tamil Nadu	8.4	7.9	4.3	5.9	14.4	19.5	35.4	4.1
Telangana	0.7	11.0	19.1	6.2	16.5	14.2	28.8	3.4
Uttar Pradesh	35.8	52.0	51.0	86.5	83.9	85.9	82.0	9.6
Uttarakhand	0.2	0.1	0.4	2.1	2.3	1.0	7.1	0.8
West Bengal	57.5	60.8	63.1	55.4	43.4	43.6	38.5	4.5
Total Sales	**365.3**	**407.1**	**449.0**	**523.8**	**598.0**	**627.8**	**842.7**	**98.6**
Pvt Imports							12.4	1.4
Total Consumption	**365.3**	**407.1**	**449.0**	**523.8**	**598.0**	**627.8**	**855.1**	**100.0**

Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

Figure V. 11 : Trend of LDO Consumption (in MMT)



V. 16 : Sector-wise Consumption (end use) of Furnace Oil

(Figures in TMT)

Sector	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Transport	**346.4**	**379.5**	**444.1**	**600.8**	**786.3**	**849.2**	**1022.4**	**19.6**
(i) Road Transport	10.2	45.0	36.9	20.2	110.0	120.5	132.1	2.5
(ii) Shipping	334.5	332.6	407.2	580.6	676.3	728.7	890.3	17.1
(iii) Railways	1.8	1.9	0.0	0.0	0.1	0.0	0.0	0.0
Other Transport (incl. Agri. Retail Trade)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2. Agriculture	**55.6**	**56.6**	**51.4**	**49.8**	**78.5**	**70.9**	**80.0**	**1.5**
3. Power Generation	**445.8**	**430.4**	**361.0**	**313.8**	**338.8**	**302.7**	**226.1**	**4.3**
4. Mining & Quarrying	**45.1**	**52.7**	**71.5**	**67.9**	**54.3**	**84.0**	**91.7**	**1.8**
5. Manufacturing Industry	**1748.4**	**2136.5**	**2491.8**	**2345.9**	**2577.4**	**2142.5**	**1874.5**	**36.0**
(i) Civil Engineering	32.8	47.9	49.6	43.0	52.1	48.8	58.0	1.1
(ii) Metallurgical	611.4	763.9	981.7	930.6	885.2	778.5	666.2	12.8
(iii) Textile & Fibre	69.9	68.4	74.1	45.7	48.6	41.0	35.7	0.7
(iv) Cement	12.7	14.7	12.0	13.7	20.3	25.3	22.1	0.4
(v) Ceramic & Glass	87.9	142.7	171.0	134.2	202.5	79.0	59.9	1.2
(vi) Chemicals & Allied	165.9	193.1	238.9	242.7	295.2	240.4	226.5	4.3
(vii) Aluminium	232.3	218.5	258.3	238.3	386.4	338.6	348.8	6.7
(viii) Electrical	1.6	1.3	1.6	2.4	3.3	1.4	1.9	0.04
(ix) Mechanical	10.9	16.4	16.6	13.6	27.5	23.0	16.8	0.3
(x) Fertilizers	393.3	476.5	487.7	518.4	460.4	386.9	294.9	5.7
(xi) Other Consumer/ Industrial Goods)	129.8	193.2	200.1	163.3	196.0	179.7	143.6	2.8
6. Resellers	**196.9**	**270.2**	**357.3**	**321.2**	**298.4**	**289.6**	**267.8**	**5.1**
7. Miscellaneous	**2175.4**	**2564.0**	**2485.4**	**2233.5**	**1449.5**	**1398.1**	**1329.9**	**25.5**
Total Sales	**5013.6**	**5889.8**	**6262.3**	**5933.0**	**5583.1**	**5137.1**	**4892.3**	**93.9**
8. Pvt Imports	**570.0**	**592.1**	**783.9**	**671.7**	**611.4**	**774.9**	**316.0**	**6.1**
Total Consumption	**5583.6**	**6481.9**	**7046.2**	**6604.7**	**6194.5**	**5912.0**	**5208.3**	**100.0**

Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

Figure V. 12 : Trend of Furnace Oil Consumption (in MMT)

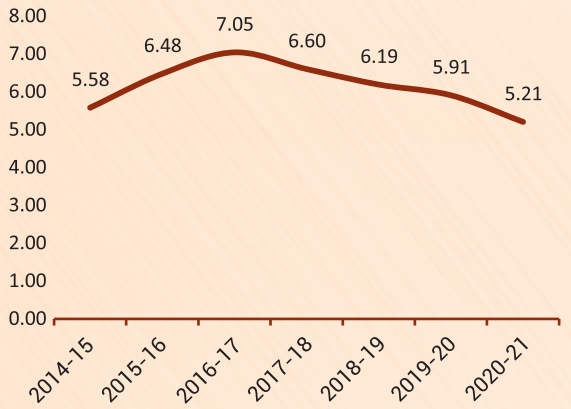
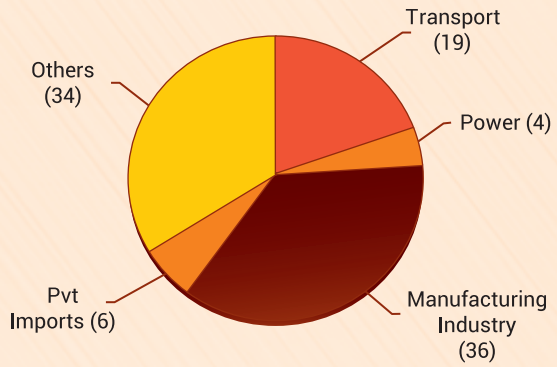


Figure V. 13 : Sector-wise consumption of Furnace Oil during 2020-21 (%)



V. 17 : State-wise Consumption of Furnace Oil

(Figures in TMT)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andaman & Nicobar Islands	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Andhra Pradesh	160.8	148.9	236.3	289.1	283.0	258.5	242.7	4.7
Arunachal Pradesh	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0
Assam	3.0	5.3	3.1	4.1	4.7	4.9	6.7	0.1
Bihar	9.0	16.3	18.7	22.9	27.2	28.6	25.9	0.5
Chandigarh	40.2	62.2	11.9	8.9	4.4	2.0	1.3	0.0
Chhattisgarh	126.1	183.6	176.6	170.8	199.6	161.4	149.9	2.9
Dadra & Nagar Haveli And Daman & Diu	112.3	137.7	128.9	107.9	115.6	104.8	124.8	2.4
Delhi	57.3	75.6	81.1	45.7	0.0	0.0	0.0	0.0
Goa	57.0	48.2	42.2	35.5	43.7	39.2	30.6	0.6
Gujarat	502.2	727.9	776.2	781.6	685.4	748.3	823.0	15.8
Haryana	95.5	173.6	165.6	82.7	0.0	0.0	0.0	0.0
Himachal Pradesh	34.5	52.0	38.0	52.7	47.7	40.4	43.6	0.8
Jammu & Kashmir	1.1	0.7	3.8	2.7	2.5	4.2	3.5	0.1
Jharkhand	144.7	134.8	143.9	142.8	141.5	112.2	106.9	2.1
Karnataka	308.3	351.6	357.8	377.5	354.4	291.8	259.0	5.0
Kerala	221.2	293.2	305.7	251.9	258.9	278.0	332.7	6.4
Ladakh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lakshadweep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madhya Pradesh	131.7	115.7	109.5	111.3	120.9	93.8	85.8	1.6
Maharashtra	811.3	822.9	858.1	844.8	815.3	766.3	666.6	12.8
Manipur	0.0	0.0	0.0	0.0	0.1	0.6	0.5	0.0
Meghalaya	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0
Nagaland	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Odisha	559.1	609.2	763.8	761.8	856.1	921.8	901.1	17.3
Puducherry	22.8	23.5	28.2	36.6	39.6	38.9	35.1	0.7
Punjab	93.9	123.4	216.9	215.4	209.1	171.0	146.7	2.8
Rajasthan	141.7	208.8	177.6	114.3	8.8	0.0	0.0	0.0
Sikkim	0.2	0.7	1.2	1.9	0.7	0.0	0.0	0.0
Tamil Nadu	659.3	691.5	699.2	676.4	655.3	502.7	382.7	7.3
Telangana	78.4	100.2	111.7	113.4	129.3	109.6	102.2	2.0
Tripura	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
Uttar Pradesh	234.4	329.2	326.7	187.9	7.2	0.0	0.0	0.0
Uttarakhand	52.4	85.1	85.3	93.2	146.0	67.9	72.7	1.4
West Bengal	355.2	368.1	393.8	398.3	426.0	390.0	347.5	6.7
Total Sales	**5013.6**	**5889.8**	**6262.3**	**5933.0**	**5583.1**	**5137.1**	**4892.3**	**93.9**
Imports & SEZ State	570.0	592.1	783.9	671.7	611.4	774.9	316.0	6.1
Grand Total	**5583.6**	**6481.9**	**7046.2**	**6604.7**	**6194.5**	**5912.0**	**5208.3**	**100.0**

Note : Total may not tally due to rounding off.

P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 18 : Sector-wise/State-wise Consumption (end use) of Low Sulphur Heavy Stock

(Figures in TMT)

Sector & State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sector-wise Consumption of Low Sulphur Heavy Stock								
1. Agriculture	**0.0**	**0.0**	**0.0**	**1.2**	**7.9**	**6.4**	**6.8**	**1.8**
2. Power Generation	**226.2**	**50.7**	**16.4**	**0.0**	**9.3**	**17.9**	**10.7**	**2.8**
3. Mining	**0.0**	**0.0**	**0.0**	**0.3**	**0.0**	**0.0**	**0.0**	**0.0**
4. Manufacturing Industry	**103.6**	**70.4**	**50.9**	**53.8**	**175.1**	**201.9**	**196.2**	**51.9**
(i) Civil Engineering	0.0	0.0	0.0	1.1	3.1	6.1	7.4	2.0
(ii) Metallurgical	0.0	0.0	0.0	2.4	60.3	78.7	66.2	17.5
(iii) Iron & Steel	55.3	46.3	45.9	37.9	71.9	86.3	93.9	24.8
(iv) Textile & Fibre	0.0	0.0	0.0	0.3	2.7	2.5	3.5	0.9
(v) Cement	0.0	0.2	0.0	0.4	0.9	0.8	0.9	0.2
(vi) Chemicals & Allied	46.6	20.7	3.7	5.7	13.6	12.4	10.2	2.7
(vii) Electrical	0.0	0.0	0.0	0.1	0.0	0.7	0.1	0.0
(viii) Mechanical	0.0	0.0	0.0	0.1	0.5	0.8	2.3	0.6
(ix) Fertilizers	1.6	3.3	1.3	0.5	0.5	1.0	0.5	0.1
(x) Other Consumer/ Industrial Goods)	0.0	0.0	0.0	5.3	21.5	12.7	11.3	3.0
5. Miscellaneous	**47.5**	**29.2**	**36.9**	**46.3**	**128.7**	**113.0**	**116.0**	**30.7**
6. Resellers	**0.0**	**0.0**	**0.0**	**14.7**	**48.0**	**50.3**	**48.5**	**12.8**
Total Sales	**377.3**	**150.4**	**104.2**	**116.3**	**369.0**	**389.5**	**378.2**	**100.0**
7. Pvt Imports	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Total Consumption	**377.3**	**150.4**	**104.2**	**116.3**	**369.0**	**389.5**	**378.2**	**100.0**
State-wise Consumption of Low Sulphur Heavy Stock								
Andhra Pradesh	60.6	54.4	49.7	39.1	59.6	69.1	82.0	21.7
Bihar	-	-	-	-	-	-	0.04	0.0
Chandigarh	-	-	-	0.1	0.6	-	0.03	0.0
Chhattisgarh	-	-	-	0.0	-	-	0.05	0.0
Dadra & Nagar Haveli And Daman & Diu	26.3	6.1	-	-	-	-	0.0	0.0
Delhi	-	-	-	8.5	38.2	13.5	0.0	0.0
Gujarat	1.9	0.5	0.9	0.9	0.6	1.3	1.7	0.5
Haryana	0.0	0.0	0.0	10.1	49.1	57.1	59.1	15.6
Himachal Pradesh	-	-	-	0.1	0.7	1.3	3.3	0.9
Jammu & Kashmir	-	-	-	0.0	0.0	0.0	0.0	0.0
Karnataka	48.0	16.9	4.9	1.4	0.1	-	0.0	0.0
Kerala	43.6	31.2	10.0	-	1.3	2.1	0.1	0.0
Madhya Pradesh	-	-	-	-	0.1	-	1.6	0.4
Maharashtra	16.5	18.2	26.5	12.8	3.8	6.2	14.2	3.8
Odisha	-	-	-	-	-	-	0.04	0.0
Puducherry	3.7	2.0	2.4	0.2	1.4	1.0	0.02	0.0
Punjab	-	-	-	10.3	4.3	2.9	2.0	0.5
Rajasthan	-	-	-	13.5	67.7	78.9	68.0	18.0
Tamil Nadu	172.0	15.6	3.9	1.7	1.6	0.9	0.7	0.2
Telangana	4.3	5.3	5.8	2.1	0.6	0.6	0.02	0.0
Uttar Pradesh	-	-	-	13.0	130.4	148.0	138.1	36.5
Uttarakhand	0.3	0.2	-	2.6	9.1	6.5	7.3	1.9
Grand Total	**377.2**	**150.4**	**104.2**	**116.3**	**369.0**	**389.5**	**378.2**	**100.0**

Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 19 : State-wise Consumption of Lubes & Greases

(Figures in TMT)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andaman & Nicobar Islands	0.9	0.7	0.9	0.7	0.7	0.7	0.8	0.0
Andhra Pradesh	30.9	30.1	29.6	30.7	30.8	27.2	31.3	0.8
Arunachal Pradesh	0.7	0.6	0.7	0.6	0.6	0.5	0.5	0.0
Assam	10.6	13.4	23.0	30.3	22.3	28.5	39.2	1.0
Bihar	11.4	11.9	13.3	13.2	14.5	13.7	13.4	0.3
Chandigarh	2.1	2.4	1.7	1.7	1.7	4.4	2.4	0.1
Chhattisgarh	19.2	18.9	18.9	19.3	20.5	20.3	20.3	0.5
Dadra & Nagar Haveli And Daman & Diu	120.4	142.5	138.8	133.0	123.5	147.2	181.2	4.4
Delhi	17.4	18.7	16.4	16.9	17.2	15.6	13.9	0.3
Goa	4.6	4.6	4.2	3.7	4.7	4.6	4.6	0.1
Gujarat	83.8	95.4	98.5	89.0	96.6	96.4	109.3	2.7
Haryana	41.7	46.4	47.5	50.5	49.9	53.1	50.5	1.2
Himachal Pradesh	18.3	21.5	30.6	22.8	15.6	12.5	15.1	0.4
Jammu & Kashmir	6.9	8.8	9.6	8.4	8.5	7.3	7.3	0.2
Jharkhand	29.8	31.1	32.1	33.5	33.3	30.5	30.1	0.7
Karnataka	46.4	52.2	53.9	55.6	51.8	46.0	55.0	1.3
Kerala	42.0	43.6	42.7	40.8	43.6	41.2	45.5	1.1
Ladakh	0.2	0.4	0.2	0.2	0.3	0.3	0.3	0.0
Lakshadweep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Madhya Pradesh	37.4	38.2	37.6	39.5	44.8	42.6	41.5	1.0
Maharashtra	250.7	316.9	306.6	328.7	285.5	303.3	330.2	8.1
Manipur	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.0
Meghalaya	1.2	1.3	1.2	1.1	1.0	0.7	0.8	0.0
Mizoram	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.0
Nagaland	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.0
Odisha	24.6	24.4	24.5	23.7	24.2	21.0	22.1	0.5
Puducherry	1.6	1.7	1.8	2.0	2.0	2.1	1.9	0.0
Punjab	39.9	42.4	43.4	43.6	49.2	40.9	40.6	1.0
Rajasthan	41.6	42.2	42.8	48.1	52.5	49.9	59.1	1.4
Sikkim	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.0
Tamil Nadu	96.6	107.2	115.3	111.6	111.1	99.1	132.7	3.2
Telangana	39.7	40.9	40.0	38.2	40.7	46.3	52.8	1.3
Tripura	0.8	0.9	0.9	1.0	1.1	0.8	0.9	0.0
Uttar Pradesh	64.4	69.0	71.6	68.7	76.7	76.4	82.8	2.0
Uttarakhand	17.8	16.7	20.4	19.9	18.0	17.0	21.9	0.5
West Bengal	57.2	65.4	69.2	66.8	68.9	65.2	66.5	1.6
Total Sales	**1161.9**	**1311.8**	**1339.2**	**1345.1**	**1312.8**	**1316.6**	**1475.4**	**36.0**
Pvt Imports	**2148.1**	**2259.3**	**2130.9**	**2538.8**	**2355.1**	**2516.8**	**2621.9**	**64.0**
Total Consumption	**3310.0**	**3571.2**	**3470.1**	**3883.9**	**3667.9**	**3833.4**	**4097.3**	**100.0**

Note : Total may not tally due to rounding off. P : Provional

Source : Petroleum Planning & Analysis Cell.

V. 20 : State-wise Consumption of Petcoke

(Figures in TMT)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andhra Pradesh	72	203	206	279	588	541	402	2.6
Assam	221	245	240	290	267	183	206	1.3
Bihar	166	160	168	189	189	194	198	1.3
Chandigarh	97	59	88	94	28	22	10	0.1
Chhattisgarh	194	202	213	602	927	634	396	2.5
Delhi	82	60	49	18	-	-	0	-
Goa	1	0	0	12	4	6	13	0.1
Gujarat	1407	1194	1380	1216	1481	1594	905	5.8
Haryana	466	395	252	325	0	-	0	-
Himachal Pradesh	331	518	633	433	356	463	344	2.2
Jammu & Kashmir	64	84	60	77	72	73	75	0.5
Jharkhand	3	3	27	82	96	65	31	0.2
Karnataka	234	620	518	646	834	865	518	3.3
Kerala	7	4	9	29	15	15	27	0.2
Madhya Pradesh	785	861	825	769	869	822	580	3.7
Maharashtra	49	31	64	94	187	126	70	0.4
Meghalaya	1	0	4	22	3	48	0	0.0
Odisha	78	96	405	486	408	356	407	2.6
Puducherry	0	1	1	0	-	-	0	-
Punjab	613	640	660	1092	1318	1249	784	5.0
Rajasthan	2837	2598	2409	2339	2211	1836	1198	7.7
Tamil Nadu	79	82	144	623	825	816	539	3.5
Telangana	8	43	153	42	45	77	76	0.5
Uttar Pradesh	548	707	620	392	43	109	105	0.7
Uttarakhand	38	72	45	68	121	111	73	0.5
West Bengal	13	22	24	34	54	67	116	0.7
Total Sales	**8393**	**8901**	**9196**	**10251**	**10942**	**10275**	**7070**	**45.3**
Pvt Imports	6165	10397	14768	12777	7926	10674	8256	52.9
SEZ data	-	-	-	2628	2479	759	279	1.8
Total Consumption	**14557**	**19297**	**23964**	**25657**	**21346**	**21708**	**15605**	**100.0**

Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 21 : State-wise Consumption of Bitumen

(Figures in TMT)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andaman & Nicobar Islands	5.2	5.5	6.3	4.1	4.9	4.7	4.4	0.1
Andhra Pradesh	207.2	245.2	235.1	206.5	250.0	190.6	207.2	2.8
Arunachal Pradesh	7.5	17.4	24.1	22.3	16.2	15.0	14.0	0.2
Assam	40.9	32.7	22.7	30.0	46.5	30.3	23.1	0.3
Bihar	170.0	216.1	219.1	192.3	217.5	260.1	421.2	5.6
Chandigarh	5.3	4.5	4.0	5.8	7.3	3.2	1.8	0.0
Chhattisgarh	163.3	178.4	142.3	198.2	244.9	130.5	162.5	2.2
Dadra & Nagar Haveli And Daman & Diu	4.6	3.1	3.2	3.6	8.5	5.2	2.4	0.0
Delhi	10.6	8.8	5.9	1.7	0.7	1.4	3.1	0.0
Goa	19.9	25.2	20.7	11.9	16.4	12.9	9.0	0.1
Gujarat	533.9	455.8	461.2	592.2	524.7	374.7	391.2	5.2
Haryana	203.4	158.0	126.8	156.1	146.1	135.4	253.8	3.4
Himachal Pradesh	47.4	51.3	62.8	63.0	71.3	64.9	74.4	1.0
Jammu & Kashmir	32.0	45.9	26.0	47.4	49.9	33.3	37.7	0.5
Jharkhand	134.4	176.9	218.4	223.5	212.5	170.2	160.3	2.1
Karnataka	203.8	225.6	238.0	250.4	228.8	190.8	156.5	2.1
Kerala	178.4	193.2	173.2	234.1	245.1	242.7	269.5	3.6
Ladakh	5.4	7.3	4.7	5.3	9.9	10.2	13.8	0.2
Lakshadweep	-	-	-	-	-	-		0.0
Madhya Pradesh	267.6	263.6	276.5	262.1	308.8	227.9	259.9	3.5
Maharashtra	387.5	467.9	500.4	531.9	711.7	653.2	663.3	8.8
Manipur	3.2	2.6	1.7	2.9	4.1	5.4	3.0	0.0
Meghalaya	20.5	18.6	12.4	12.0	9.8	4.0	4.3	0.1
Mizoram	2.5	3.6	2.8	4.8	7.1	3.1	3.1	0.0
Nagaland	6.0	5.4	3.1	3.1	6.0	7.0	7.3	0.1
Odisha	119.9	137.0	155.5	116.3	89.8	99.9	112.1	1.5
Puducherry	4.7	5.5	3.6	3.2	1.6	1.1	1.6	0.0
Punjab	171.2	123.2	215.3	118.0	168.6	232.2	153.2	2.0
Rajasthan	311.7	279.5	219.9	294.9	403.0	335.8	309.4	4.1
Sikkim	1.5	1.8	2.6	3.9	1.8	2.1	1.7	0.0
Tamil Nadu	356.5	475.9	450.3	424.7	493.7	464.8	517.5	6.9
Telangana	153.0	307.2	243.1	205.0	202.5	188.2	197.0	2.6
Tripura	10.0	11.0	13.1	12.6	4.5	4.0	3.5	0.0
Uttar Pradesh	505.1	605.3	644.5	660.7	854.0	721.9	776.2	10.3
Uttarakhand	57.6	68.2	51.0	35.2	33.5	44.2	78.6	1.0
West Bengal	204.1	231.9	207.6	195.9	228.7	227.2	194.9	2.6
Total Sales	**4555.8**	**5058.9**	**4998.1**	**5135.6**	**5830.4**	**5097.7**	**5492.4**	**73.0**
Pvt Imports	517.0	879.0	937.4	950.3	877.3	1622.6	2031.5	27.0
Total Consumption	**5072.8**	**5937.9**	**5935.5**	**6085.9**	**6707.7**	**6720.4**	**7523.9**	**100.0**

Note : Total may not tally due to rounding off.

P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 22 : State-wise Consumption of Total Petroleum products

(Figures in TMT)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share of Total Cons. 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andaman & Nicobar Islands	172	180	186	202	212	217	171	0.1
Andhra Pradesh	6269	6182	6585	6953	7820	7699	7266	3.7
Arunachal Pradesh	178	200	225	242	248	263	276	0.1
Assam	1905	2120	2243	2517	2744	2823	2710	1.4
Bihar	4108	4633	4759	4972	5242	5397	5518	2.8
Chandigarh	405	440	388	427	435	436	312	0.2
Chhattisgarh	2556	2873	2910	3587	4110	3667	3421	1.8
Dadra & Nagar Haveli And Daman & Diu	534	592	658	637	619	570	542	0.3
Delhi	4517	4997	4882	4999	4890	4621	2911	1.5
Goa	686	730	780	779	798	790	556	0.3
Gujarat	17625	18980	18963	19134	21216	22536	21940	11.3
Haryana	10586	10774	10721	10974	10523	10223	9853	5.1
Himachal Pradesh	1247	1549	1707	1578	1559	1694	1528	0.8
Jammu & Kashmir	1108	1231	1147	1325	1376	1372	1301	0.7
Jharkhand	2627	2768	2921	3184	3409	3416	3139	1.6
Karnataka	9577	11051	11459	12548	13206	13067	11121	5.7
Kerala	5390	5552	5724	6145	6339	6533	5461	2.8
Ladakh	93	110	111	119	127	128	141	0.1
Lakshadweep	15	15	14	15	15	17	18	0.0
Madhya Pradesh	6431	7009	6962	7398	8006	7860	7283	3.7
Maharashtra	16922	18227	19333	20618	21017	20797	17849	9.2
Manipur	173	179	163	207	241	255	237	0.1
Meghalaya	422	419	428	484	492	550	409	0.2
Mizoram	107	113	117	125	139	141	130	0.1
Nagaland	120	127	132	143	154	172	163	0.1
Odisha	3926	4461	5177	5687	5930	6030	5927	3.1
Puducherry	459	521	543	554	542	517	413	0.2
Punjab	5714	5962	6346	6788	7063	7114	5964	3.1
Rajasthan	10879	11218	10984	11267	11403	10921	9179	4.7
Sikkim	93	100	104	117	126	130	108	0.1
Tamil Nadu	12211	12698	13284	13939	14421	14116	12195	6.3
Telangana	4818	5705	6133	6562	7000	6953	6223	3.2
Tripura	190	212	215	235	235	232	230	0.1
Uttar Pradesh	13348	15012	15930	16891	18180	18407	18090	9.3
Uttarakhand	1303	1519	1486	1526	1725	1656	1534	0.8
West Bengal	6448	7194	7505	8249	8789	9308	8491	4.4
Total Sales	**153163**	**165653**	**171225**	**181126**	**190352**	**190627**	**172610**	**88.8**
PVT	12357	19021	23372	20866	16920	19284	18280.0	9.4
SEZ	-	-	-	4174	5945	4216	3405	1.8
Total Consumption	**165520**	**184674**	**194597**	**206166**	**213216**	**214127**	**194295**	**100.0**

Note : Total may not tally due to rounding off. P : Provisional

Source : Petroleum Planning & Analysis Cell.

V. 23 : State-wise & Product-wise Per Capita Consumption of Petroleum Products

(Figures in TMT)

State/UT & Product	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
State-wise Per Capita Consumption of Petroleum Products							
Andaman & Nicobar Islands	451.8	473.0	489.5	530.9	558.0	571.5	451.3
Andhra Pradesh	127.0	125.2	133.3	140.8	158.4	155.9	147.2
Arunachal Pradesh	128.5	144.5	162.7	175.3	179.7	190.5	199.5
Assam	61.1	68.0	72.0	80.8	88.0	90.6	86.9
Bihar	39.6	44.6	45.8	47.9	50.5	52.0	53.2
Chandigarh	384.1	417.4	367.9	404.5	412.6	413.3	295.9
Chhattisgarh	100.1	112.5	113.9	140.4	160.9	143.6	133.9
Dadra & Nagar Haveli And Daman & Diu	911.0	1010.6	1123.2	1086.7	1056.5	973.7	924.7
Delhi	269.6	298.3	291.4	298.4	291.9	275.9	173.8
Goa	470.8	500.7	534.8	534.5	547.1	541.9	381.1
Gujarat	291.9	314.3	314.0	316.9	351.4	373.2	363.3
Haryana	417.5	424.9	422.9	432.9	415.0	403.2	388.6
Himachal Pradesh	181.8	226.0	249.0	230.2	227.4	247.0	222.8
Jammu & Kashmir	90.4	100.4	93.6	108.1	112.3	111.9	106.1
Jharkhand	79.7	84.0	88.6	96.6	103.4	103.6	95.2
Karnataka	156.7	180.8	187.5	205.3	216.0	213.8	181.9
Kerala	161.4	166.3	171.5	184.1	189.9	195.7	163.6
Ladakh	320.8	379.5	383.5	409.0	435.9	441.8	484.1
Lakshadweep	228.9	232.7	213.8	225.7	235.0	256.6	274.6
Madhya Pradesh	88.6	96.5	95.9	101.9	110.3	108.3	100.3
Maharashtra	150.6	162.2	172.0	183.5	187.0	185.1	158.8
Manipur	63.7	66.0	59.9	76.2	88.5	93.6	86.9
Meghalaya	142.5	141.3	144.4	163.4	166.0	185.7	138.1
Mizoram	98.5	103.7	107.5	114.1	127.2	129.2	119.5
Nagaland	60.7	64.3	66.8	72.2	77.9	86.6	82.1
Odisha	93.6	106.4	123.4	135.6	141.4	143.7	141.3
Puducherry	369.0	418.5	436.0	445.5	435.6	415.2	331.7
Punjab	206.2	215.2	229.1	245.0	255.0	256.8	215.3
Rajasthan	158.5	163.5	160.1	164.2	166.2	159.1	133.8
Sikkim	152.9	164.9	171.7	192.7	207.1	214.1	178.0
Tamil Nadu	169.3	176.0	184.1	193.2	199.9	195.7	169.0
Telangana	136.5	161.7	173.8	186.0	198.4	197.0	176.3
Tripura	51.8	57.8	58.5	64.0	64.0	63.1	62.6
Uttar Pradesh	66.9	75.2	79.8	84.6	91.1	92.2	90.6
Uttarakhand	128.8	150.2	146.9	150.8	170.6	163.7	151.6
West Bengal	70.6	78.7	82.2	90.3	96.2	101.9	92.9
Grand Total	**126.6**	**136.9**	**141.5**	**149.7**	**157.3**	**157.5**	**142.6**
Product-wise Per Capita Consumption of Petroleum Products							
Naphtha	8.5	8.9	8.9	9.0	9.4	9.8	10.2
MS	15.8	18.1	19.6	21.6	23.4	24.8	23.1
SKO	5.9	5.6	4.5	3.2	2.9	2.0	1.5
HSDO	57.3	61.6	62.8	66.9	68.9	68.2	60.0
LDO	0.3	0.3	0.4	0.4	0.5	0.5	0.7
F.O (Regular)	4.1	4.9	5.2	4.9	4.6	4.2	4.0
LSHS/HHS	0.3	0.1	0.1	0.1	0.3	0.3	0.3
All India	**126.6**	**136.9**	**141.5**	**149.7**	**157.3**	**157.5**	**142.6**

Note : Total may not tally due to rounding off. (Consumption data is excluding Pvt. Imports & SEZ sales) P : Provisional

Source : Petroleum Planning & Analysis Cell.

CHAPTER-VI

Trade

CHAPTER HIGHLIGHTS

India's trade deficit in the Oil & Gas Trade was lower by 28.8% at ₹ 4,66,891 crore in FY 2020-21 from ₹ 6,56,108 crore during FY 2019-20.

India's import bill on import of Crude Oil, LNG, and Petroleum Products decreased by 31.6% in value terms from ₹ 9,10,125 crore in 2019-20 to ₹ 6,24,058 crore in 2020-21. And in quantity term, import of crude oil, LNG and petroleum products decreased by 10.7% from 296.32 MMT in 2019-20 to 264.51 MMT during 2020-21.

Import of crude oil in the country during 2020-21 was 196.46 MMT, which was lower by 13.4% over the imports of crude oil import of 226.96 MMT during 2019-20. This let to decrease of 35.9% in ₹ value terms over the same period.

Import of LNG in the country during 2020-21 was 24.80 MMT, which was lower by 3.0% over the imports of LNG of 25.57 MMT during 2019-20. This resulted in decrease of 18.6% in ₹ value terms over the same period.

Import of petroleum products in the country during 2020-21 was 43.25 MMT, which was lower by 1.2% over the imports of petroleum products of 43.79 MMT during 2019-20. The decrease was 13.0% in ₹ value terms over the same period.

Exports of petroleum products in the country during 2020-21 was 56.77 MMT, which was lower by 13.6% over the exports of petroleum products of 65.69 MMT during 2019-20. The decrease was 38.1% in ₹ value terms over the same period.

Around 53.7% crude oil and 43.2% of petroleum products are imported by Public sector. Exports of petroleum products by the public sector accounted for 18.8% during 2020-21.

Self-sufficiency in crude oil was 15.6% and self-sufficiency in gas was 45.8%. India's O+OEG import dependency was reduced from 78.0% during 2019-20 to 77.6% during 2020-21.

FDI inflow received was ₹ 7,672 million in the P& NG Sector contributing 0.17% of total FDI inflow (₹ 44,25,688 million) in the economy during 2020-21. FDI inflows in India in US dollar terms increased by 19.3% during 2020-21.

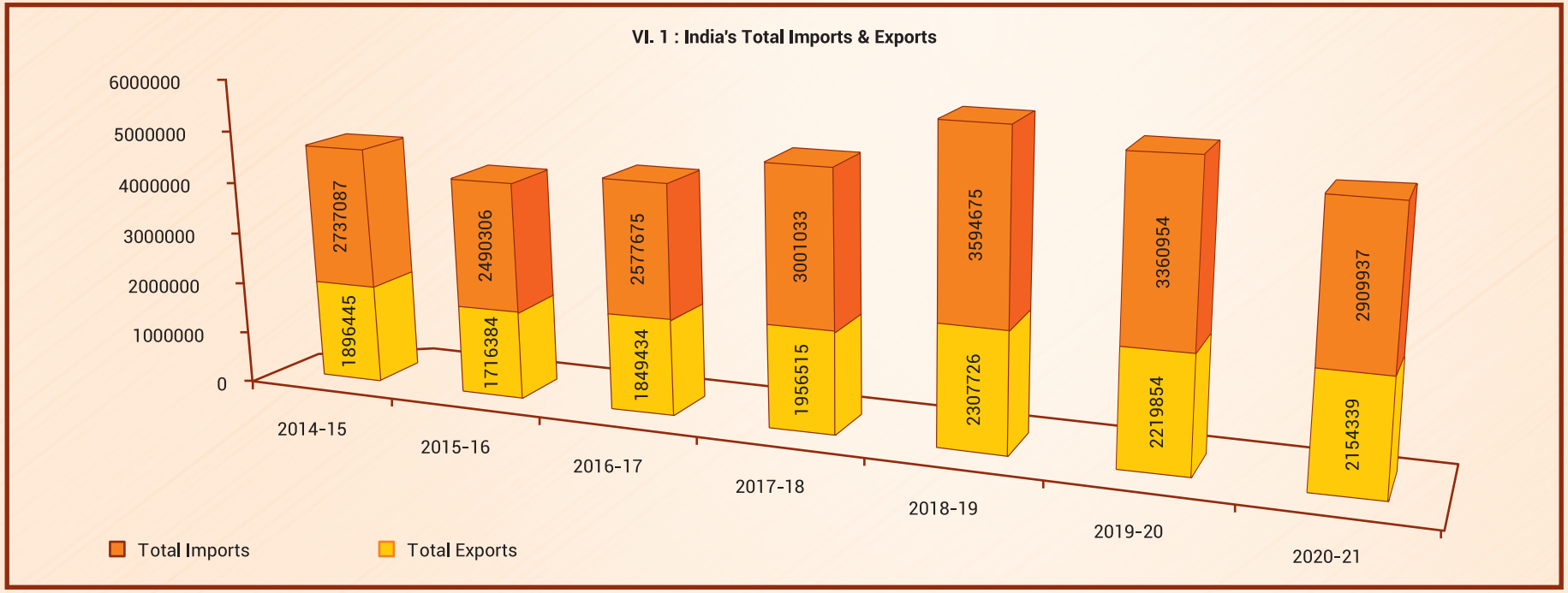
VI. 1 : India's Oil & Gas Trade and India's overall Trade Balance

(Value in ₹ Crore)

Year	India's Oil & Gas Trade					India's Overall Trade					% of Oil & Gas trade to India's total trade	
	Exports	Imports	Trade Balance	% variation over preceding year		Exports	Imports	Trade Balance	% variation over preceding year			
				Exports	Imports				Exports	Imports	Exports	Imports
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2014-15	288580	820419	-531839	-21.64	-17.48	1896445	2737087	-840641	-0.45	0.80	15.22	29.97
2015-16	176780	526979	-350199	-38.74	-35.77	1716384	2490306	-773921	-9.49	-9.02	10.30	21.16
2016-17	194893	582809	-387916	10.25	10.59	1849434	2577675	-728242	7.75	3.51	10.54	22.61
2017-18	225388	706946	-481558	15.65	21.30	1956515	3001033	-1044519	5.79	16.42	11.52	23.56
2018-19	267697	968716	-701019	18.77	37.03	2307726	3594675	-1286948	17.95	19.78	11.60	26.95
2019-20	254018	910125	-656108	-5.11	-6.05	2219854	3360954	-1141100	-3.81	-6.50	11.44	27.08
2020-21 (P)	157168	624058	-466891	-38.13	-31.43	2154339	2909937	-755598	-2.95	-13-42	7.30	21.45

P : Provisional

Source : PPAC & RBI



VI. 2 : Import / Export of Crude Oil and Petroleum Products (Calendar Year-wise)

(1)	2016			2017			2018			2019			2020		
	Qty.	Value		Qty.	Value		Qty.	Value		Qty.	Value		Qty.	Value	
	TMT	Rs. Crore	Million USD	TMT	Rs. Crore	Million USD	TMT	Rs. Crore	Million USD	TMT	Rs. Crore	Million USD	TMT	Rs. Crore	Million USD
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Crude Oil Import	**215376**	**415672**	**61889**	**216445**	**528350**	**81347**	**226626**	**775881**	**112969**	**224627**	**726039**	**103314**	**201672**	**460868**	**62613**
Product Import															
LPG	10197	26139	3870	11888	40241	6155	12192	46758	6833	14521	47000	6672	16196	50818	6867
Petrol	549	1854	274	174	581	91	355	1783	255	2127	9567	1359	1346	4812	657
Naphtha	2926	8243	1218	1832	6414	977	2697	12126	1789	1628	6449	913	1350	4490	608
Aviation Turbine Fuel	333	1010	149	288	1089	166	327	1675	244	76	358	52	0	0	0
Kerosene	0	0	0	0	0	0	0	0	0	0	0	0	3	12	2
Diesel	975	2685	399	1441	4491	690	324	1484	219	1990	8472	1205	1673	6138	843
Lubes	2257	8601	1270	2233	10185	1554	2552	13934	2045	2699	12407	1759	2596	10859	1471
Fuel Oil	1150	1980	293	957	2325	356	1645	5428	807	2624	7340	1036	6350	13233	1794
Bitumen	887	1443	213	911	1725	263	887	2133	316	1290	2997	424	1907	3627	492
Petcoke	14710	7220	1066	13731	10811	1652	7011	9364	1386	11388	11623	1649	9735	6806	917
Others[1]	2033	4810	712	2268	6609	1011	3619	15443	2252	3312	12294	1743	3779	6690	902
Product Import	**36016**	**63984**	**9465**	**35722**	**84472**	**12914**	**31608**	**110127**	**16147**	**41654**	**118507**	**16812**	**44935**	**107485**	**14552**
Total Import	**251392**	**479657**	**71354**	**252167**	**612823**	**94261**	**258234**	**886008**	**129116**	**266281**	**844546**	**120126**	**246607**	**568353**	**77165**
Product Export															
LPG	291	1023	151	348	1430	218	396	1919	280	455	1861	264	443	1745	235
MS/ Petrol	16150	51224	7625	14262	53591	8226	13287	62539	9150	12956	57570	8178	11524	33771	4608
Naphtha/ NGL	8417	21683	3220	8907	27885	4280	7916	32561	4770	7930	28931	4101	6865	18031	2458
Aviation Turbine Fuel	7489	20813	3096	6968	23209	3564	7527	34316	5016	7244	30891	4382	3905	10626	1462
SKO/ Kerosene	15	48	7	17	65	10	18	95	14	39	174	24	151	436	60
HSD/ Diesel	27892	73678	10963	28868	92690	14248	28509	124329	18095	30543	125273	17768	30563	79532	10856
LDO	20	52	8	149	384	57	99	364	50	-	-	-	-	-	-
LOBS/ Lube Oil	13	110	16	13	111	17	8	104	15	9	107	15	15	94	13
Fuel Oil/LSHS	2439	3786	560	2363	4757	732	2259	6566	943	1747	4432	626	1008	1688	228
Bitumen	57	52	9	61	109	17	23	75	11	25	83	12	13	43	6
Petcoke/CBFS	608	830	124	692	688	106	924	2509	359	768	1969	279	598	295	39
Others[2]	2551	6631	986	3954	10396	1586	2486	8695	1276	2562	7674	1089	2639	6845	925
Total Product Export	**65942**	**179930**	**26765**	**66603**	**215316**	**33061**	**63454**	**274071**	**39979**	**64278**	**258966**	**36738**	**57723**	**153106**	**20889**
Net Import	**185451**	**299727**	**44589**	**185565**	**397507**	**61200**	**194780**	**611937**	**89137**	**202003**	**585580**	**83388**	**188884**	**415247**	**56275**

Note : 1. Other imports include Paraffin Wax, Petroleum Jelly, LSWR, Aviation Gas, MTBE, Reformate, etc.

2. Other exports include VGO, Benzene, MTO, Sulphur, etc.

Source : Petroleum Planning & Analysis Cell.

VI . 3 : Import / Export of Crude Oil and Petroleum Products

(Figures in TMT)

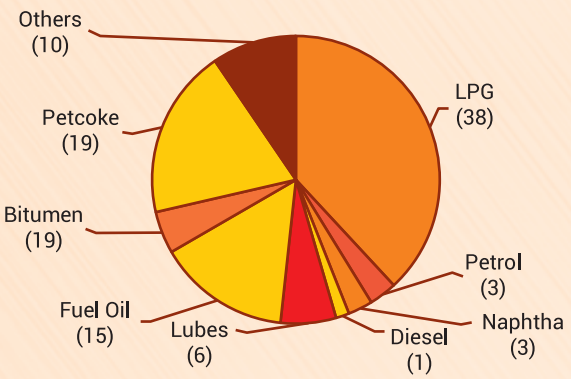
Import/Export	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Growth
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Crude Oil Import	**189435**	**202850**	**213932**	**220433**	**226498**	**226955**	**196461**	**-13.4**
2. LNG Imports	**14043**	**16142**	**18754**	**20709**	**21691**	**25574**	**24801**	**-3.0**
3. Petroleum Product Import	**21301**	**29456**	**36287**	**35461**	**33348**	**43788**	**43248**	**-1.2**
Product Imports								
LPG	8313	8959	11097	11380	13235	14809	16476	11.3
Petrol	372	1012	476	174	670	2146	1351	-37.0
Naphtha	1034	2931	2777	2212	2082	1662	1199	-27.8
Aviation Turbine Fuel	140	286	338	300	259	65	0	-100.0
Kerosene	30	41	0	0	0	0	3	0.0
Diesel	124	177	1008	1361	555	2796	648	-76.8
Lubes	2148	2264	2131	2539	2457	2675	2693	0.7
Fuel Oil	902	1170	925	1213	1419	4583	6454	40.8
Bitumen	517	879	951	950	877	1630	2055	26.1
Petcoke	6165	10041	14416	12777	7926	10674	8256	-22.7
Others[1]	1557	1694	2169	2556	3869	2749	4112	49.6
Total Import (1+2+3)	**224779**	**248448**	**268973**	**276602**	**281537**	**296316**	**264509**	**-10.7**
Product Export								
LPG	254	195	317	359	417	463	452	-2.4
Petrol	16048	16817	15417	14036	12885	12710	11606	-8.7
Naphtha	7008	7116	8727	8951	6963	8897	6509	-26.8
Aviation Turbine Fuel	5520	5686	7271	7183	7389	6906	3544	-48.7
Kerosene	15	10	15	17	19	176	15	-91.4
Diesel	25566	24037	27453	29735	27931	31653	30576	-3.4
Lubes	11	17	13	13	8	8	15	91.0
Fuel Oil	4762	2806	2248	2525	2197	1527	1177	-22.9
Bitumen	94	101	38	64	23	25	7	-72.6
Petcoke/CBFS	613	840	673	561	1124	465	577	24.1
Others[2]	4041	2914	3344	3387	2140	2854	2290	-19.8
Export of Petroleum Products	**63932**	**60539**	**65513**	**66833**	**61096**	**65685**	**56769**	**-13.6**
Net Import	**160847**	**187910**	**203460**	**209770**	**220441**	**230631**	**207741**	**-9.9**
Net Petroleum Product Export	**42631**	**31083**	**29226**	**31372**	**27747**	**21898**	**13521**	**-38.3**

P : Provisional

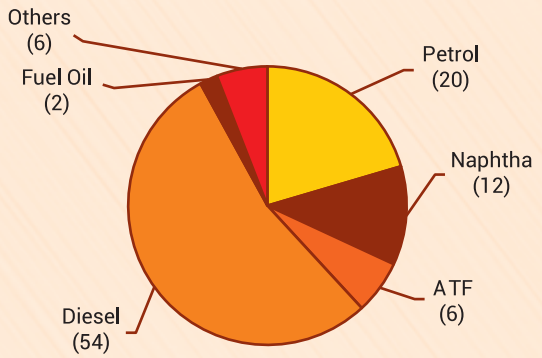
1. Other imports include Paraffin Wax, Petroleum Jelly, LSWR, Aviation Gas, MTBE & Reformate.
2. Other exports include VGO, Benzene, MTO & Sulphur.

Source : Petroleum Planning & Analysis Cell.

VI. 2 : Share of Imports of Major Pet. Products (%) During 2020-21



VI. 3 : Share of Exports of Major Pet. Products (%) During 2020-21



VI. 4 : Import / Export of Crude Oil and Petroleum Products

(Value in ₹ Crore)

Import/Export	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Growth
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Crude Oil Import	**687416**	**416579**	**470159**	**566450**	**783183**	**717001**	**459779**	**-35.9**
2. LNG Imports	**58359**	**45039**	**41084**	**52122**	**71867**	**67383**	**54850**	**-18.6**
3. Petroleum Product Import	**74644**	**65361**	**71566**	**88374**	**113665**	**125742**	**109430**	**-13.0**
Product Import								
LPG	36571	25778	32124	37875	49939	50347	53752	6.8
Petrol	2301	4207	1617	581	3104	9610	4950	-48.5
Naphtha	4592	9581	8374	8161	9665	6678	3844	-42.4
Aviation Turbine Fuel	706	889	1109	1159	1392	309	0	0.0
Kerosene	172	158	0	0	0	0	12	0.0
Diesel	670	605	2959	4269	2486	11619	1960	-83.1
Lubes	12702	9478	8625	12075	13349	11869	12170	2.5
Fuel Oil	3659	2380	1848	3231	4782	11791	14312	21.4
Bitumen	1623	1832	1638	1902	2149	3634	4325	19.0
Petcoke	5383	5633	7929	11100	10350	9713	6410	-34.0
Others[1]	6266	4821	5342	8020	16449	10172	7695	-24.4
Total Import (1+2+3)	**820419**	**526979**	**582809**	**706946**	**968716**	**910125**	**624058**	**-31.4**
Product Export								
LPG	1455	785	1168	1501	1976	1970	1797	-8.8
Petrol	81971	59575	52920	54580	60419	54512	36530	-33.0
Naphtha	31619	20057	24616	29075	28893	31509	18643	-40.8
Aviation Turbine Fuel	25413	16007	22294	25348	34030	28458	9377	-67.1
Kerosene	81	35	54	68	98	560	48	-91.3
Diesel	115177	66492	80256	99492	123882	123919	81611	-34.1
Lubes	100	127	104	118	106	96	93	-3.2
Fuel Oil	14251	4471	3930	5291	6537	3811	2318	-39.2
Bitumen	245	176	37	119	72	89	23	-73.5
Petcoke/CBFS	1806	750	804	687	3255	1096	292	-73.3
Others[2]	16462	8304	8710	9110	8429	7998	6436	-19.5
Export of Petroleum Products	**288580**	**176780**	**194893**	**225388**	**267697**	**254018**	**157168**	**-38.1**
Net Import	**531839**	**350199**	**387916**	**481558**	**701019**	**656108**	**466891**	**-28.8**
Net Petroleum Product Export	**213936**	**111419**	**123327**	**137014**	**154031**	**128276**	**47738**	**-62.8**

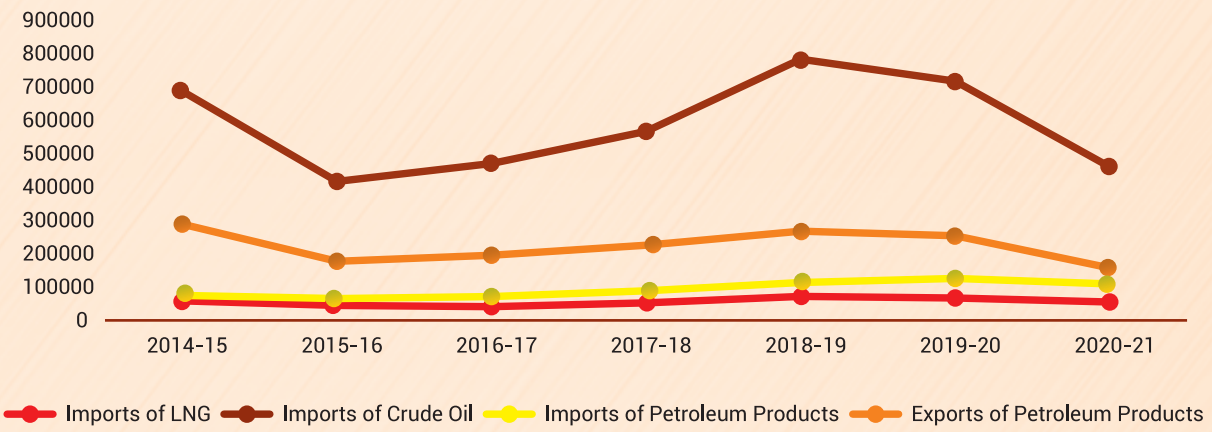
P : Provisional

1. Other imports include Paraffin Wax, Petroleum Jelly, LSWR, Aviation Gas, MTBE & Reformate.

2. Other exports include VGO, Benzene, MTO & Sulphur.

Source : Petroleum Planning & Analysis Cell.

VI. 4 : Trend in Import & Export of Oil, Petroleum Products & Gas (in ₹ Crore)



VI. 5 : Import / Export of Crude Oil and Petroleum Products

(Value in Million US$)

Import/Export	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	% Growth
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Crude Oil Import	**112744**	**63972**	**70196**	**87803**	**111915**	**101376**	**62248**	**-38.6**
2. LNG Imports	**9549**	**6897**	**6128**	**8051**	**10253**	**9489**	**7415**	**-21.9**
3. Petroleum Product Import	**12138**	**9952**	**10614**	**13637**	**16341**	**17689**	**14770**	**-16.5**
Product Import								
LPG	5955	3922	4775	5849	7178	7070	7242	2.4
Petrol	375	648	239	91	445	1357	674	-50.3
Naphtha	744	1463	1240	1261	1391	941	518	-44.9
Aviation Turbine Fuel	114	135	163	178	200	45	0	-100.0
Kerosene	29	25	0	0	0	0	2	0.0
Diesel	108	92	438	660	360	1632	265	-83.7
Lubes	2067	1439	1276	1860	1910	1673	1647	-1.5
Fuel Oil	599	363	273	499	696	1650	1936	17.3
Bitumen	262	279	242	293	309	510	586	15.0
Petcoke	870	853	1174	1709	1494	1374	861	-37.3
Others[1]	1015	733	793	1237	2358	1438	1038	-27.8
Total Import (1+2+3)	**134431**	**80821**	**86938**	**109491**	**138508**	**128554**	**84434**	**-34.3**
Product Export								
LPG	236	120	173	231	283	277	241	-13.0
Petrol	13454	9120	7895	8464	8641	7708	4977	-35.4
Naphtha	5176	3071	3666	4505	4137	4439	2530	-43.0
Aviation Turbine Fuel	4155	2440	3324	3931	4867	4021	1287	-68.0
Kerosene	13	5	8	10	14	78	7	-91.6
Diesel	18870	10180	11964	15426	17675	17481	11132	-36.3
Lubes	16	20	15	18	15	13	12	-7.5
Fuel Oil	2321	688	583	817	923	537	313	-41.6
Bitumen	40	27	6	18	10	13	3	-74.5
Petcoke/CBFS	295	115	121	107	463	155	39	-75.0
Others[2]	2700	1275	1294	1412	1208	1128	865	-23.3
Total Export	**47277**	**27059**	**29049**	**34940**	**38236**	**35848**	**21406**	**-40.3**
Net Import	**87154**	**53761**	**57888**	**74551**	**100272**	**92706**	**63027**	**-32.0**
Net Product Export	**35139**	**17108**	**18436**	**21303**	**21895**	**18159**	**6636**	**-63.5**

P : Provisional

1. Other imports include Paraffin Wax, Petroleum Jelly, LSWR, Aviation Gas, MTBE & Reformate.
2. Other exports include VGO, Benzene, MTO & Sulphur.

Source : Petroleum Planning & Analysis Cell.

VI. 6 : Product-wise Volume of Imports by Public & Private Sector

(Figures in TMT)

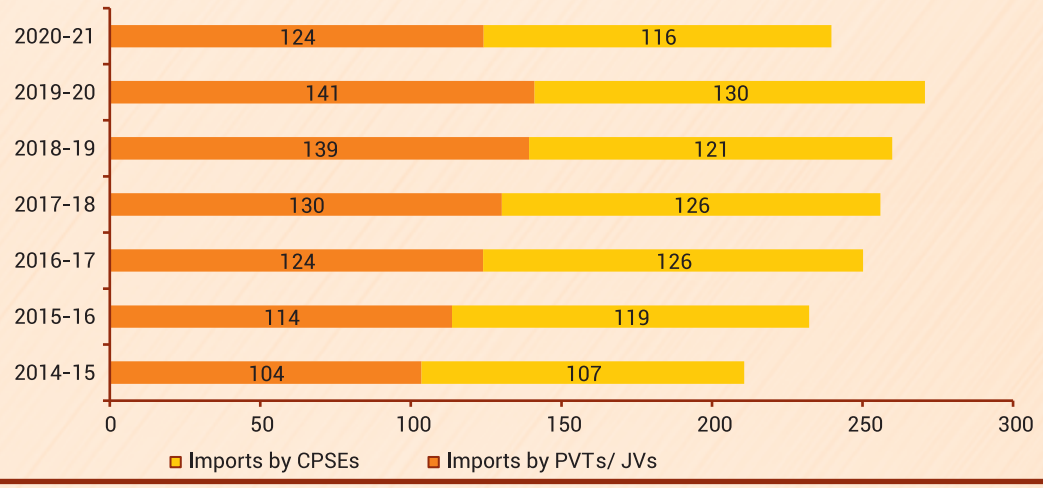
Products	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. PUBLIC SECTOR							
Crude Oil Imports	**94909**	**103646**	**111467**	**117371**	**124665**	**121102**	**105506**
LPG	7884	8470	10668	11015	12919	14605	16412
Petrol	372	1012	476	174	670	2146	1343
Naphtha	104	135	142	162	140	145	66
ATF	0	11	0	0	0	65	0
Kerosene	30	41	0	0	0	0	0
Diesel	40	122	962	1270	462	2679	557
Lubes	0	5	0	0	102	158	71
Fuel Oil	72	135	106	116	225	122	188
Bitumen	0	0	13	0	0	7	23
Petcoke	0	0	0	0	0	0	0
Others[1]	96	124	177	50	62	43	18
Total Product Import	**8598**	**10056**	**12544**	**12786**	**14580**	**19969**	**18677**
Total Imports (A)	**103507**	**113702**	**124012**	**130157**	**139245**	**141071**	**124184**
B. PRIVATE/JVs SECTOR							
Crude Oil Imports	**94526**	**99204**	**102464**	**103062**	**101832**	**105852**	**90955**
LPG	429	489	429	364	316	204	64
Petrol	0	0	0	0	0	0	9
Naphtha	930	2796	2635	2050	1941	1517	1133
ATF	140	275	338	300	259	0	0
Kerosene	0	0	0	0	0	0	3
Diesel	83	55	46	90	93	117	91
Lubes	2148	2259	2131	2539	2355	2517	2622
Fuel Oil	830	1035	819	1097	1195	4461	6267
Bitumen	517	879	937	950	877	1623	2032
Petcoke	6165	10041	14416	12777	7926	10674	8256
Others[1]	1461	1570	1992	2506	3807	2706	4094
Total Product Import	**12704**	**19400**	**23743**	**22675**	**18769**	**23819**	**24570**
Total Imports (B)	**107229**	**118604**	**126207**	**125737**	**120601**	**129671**	**115525**
Total (A+B)	**210736**	**232306**	**250219**	**255894**	**259846**	**270742**	**239709**

P : Provisional

1. Other imports include Paraffin Wax, Petroleum Jelly, LSWR, Aviation Gas, MTBE & Reformate.

Source : Petroleum Planning & Analysis Cell.

VI. 5 : Trend in Imports (Crude Oil+Petroleum Products) by Public & PVTs/JVs Sector (in MMT)



VI. 7 : Product-wise Volume of Exports by Public & Private Sector

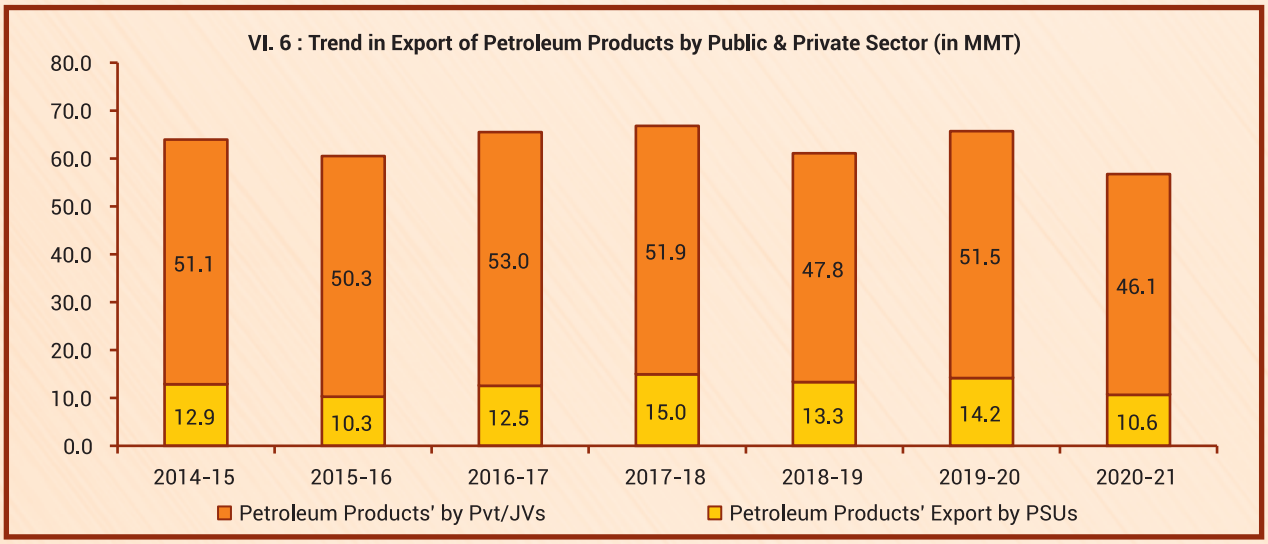
(Figures in TMT)

Products	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. PUBLIC SECTOR							
LPG	254	195	317	359	417	463	452
MS/ Petrol	454	350	658	794	873	690	842
Naphtha/ NGL	4309	4486	4651	4466	3101	4089	2537
Aviation Turbine Fuel	1181	883	1363	1641	1585	1228	575
SKO/ Kerosene	15	10	15	17	19	176	15
HSD/ Diesel	1702	1301	2348	4211	4845	5667	4720
LDO	6	0	151	18	99	0	0
LOBS/ Lube Oil	11	17	13	13	8	8	15
Fuel Oil/LSHS	4615	2588	2203	2525	1849	1492	951
Bitumen	94	101	38	64	23	25	7
Petcoke/CBFS	0	0	0	0	0	0	0
Others[1]	226	334	759	854	494	329	537
Total (A)	**12867**	**10265**	**12514**	**14962**	**13312**	**14168**	**10649**
B. PRIVATE/JVs SECTOR							
LPG	0	0	0	0	0	0	0
MS/ Petrol	15594	16467	14759	13242	12012	12020	10764
Naphtha/ NGL	2700	2630	4075	4485	3862	4808	3972
Aviation Turbine Fuel	4339	4803	5907	5542	5804	5678	2970
SKO/ Kerosene							
HSD/ Diesel	23857	22736	24955	25506	22988	25986	25856
LDO							
LOBS/ Lube Oil							
Fuel Oil/LSHS	148	218	45		348	35	227
Bitumen							
Petcoke/CBFS	613	840	673	561	1124	465	577
Others[1]	3815	2579	2585	2533	1646	2525	1753
Total (B)	**51065**	**50274**	**52999**	**51870**	**47783**	**51517**	**46119**
Total Exports (A+B)	**63932**	**60539**	**65513**	**66833**	**61096**	**65685**	**56769**

P : Provisional

1. Other exports include VGO, Benzene, MTO & Sulphur.

Source : Petroleum Planning & Analysis Cell.



VI. 8 : Product-wise Value of Imports by Public & Private Sector

(Value in ₹ Crore)

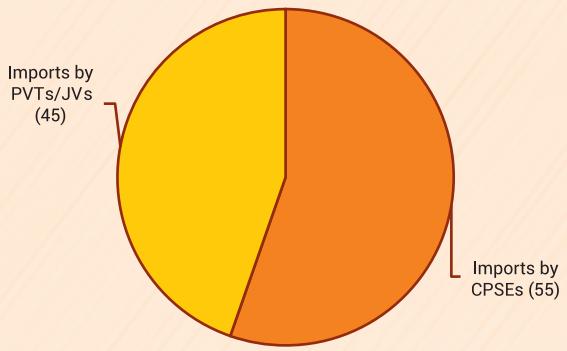
Products	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. PUBLIC SECTOR							
Crude Oil	**355382**	**223916**	**257790**	**310815**	**443629**	**396186**	**254432**
LPG	34547	24251	30797	36626	48636	49617	53501
Petrol	2301	4207	1617	581	3104	9610	4911
Naphtha	517	437	429	593	668	616	207
ATF	0	48	0	0	0	309	0
Kerosene	172	158	0	0	0	0	0
Diesel	223	275	2794	3921	2016	11116	1654
Lubes	0	93	0	0	553	753	361
Fuel Oil	213	298	215	284	761	345	508
Bitumen	0	0	24	0	0	18	78
Petcoke							
Others[1]	783	599	815	300	439	315	112
Total Product Import	**38756**	**30367**	**36691**	**42305**	**56178**	**72699**	**61332**
Total Imports (A)	**394138**	**254283**	**294481**	**353120**	**499808**	**468885**	**315763**
B. PRIVATE/JVs SECTOR							
Crude Oil	**332034**	**192663**	**212369**	**255635**	**339553**	**320815**	**205347**
LPG	2023	1527	1327	1250	1303	730	251
Petrol							39
Naphtha	4075	9143	7945	7569	8997	6062	3637
ATF	706	841	1109	1159	1392	0	0
Kerosene							12
Diesel	447	330	165	348	470	503	306
Lubes	12702	9385	8625	12075	12796	11116	11809
Fuel Oil	3446	2082	1633	2947	4021	11446	13804
Bitumen	1623	1832	1615	1902	2149	3615	4248
Petcoke	5383	5633	7929	11100	10350	9713	6410
Others[1]	5483	4222	4527	7719	16009	9857	7583
Total Product Import	**35888**	**34994**	**34875**	**46069**	**57487**	**53042**	**48098**
Total (B)	**367922**	**227657**	**247244**	**301704**	**397041**	**373857**	**253445**
TOTAL (A+B)	**762060**	**481940**	**541725**	**654824**	**896848**	**842743**	**569208**

P : Provisional

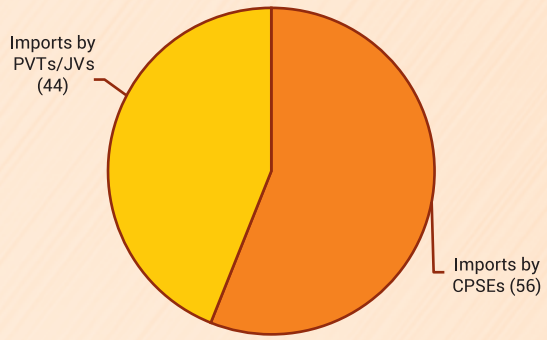
1. Other imports include Paraffin Wax, Petroleum Jelly, LSWR, Aviation Gas, MTBE & Reformate.

Source : Petroleum Planning & Analysis Cell.

VI. 7 : Share(%) of Public & PVTs/JVs Companies in Import of Crude Oil During 2020-21



VI. 8 : Share (%) of Public & PVTs/JVs Companies in Import of Petroleum Products During 2020-21



VI. 9 : Product-wise Exports Petroleum Products by Public & Private Sector

(Value in ₹ Crore)

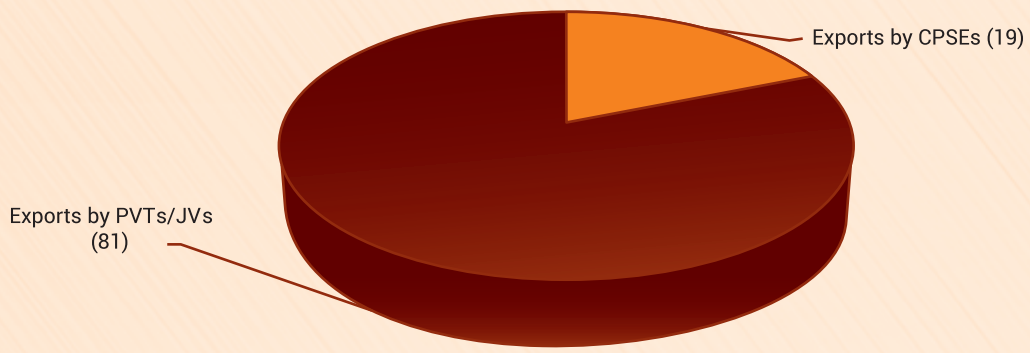
Products	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. PUBLIC SECTOR							
LPG	1455	785	1168	1501	1976	1970	1797
MS/ Petrol	2524	1374	2419	3240	4237	3123	2768
Naphtha/ NGL	19022	12683	12988	14356	12698	14448	7205
Aviation Turbine Fuel	5550	2506	4263	5771	7317	5083	1566
SKO/ Kerosene	81	35	54	68	98	560	48
HSD/ Diesel	7931	3897	7516	14777	22097	23068	12790
LDO	28	0	399	37	364	0	0
LOBS/ Lube Oil	100	127	104	118	106	96	93
Fuel Oil/LSHS	13806	4054	3823	5291	5648	3700	1876
Bitumen	245	176	37	119	72	89	23
Petcoke/CBFS							
Others[1]	849	879	2225	2673	1528	1004	1541
Total (A)	**51593**	**26517**	**34995**	**47952**	**56140**	**53141**	**29708**
B. PRIVATE/JVs SECTOR							
MS/ Petrol	79447	58201	50501	51340	56182	51389	33761
Naphtha/ NGL	12597	7374	11627	14719	16195	17061	11437
Aviation Turbine Fuel	19863	13501	18031	19577	26713	23375	7811
SKO/ Kerosene							
HSD/ Diesel	107218	62595	72341	84677	101422	100851	68821
LDO							
LOBS/ Lube Oil							
Fuel Oil/LSHS	444	417	107	0	889	111	443
Bitumen							
Petcoke/CBFS	1806	750	804	687	3255	1096	292
Others[1]	15613	7424	6485	6437	6901	6994	4894
Total (B)	**236987**	**150262**	**159897**	**177436**	**211557**	**200876**	**127460**
TOTAL (A+B)	**288580**	**176780**	**194893**	**225388**	**267697**	**254018**	**157168**

P : Provisional

1. Other exports include VGO, Benzene, MTO & Sulphur.

Source : Petroleum Planning & Analysis Cell.

VI. 9 : Share (%) of Public & PVTs/JVs Companies in Exports of Petroleum Products During 2020-21



VI. 10 : Oil & Gas Import Dependency

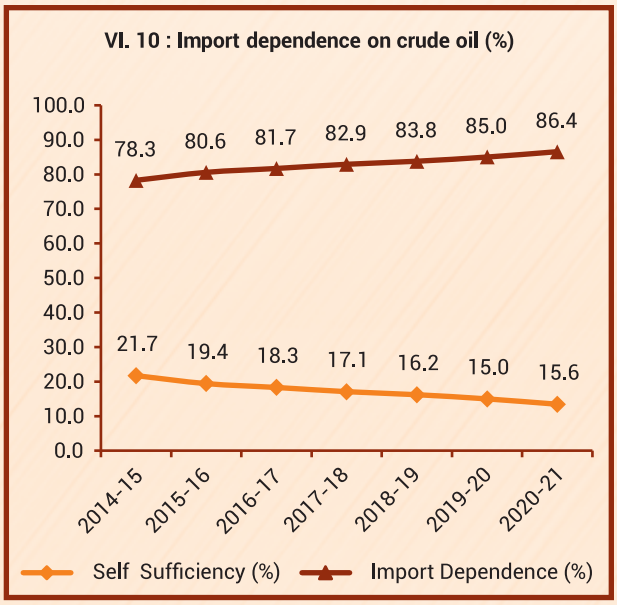
(Value in ₹ Crore)

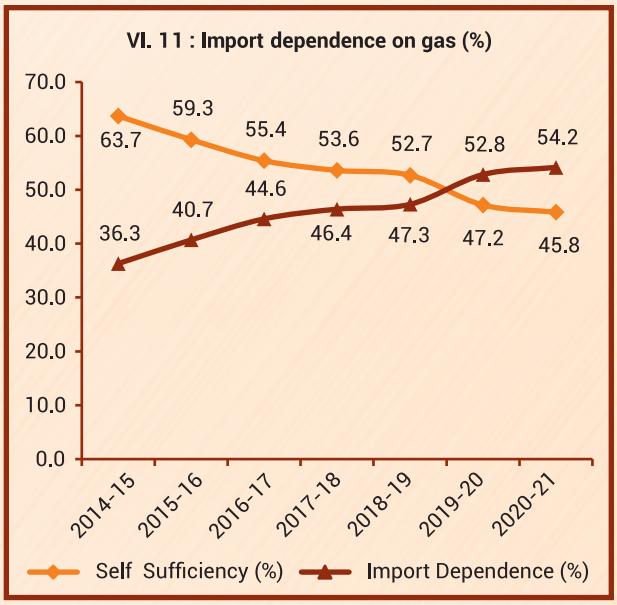
Elements	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21(P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Import dependence on crude oil (in MMT)							
Total Consumption	165.52	184.67	194.60	206.17	213.22	214.13	194.30
Indigenous crude oil processing	34.25	34.12	33.54	32.79	31.72	29.28	28.01
Products from Indigenous crude	31.95	31.83	31.29	30.59	29.59	27.31	26.14
Products from Fractionators	3.99	4.02	4.30	4.61	4.93	4.76	4.21
Total Indigenous production	35.95	35.85	35.59	35.20	34.52	32.07	30.35
Self Sufficiency (%)	21.72	19.41	18.29	17.07	16.19	14.98	15.62
Import Dependence (%)	**78.28**	**80.59**	**81.71**	**82.93**	**83.81**	**85.02**	**84.38**
Import dependence on natural gas (in BCM)							
Total Consumption	51.30	52.50	55.70	59.20	60.80	64.14	60.64
Indigenous gas production	32.69	31.14	30.80	31.70	32.10	30.26	27.78
Import of LNG	18.60	21.40	24.80	27.40	28.70	33.89	32.86
Self Sufficiency (%)	63.70	59.30	55.40	53.60	52.70	47.17	45.81
Import Dependence (%)	**36.30**	**40.70**	**44.60**	**46.40**	**47.30**	**52.83**	**54.19**
Import dependence on oil and oil equivalent gas (O+OEG)(in MMTOE)							
Total Consumption	228.71	250.44	264.27	280.17	289.33	293.65	268.89
Indigenous O+OEG production	71.22	69.56	68.94	69.43	69.10	64.63	60.31
Self Sufficiency (%)	**31.14**	**27.78**	**26.09**	**24.78**	**23.88**	**22.01**	**22.43**
Import Dependence (%)	**68.86**	**72.22**	**73.91**	**75.22**	**76.12**	**77.99**	**77.57**

Note :

1. SION norms has been taken as 93.3% of crude oil processed for working out products output from indigenous crude oil processed.
2. For converting production of petroleum products from fractionators, SION norms has been taken as 93.3%.
3. Net production and consumption of natural gas is inclusive of internal gas consumption but excluding flare and loss.
4. 1 BCM of Natural gas =1 Mtoe
5. Total may not due to rounding off.

Source : Petroleum Planning & Analysis Cell.





VI. 11 : Annual Growth of Foreign Direct Investment Equity Inflows

Year	FDI Inflow in P&NG Sector				FDI Inflow in All Sectors	% share of P&NG in All sector's FDI
	Refinery	Exploration	Others (Fuels)	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
FDI Inflow (in ₹ Million)						
2014-15	61189	81	3686	64956	1816821	3.58
2015-16	852	3588	2331	6770	2623216	0.26
2016-17	551	3825	7594	11971	2916963	0.41
2017-18	0	959	602	1561	2888885	0.05
2018-19	334	4955	4114	9402	3098667	0.30
2019-20	3168	895	55592	59654	3535584	1.69
2020-21 (P)	361	670	6642	7672	4425688	0.17
Year	**FDI Inflow in P&NG Sector**				**FDI Inflow in All Sectors**	**% FDI Growth in All Sector**
	Refinery	**Exploration**	**Others (Fuels)**	**Total**		
FDI Inflow (in US $ Million)						
2014-15	1019	1	59	1079	29737	22.38
2015-16	13	54	35	103	40001	34.51
2016-17	8	57	115	180	43478	8.69
2017-18	0	15	9	24	44857	3.17
2018-19	5	73	61	138	44366	-1.09
2019-20	45	12	749	806	49977	12.65
2020-21 (P)	5	9	89	103	59636	19.33

P : Provisional

Source : Foreign Direct Investment Cell, Department of Industrial Policy & Promotion

Figure VI. 12 : Share of FDI inflow in the PNG Sector during 2020-21 (in %)

CHAPTER-VII

Taxes and Duties

CHAPTER HIGHLIGHTS

Central excise collection from Petroleum sector (Crude oil & Petroleum Products) during 2020-21 was at ₹ 4,17,994 crore, 72.5% higher as compared to 2019-20 (₹ 2,39,029 crore). Customs duties collection from Petroleum sector during 2020-21 was at ₹ 5,671 crore, 120.9% lower as compared to 2019-20 (₹ 12,527 crore).

During 2020-21, Sales tax/VAT payments paid by 16 Major Oil & Gas Companies was at ₹ 2,02,937 crore, 1.2% higher as compared to 2019-20 (₹ 2,00,493 crore)

GST payment paid by 16 Major Oil & Gas Companies during the year 2020-21 was at 6,121 crore, 16.7% lower than the GST payment during 2019-20 (₹ 7,345 crore).

During 2020-21, Sales tax payment paid by CPSEs increase in the payment has been observed for Petrol and Diesel by 7.3% & 1.7% respectively vis-a-vis 2019-20. However, decrease in the payment has been observed for Crude Oil, Natural Gas & Aviation Turbine Fuel by 33.6%, 23.7% and 64.1% respectively vis-à-vis 2019-20.

VII. 1 : Realisation of Excise and Customs Duties from Crude Oil and Petroleum Products

(Value in ₹ Crore)

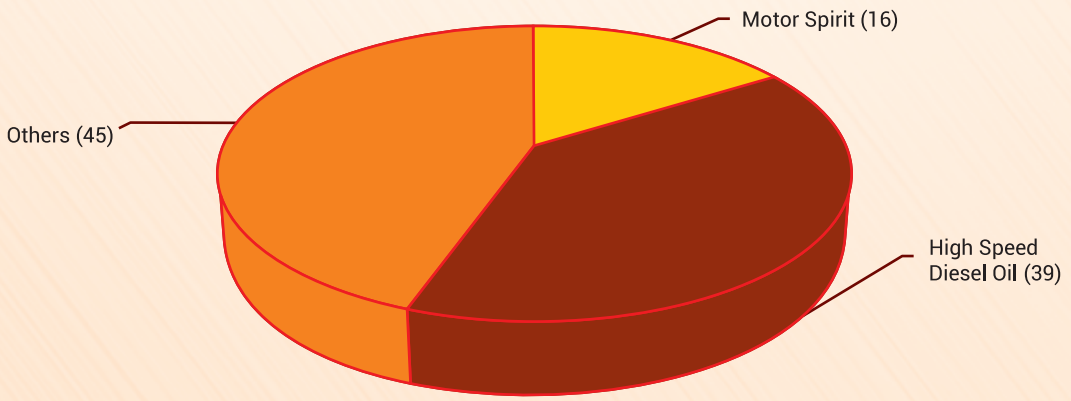
Products	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. Excise Duties							
Motor Spirit	29279	52297	67182	66991	52777	60877	66805
Kerosene Oil	315	272	391	93	0	25	0
High Speed Diesel Oil	42592	101178	147915	136422	99852	102142	161759
Light Diesel Oil	289	261	295	69	0	--	--
Furnace Oil	604	435	477	81	0	--	--
Petroleum Gases and Other Gaseous Hydrocarbons	1998	1903	2091	1416	44	59	67
Aviation Turbine Fuel	1063	1623	1521	1920	2540	11416	627
All others	10989	9558	9271	3480	2762	64509	183066
Total (A)	**87130**	**167526**	**229143**	**210473**	**157975**	**239029**	**412322**
B. Customs Duties							
Crude Petroleum	423	455	507	135	0	675	920
Petroleum Products	6686	5694	7738	11413	5187	11852	4751
Total (B)	**7109**	**6149**	**8245**	**11547**	**5187**	**12527**	**5671**
Grand Total (A+B)	**94239**	**173675**	**237675**	**222020**	**163162**	**251556**	**417994**

Note : Excise and customs duty paid on crude oil and petroleum products on the basis of their respective Central Excise Tariff Heads (CETH) under chapter-27 excludes CETH 2701 to 2708 & 2716 which do not pertain to oil & gas sector.

P : Provisional

Source : Central Board of Indirect Taxes & Customs (CBIC)

Figure VII. 1 : Product-wise Distribution of Excise duty during 2020-21(%)



VII. 2 : Royalty and Oil Development Cess Paid by Oil Companies on Production of Oil & Gas

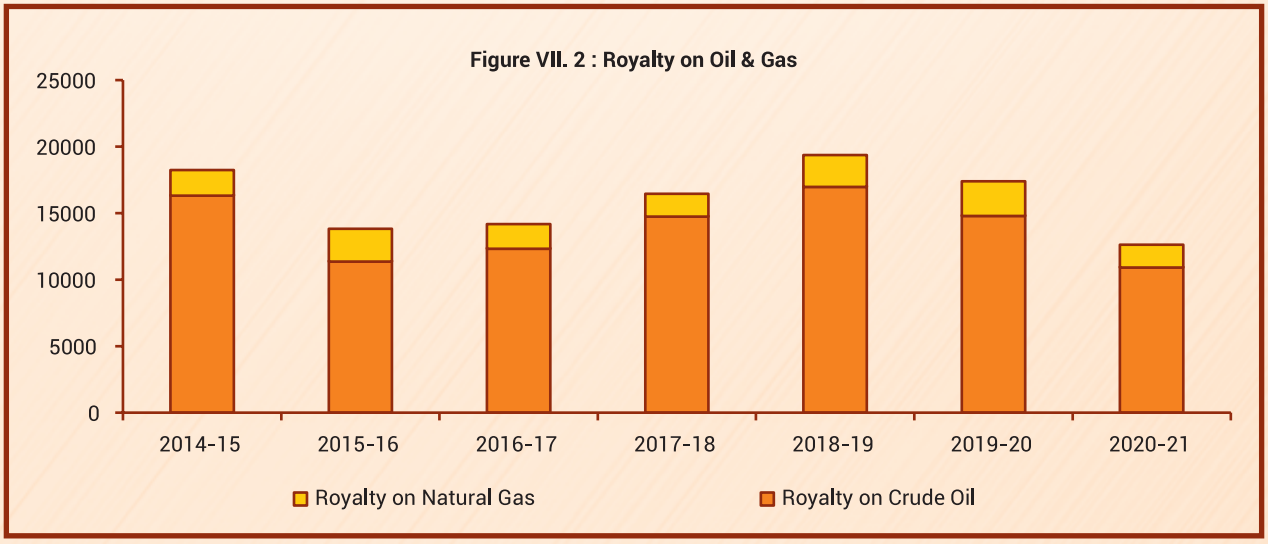
(Value in ₹ Crore)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Royalty on Crude Oil							
Western Region	11694	7435	5909	9340	9905	8619	6837
Eastern Region	1219	1445	2938	1709	2315	2083	1326
Southern Region	225	355	304	269	384	306	201
Central Region	0	0	0	0	0	0.29	0.21
Offshore	3182	2115	3166	3416	4365	3784	2555
Total Royalty on Crude Oil	**16320**	**11351**	**12317**	**14733**	**16969**	**14794**	**10919**
Royalty on Natural Gas							
Western Region	154	181	140	167	274	330	370
Eastern Region	203	228	165	148	192	212	115
Southern Region	168	172	138	127	182	171	99
Central Region	70	92	82	101	91	102	83
Offshore	1334	1800	1341	1182	1656	1778	1034
Total Royalty on Natural Gas	**1929**	**2472**	**1865**	**1726**	**2394**	**2593**	**1699**
Total Royalty on Oil & Gas	**18249**	**13823**	**14182**	**16459**	**19364**	**17386**	**12618**
Oil Development Cess[3]	**14491**	**17928**	**15397**	**16581**	**18959**	**14789**	**10676**

Note :

1. All figures including Oil Development Cess are on cash basis
2. Total may not tally due to rounding off.
3. Excludes National Calamity Contingent Fund (NCCD) and Education cess.
4. Includes data Royalty & Cess from ONGC (nomination block), OIL (Nomination block), CEIL (RJ-ON-90/1, RAVVA & CB-OS/2 block) and RIL (KG-DWN-98/3) and excludes other Pvt. Oil companies.

Source : Oil & Natural Gas Corp. Ltd., Oil India Ltd. , Reliance Industries Ltd. and Cairn Oil & Gas.



VII. 3 Sales Tax Rates Applicable on Crude Oil, Natural Gas and Select Petroleum Products (as on 01.04.2021)

(Value in ₹ Crore)

State/U.T	Crude Oil	Natural Gas	MS (Petrol)
(1)	(2)	(3)	(4)
Andaman & Nicobar islands	6.00%	10.00%	6.00%
Andhra Pradesh	5.00%	24.50%	31% + Rs 4 per Litre+Rs1 Per Litre Road Development Cess
Arunachal Pradesh	4.00%	20.00%	20.00%
Assam	5.00%	14.50%	32.66% or Rs 22.63/Ltr, Whichever is higher
Bihar	6.00%	20.00%	26 percent or Rupees 16.65 per litre, Which ever is higher. Plus 30% Surharge
Chandigarh	12.50%	5.00%	22.45% or Rs 12.58 per liter which ever is higher +(MST Rs 10/- PER KL)
Chhattisgarh	5.00%	25.00%	25% + Rs. 2 Per ltr
Dadra & Nagar Haveli and Daman & Diu	20.00%	20.00%	20.00%
Delhi	5.00%	0.00%	30.00%
Goa	20%, Goa Green Cess- 0.50% on Turnover excluding VAT	Piped Natural Gas for domestic use - 4%, Regasified Liquefied Natural Gas - 12.50%, Natural Gas other than above - 12.50 %, Goa Green Cess- 0.50% on Turnover excluding VAT	27% (Sold by PSU OMC to Auth RO), thers 20%, Goa Green Cess- 0.50% on Turnover excluding VAT
Gujarat	5.00%	15.00%	20.10%, Motor Spirit Cess-4% on Turnover
Haryana	12.50%, Additional Tax on VAT 5%	"CNG sold for use in Transport Sector and Piped natual gas supplied in domestic Sector - 5%, Additional Tax on VAT 5% PNG other than PNG supplied in domestic Sector - 6%, Additional Tax on VAT 5% Others - 12.5%, AdditionaL Tax on VAT 5%"	25% or Fixed rate of Rs. 15.62 per litre, whichever is greater + 5% surcharge on tax
Himachal Pradesh	13.75%	4.00%	25% or Rs 15.5 per liter which ever is greater
Jammu & Kashmir	14.50%	21.00%	MST 24.00%, Rebate Rs 0.5 per liter, Motor Spirit CESS RS 5/- PER LTR. Rs 50 per kl on MS leaving from jammu depot only
Jharkhand	5.00%	14.00%	22% on the sale price or Rs. 17.00 per litre, which ever is higher + Road Development Cess of Rs 1.00 per Ltr.
Karnataka	5.00%	14.5%, PNG-5.5%	35.00%
Kerala	5.00%	5.00%	30.08%, Additional Sales Tax Rs 1/- per litre, SSC 1% on total tax
Ladakh	14.50%	21.00%	MST 24.00%, Rebate Rs 2.5 per liter, Motor Spirit Cess Rs 5/- Per Ltr.
Lakshadweep	-	-	-
Madhya Pradesh	5.00%	14.00%	33%+ Rs 4.5 per ltr + Road Development Cess 1% over Turnover inc VAT & Addl tax
Maharashtra	5.00%	13.50%	Within Municipal Limits of Thane, Mumbai, Navi Mumbai, Amravati, Aurangabad, 26.00%+Rs. 10.12/ltr, Others 25%+Rs. 10.12/Ltr,
Manipur	5.00%	13.50%	36.50%
Meghalaya	4.00%	14.50%	20% or Rs 15/-per litre whichever is higher + Rs 0.1/Ltr Surcharge on tax payable at ad valorem rate only
Mizoram	5.00%	13.50%	25.00%

Contd...

State/U.T	Crude Oil	Natural Gas	MS (Petrol)
(1)	(2)	(3)	(4)
Nagaland	5.00%, surcharge on tax 5%	5.00%, surcharge on tax 5% (16.07.15)	25% or Rs. 16..04 per litre whichever is higher
Odisha	5.00%	15%, 5% when used for Industrial Purpose, piped or Domestic use	32% w.e.f 17.05.2020
Puducherry	14.50%	14.50%	Puducherry & Karaikal- 26%, Mahe- 21.90%, Yanam- 23.70%
Punjab	13%, Surcharge on Tax 10%	3%, Surcharge on Tax 10%	24.79%, Surcharge on tax 10.00%, Infrastructure Development Cess Rs.2050 per kl. 10 paise per ltr additional cess on sale for Urban Area
Rajasthan	5.00%	10% (CNG 14.50%)	36.00%, Road Develompment Cess Rs.1500/-per KL
Sikkim	4.50%	4.50%	32% to others & 25.25% for retailers in sikkim, Infrastructure Development Cess Rs.3000 per Kl
Tamil nadu	5.00%	5.00%	15% + Rs.13.02 per litre
Telangana	5.00%	14.50%	35.20%
Tripura	5.00%	4% & 19.5% Cess on Turnover (Taxable Value+VAT).	25.00% & 3% Road Development Cess on Turnover (Taxable Value +VAT) .
Uttar Pradesh	4.00%	When sold to industrial unit for use in process of chemical fertilizer- 14.5% and for other cases- 10%, CNG- 12.50%	26.8% or Rs.18.74 per litre whichever is greater.
Uttarakhand	5.00%	20%	25% or Rs 19 per liter whichever is greater
West Bengal	5.00%	5.00%	25% or Rs. 13.12/Ltr whichever is higher, Infrastructure Development Cess Rs.1000 per Kl, Additional Tax on tax 20%, Rebate Available Rs 1000/Kl.(Nil rebate for Inter State Sales)

Source : Indian Oil Corporation Ltd.

State/U.T	HSD	ATF Domestic
(1)	(5)	(6)
Andaman & Nicobar islands	6% (HSD for Ship @8%)	10.00%
Andhra Pradesh	22.25% + Rs 4 per Litre+Rs1 Per Litre Road Development Cess-0.5% VAT on HSD supplied to Foreign going Vessel	1.00%
Arunachal Pradesh	12.50%	20.00%
Assam	23.66% or Rs 17.45/Ltr, Whichever is higher. Rebate of Rs.5/per litre	23.65%
Bihar	19 percent or Rupees 12.33 per litre, Which ever is higher plus 30 % Surcharge	29.00%, Sch.Airlines- 5%
Chandigarh	14.02% or Rs 7.63 per liter which ever is higher +(MST Rs 10/- Per KL)	20.00% (MST:-Rs 10/- Per KL)
Chhattisgarh	25% + Re. 1 Per ltr	25.00%
Dadra & Nagar Haveli and Daman & Diu	20.00%	20.00%
Delhi	16.75% plus Rs. 250 per KL Air Ambience Cess	25.00%
Goa	"23% (Sold by PSU OMC to Auth RO), thers 20%, Goa Green Cess- 0.50% on Turnover excluding VAT"	18%, Goa Green Cess- 0.50% on Turnover excluding VAT
Gujarat	20.20%, Motor Spirit Cess-4% on Turnover	ATF duty paid:-30% & 5%
Haryana	16.4% or Fixed rate of Rs. 10.08 per litre, whichever is greater + 5% surcharge on tax	20%, Additional Tax on VAT 5%
Himachal Pradesh	14% or Rs 9 per liter which ever is greater	25% or Rs 15.5 per liter which ever is greater for defence and scheduled Airlines and 1% for non scheduled airlines
Jammu & Kashmir	MST 16.00%, Motor Spirit Cess Rs 1.5/- Per Ltr. Rs 50 per kl on MS leaving from jammu depot only	MST 26.25 %
Jharkhand	22% on the sale price or Rs. 12.50 per litre, which ever is higher + Road Development Cess of Rs 1.00 per Ltr.	20%(Sch.Airlines):-5.00%}
Karnataka	24%, 4% for captive power, 1% for foreign going vessel	28.00%
Kerala	22.76% , Additional Sales Tax Rs 1/- per litre, SSC 1% on total tax	5%, , cess 1% on tax
Ladakh	MST 16.00%, Rebate of Rs 0.5 per liter, Motor Spirit CESS RS 1/- Per Ltr	MST 26.25 %
Lakshadweep	-	-
Madhya Pradesh	23% + Rs. 3 per ltr+ Road Development Cess 1% over Turnover inc VAT	4% except for Indore & Bhopal. 25% @ Bhopal & Indore
Maharashtra	Within Municipal Limits of Thane, Mumbai, Navi Mumbai, Amravati, , Aurangabad, 24.00%+Rs 3/Ltr, Others 21%+Rs 3/Ltr	ATF - duty paid Mumbai Pune, Raigad:-25.00%, ATF - duty paid, except Mumbai Pune 5.00%
Manipur	22.50%	20.00%
Meghalaya	12% or Rs 9/-per litre whichever is higher + Rs 0.1/ Ltr SUR-CHARGE on tax payable at ad valorem rate only	20.00% + 2% Surcharge
Mizoram	14.50%	20.00%
Nagaland	16.5% or Rs. 10.51 per litre whichever is higher Surcharge on tax 5% . Road Maintenance Cess Rs 2 /Ltr	1%, Surcharge on tax 5%
Odisha	28.00%	5.00%

Contd...

State/U.T	HSD	ATF Domestic
(1)	(5)	(6)
Puducherry	Puducherry & Karaikal- 17.75%, Mahe- 16.15%, Yanam- 18.00%	14.50%
Punjab	15.94% for Normal and 13% for Branded Fuel. (SURCHARGE ON TAX:-10.00%), Infrastructure Development CESS - RS 1050 PER KL. 10 paise per ltr additional cess on sale for Urban Area	A) 4.00% + 10 % Surcharge on Tax - when sold at the Mohali & Amritsar Airport in Punjab to Scheduled & Non Scheduled Airlines carrying passengers, or others residual Rate is @13% + Surcharge on Tax:-10.00%,
Rajasthan	26.00%, Road Development Cess Rs.1750/-per KL	A) 26% , B) 5.50% when airlines maintan hub or connect two cities of Rajasthan C) 10.00% on Sale of ATF to any airline for use in aircraft which connects any city of Rajasthan (other than Jaipur) by a scheduled commercial flight
Sikkim	21.50% to others & 14.75% for retailers in sikkim, Infrastructure Development Cess Rs.2500 per Kl	1.00%
Tamil nadu	11% + Rs.9.62 per litre	29.00%
Telangana	27.00%	1.00%
Tripura	16.50% & 3% Road Development Cess on Turnover(Taxable Value+VAT)	16.00%
Uttar Pradesh	17.48% or Rs.10.41 per litre whichever is greater	21%, In case of sale to CIVIL aircrafts at Agra & Varanasi - 4%
Uttarakhand	17.48% or Rs 10.41 per liter whichever is greater	20.00%
West Bengal	17% or Rs. 7.70/Litre whichever is higher, Infrastructure Development Cess Rs.1000 per Kl, Additional Tax on tax 20%, Rebate Available Rs 1000/Kl. (NIl rebate for Inter State Sales)	25.00% + 20% Add. Tax on tax. For Bagdogra AFS- nil (No tax)

Source : Indian Oil Corporation Ltd.

VII. 4 : GST Rates applicable on Select Petroleum Products (as on 01.04.2021)

(in Percentage)

Product	For intra-state supply		For inter-state supply
	Central Tax	State / UT tax	Integrated Tax
(1)	(2)	(3)	(4)
Naphtha	9.00%	9.00%	18.00%
Superior Kerosene Oil - PDS	2.50%	2.50%	5.00%
Superior Kerosene Oil - Others	9.00%	9.00%	18.00%
LPG - Domestic	2.50%	2.50%	5.00%
LPG - Non-Domestic	9.00%	9.00%	18.00%
Fuel Oil	9.00%	9.00%	18.00%
IFO 180 CST & IFO 2380 CST	2.50%	2.50%	5.00%
Low Sulphur Heavy Stock	9.00%	9.00%	18.00%
Light Diesel Oil	9.00%	9.00%	18.00%
Lubes/Greases	9.00%	9.00%	18.00%
Mineral Turpentine Oil	9.00%	9.00%	18.00%
Sulphur	2.50%	2.50%	5.00%
Asphalt / Bitumen	9.00%	9.00%	18.00%

Note :

1. IFO : Intermediate Fuel Oil (For use in Bunker fuel) and Bunker fuel for use in ships or vessels- (i) IFO 180 CST, (ii) IFO 380 CST, (iii) Marine Fuel 0.5% (Fo)
2. GST Rate for Sulphur is 5%, Relevant entry abtract is as under- "Sulphur of all kinds, other than sublimed sulphur, precipitated sulphur and colloidal sulphur

Source : Indian Oil Corporation Ltd.

VII. 5 : Central Excise and Customs Tariff (as on 01.04.2021)

Particulars	Basic Customs Duty	Additional Customs Duty (CVD)	Additional Customs Duty	Basic Excise Duty	Special Additional Excise Duty	Additional Excise Duty (Road and infrastructure Cess)	Additional Excise Duty (Agriculture Infrastructure & Development Cess)
Crude Oil	Rs.1/MT + Rs. 50/MT as NCCD	Rs.1/MT	-	Rs.1/MT+ Cess @ 20% +Rs.50/ MT as NCCD	-	-	-
Petrol	2.50%	Rs.1.40/ltr. + Rs.11.00/ ltr SAD + Rs.2.50/ ltr AIDC	Rs.18.00/ ltr.	Rs.1.40/ltr	Rs.11.00/ ltr	Rs.18.00/ltr.	Rs.2.50/ltr.
Petrol (branded)	2.50%	Rs.2.60/ltr. + Rs.11.00/ ltr SAD + Rs.2.50/ ltr AIDC	Rs.18.00/ ltr.	Rs.2.60/ltr	Rs.11.00/ ltr	Rs.18.00/ltr.	Rs.2.50/ltr.
High Speed Diesel	2.50%	Rs.1.80/ltr. + Rs.8.00/ ltr SAD + Rs.4.00/ ltr AIDC	Rs.18.00/ ltr.	Rs.1.80/ltr	Rs.8.00/ ltr	Rs.18.00/ltr.	Rs.4.00/ltr.
High Speed Diesel (branded)	2.50%	Rs.4.20/ltr. + Rs.8.00/ ltr SAD + Rs.4.00/ ltr AIDC	Rs.18.00/ ltr.	Rs.4.20/ltr	Rs.8.00/ ltr	Rs.18.00/ltr.	Rs.4.00/ltr.
Aviation Turbine Fuel[2]	5.00%	11%	-	11%	-	-	-
Liquefied Natural Gas	2.50%	Nil	-	Nil	-	-	-
Natural Gas[Gasious state]	5.00%	Nil	-	Nil	-	-	-
Natural Gas [Compressed]	5.00%	14.00%	-	14.00%	-	-	-

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

Note :

1. In addition to the above, 10% Social Welfare Surcharge is also applicable on the total duties of Customs. However, where CVD is payable in lieu of IGST, social welfare surcharge is not applicable on the amount of CVD.
2. In case of ATF , Basic Excise Duty /Additional Customs Duty (CVD) is 2% in place of 11%, for supply to scheduled commuter airlines (SCA) from the regional connectivity scheme (RCS) airports.
3. Basic Customs duty is Nil for import of domestic LPG sold to household consumers (including NDEC) by PSU OMCs. Basic Customs duty rate is 5% for other importers of domestic LPG.

Source : PPAC

VII. 6 : Sales Tax / VAT Payments by Oil & Gas Companies

(Value in ₹ Crore)

State & UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Andaman & Nicobar islands	-	-	-	51	92	94	74
Andhra Pradesh	8,777	7,806	8,908	9,693	10,784	10,168	11,014
Arunachal Pradesh	56	54	62	67	49	26	104
Assam	2,268	2,163	2,571	3,108	3,879	3,641	3,747
Bihar	2,885	3,638	4,501	5,447	6,584	6,238	5,854
Chandigarh	84	75	54	54	62	60	60
Chhattisgarh	2,645	2,617	3,200	3,682	3,986	3,877	4,107
Dadra & Nagar Haveli and Daman & Diu	149	152	156	42	2	2	1
Delhi	2,798	3,158	3,589	3,944	4,379	3,833	2,653
Goa	478	534	650	657	694	754	682
Gujarat	15,879	14,701	15,958	15,593	16,229	15,337	15,141
Haryana	5,112	5,976	7,000	7,647	8,286	7,648	7,923
Himachal Pradesh	234	263	317	344	364	440	882
Jammu & Kashmir	951	1,004	1,110	1,329	1,449	1,459	1,444
Jharkhand	2,076	2,476	2,967	3,224	2,796	3,296	3,619
Karnataka	8,668	8,652	11,103	13,306	14,417	15,381	15,476
Kerala	5,378	6,121	6,899	7,300	7,995	8,074	6,924
Ladakh						14	49
Lakshadweep	-	-	-	-	-	-	-
Madhya Pradesh	6,832	7,631	9,160	9,380	9,485	10,720	11,908
Maharashtra	19,795	19,417	23,160	25,256	27,191	26,791	25,430
Manipur	116	114	117	162	181	192	265
Meghalaya	2	1	1	0	-	-	-
Mizoram	58	53	48	55	88	91	84
Nagaland	83	80	78	86	97	116	148
Odisha	2,865	3,027	4,283	6,870	5,660	5,495	6,224
Puducherry	22	18	22	15	8	5	10
Punjab	4,179	4,907	5,833	6,062	6,576	5,548	6,291
Rajasthan	8,373	9,211	10,591	12,094	12,714	13,319	15,119
Sikkim	74	98	105	110	134	129	111
Tamil nadu	12,316	11,004	12,563	15,507	18,143	18,175	17,063
Telangana	4,527	6,391	7,552	8,776	10,037	10,045	8,691
Tripura	180	197	168	205	277	384	445
Uttar Pradesh	12,579	14,175	15,850	17,420	19,168	20,112	21,956
Uttarakhand	1,157	1,221	1,414	1,323	1,595	1,495	1,524
West bengal	5,563	5,869	6,427	7,042	7,866	7,534	7,916
TOTAL	**1,37,157**	**1,42,807**	**1,66,414**	**1,85,850**	**2,01,265**	**2,00,493**	**2,02,937**

Note :

(P) Provisional

1. Totals may not tally due to round off.
2. As the amounts have been rounded off to the nearest crore, hence some amounts are zero.

Source : PPAC (Based on 16 major oil & gas companies)

VII .7 : GST Payment by Oil & Gas Companies

(Value in ₹ Crore)

State/UT	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)
Andaman & Nicobar islands	1	0	0	0
Andhra Pradesh	172	257	156	112
Arunachal Pradesh	1	6	0	0
Assam	116	559	475	332
Bihar	91	159	145	122
Chandigarh	1	1	1	1
Chhattisgarh	39	18	9	14
Dadra & Nagar Haveli and Daman & Diu	10	12	20	20
Delhi	114	52	51	37
Goa	5	3	9	11
Gujarat	1,022	2,060	1,801	1,566
Haryana	379	659	685	529
Himachal Pradesh	15	3	4	6
Jammu & Kashmir	38	20	17	40
Jharkhand	57	13	16	12
Karnataka	329	356	269	260
Kerala	136	146	171	136
Ladakh			1	1
Lakshadweep	0	0	0	0
Madhya Pradesh	73	87	98	68
Maharashtra	797	1,272	1,126	932
Manipur	2	1	1	2
Meghalaya	0	1	0	0
Mizoram	1	1	1	0
Nagaland	1	1	1	0
Odisha	52	93	192	195
Other territory (Offshore areas of India beyond 12 Nautical Miles)	8	11	11	7
Puducherry	2	1	1	1
Punjab	157	116	128	43
Rajasthan	88	205	176	145
Sikkim	3	2	0	0
Tamil nadu	517	642	562	439
Telangana	88	19	21	22
Tripura	6	20	17	38
Uttar Pradesh	362	616	619	603
Uttarakhand	20	6	7	8
West bengal	272	545	553	418
TOTAL	**4,974**	**7,961**	**7,345**	**6,121**

Note : Totals may not tally due to round off. (P) Provisional

1. As GST was implemented w.e.f 01.07.2017, data for 2017-18 is for a period of nine months.
2. As the amounts have been rounded off to the nearest crore, hence some amounts are zero.

Source : PPAC (Based on 16 major oil & gas companies)

VII. 8 : Sales Tax/VAT Payments on Crude Oil & Natural Gas by CPSEs

(Value in ₹ Crore)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sales Tax/VAT on Crude Oil							
Andhra Pradesh	45	31	25	14	48	16	10
Assam	440	473	462	578	720	620	419
Gujarat	237	418	487	549	748	714	476
Maharashtra	**1,114**	**1,094**	**1,197**	**1,305**	**1,582**	**1,356**	**890**
Rajasthan	0	0	0	0	0	0	0
Tamil Nadu	47	31	33	43	75	66	47
West Bengal	-	-	-	-	-	-	0
Total VAT/Sales Tax	**1,883**	**2,046**	**2,204**	**2,488**	**3,172**	**2,772**	**1,841**
Sales Tax/VAT on Natural Gas							
Andhra Pradesh	107	139	137	191	348	267	174
Arunachal Pradesh	0	0	0	0	0	0	0
Assam	195	246	189	178	238	236	119
Bihar	-	-	-	-	-	1	5
Chandigarh	60	0	0	0	0	0	0
Dadra Nagar Haveli & Daman & Diu	0	0	0	0	0	1	1
Delhi	19	16	12	11	12	15	13
Goa	0	0	0	0	0	0	1
Gujarat	2,271	2,131	1,678	2,084	2,544	2,636	2,144
Haryana	144	104	93	114	147	149	86
Himachal Pradesh	14	0	0	0	1	1	1
Jammu & Kashmir	68	0	0	0	0	0	0
Jharkhand	0	0	0	0	0	1	1
Kerala	0	0	11	148	8	23	27
Madhya Pradesh	201	195	133	121	162	162	114
Maharashtra	974	866	806	672	580	659	360
Odisha	0	0	0	0	0	0	2
Punjab	127	64	13	2	6	33	52
Rajasthan	116	126	123	147	233	436	424
Tamil Nadu	67	58	36	43	52	120	108
Telangana	4	5	5	5	5	9	2
Tripura	53	59	42	44	79	150	206
Uttar Pradesh	1,379	1,304	948	1,263	1,846	2,171	1,556
Uttarakhand	8	10	4	6	10	14	8
West Bengal	0	0	0	0	0	0	0
Total VAT/Sales Tax	**5,806**	**5,325**	**4,229**	**5,030**	**6,272**	**7,084**	**5,406**

Note : Totals may not tally due to round off. P : Provisional

2. As the amounts have been rounded off to the nearest crore, hence some amounts are zero.

Sources : CPSEs (ONGC, OIL, GAIL, IOCL, BPCL, HPCL, CPCL, MRPL, NRL)

VII. 9 : Sales Tax/VAT Payments on Petrol by CPSEs

(Value in ₹ Crore)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Andaman & Nicobar Islands	0	0	0	6	9	9	7
Andhra Pradesh	2310	2196	2794	2827	3098	3147	3739
Arunachal Pradesh	10	18	9	23	15	8	36
Assam	304	489	610	797	962	1024	1224
Bihar	768	997	1146	1476	2233	2281	2242
Chandigarh	17	20	16	20	21	20	19
Chhattisgarh	672	696	833	904	1157	1267	1378
Dadra Nagar Haveli & Daman & Diu	0	0	0	0	0	0	0
Delhi	1252	1440	1709	1766	2004	1877	1645
Goa	36	150	158	201	231	294	296
Gujarat	1541	1382	1717	1703	2656	2548	2612
Haryana	1211	1420	1559	1747	2051	2092	2146
Himachal Pradesh	74	84	99	119	133	172	372
Jammu & Kashmir	286	334	381	474	626	685	684
Jharkhand	449	640	752	805	846	935	1134
Karnataka	2718	2842	3669	4443	4880	5011	5349
Kerala	1986	2493	2821	2998	3523	3717	3378
Ladakh	-	-	-	-	0	6	24
Madhya Pradesh	1604	1954	2360	2442	3327	3753	4390
Maharashtra	5445	5911	7302	9937	10074	9644	9527
Manipur	31	49	56	83	89	92	135
Meghalaya	0	0	0	0	0	0	0
Mizoram	11	25	22	26	37	39	38
Nagaland	19	36	38	45	50	58	61
Odisha	694	824	1019	1246	1510	1579	1993
Puducherry	4	3	4	6	5	3	7
Punjab	1426	1329	1462	1670	2403	1861	1927
Rajasthan	2062	2323	2563	2854	3295	3726	4840
Sikkim	22	26	28	31	44	48	39
Tamil Nadu	3748	3650	4098	5584	6537	6669	6992
Telangana	1389	2167	2355	2655	3205	3212	3119
Tripura	22	60	56	67	92	114	119
Uttar Pradesh	3846	4684	5390	6000	6335	6830	7652
Uttarakhand	403	458	526	546	687	667	713
West Bengal	1196	1374	1514	1788	2268	2335	2679
Total VAT/Sales Tax	**35554**	**40073**	**47068**	**55290**	**64404**	**65722**	**70516**

Note : Totals may not tally due to round off. P : Provisional

2. As the amounts have been rounded off to the nearest crore, hence some amounts are zero.

Sources : CPSEs (ONGC, OIL, GAIL, IOCL, BPCL, HPCL, CPCL, MRPL, NRL)

VII. 10 : Sales Tax/VAT Payments on Diesel by CPSEs

(Value in ₹ Crore)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Andaman & Nicobar Islands	0	0	0	23	66	70	62
Andhra Pradesh	5333	4883	5144	5887	6507	5806	5947
Arunachal Pradesh	21	33	15	38	31	17	66
Assam	593	749	976	1261	1422	1425	1690
Bihar	1559	1967	2266	2769	3821	3720	3358
Chandigarh	4	10	8	10	12	11	14
Chhattisgarh	1880	1723	1980	2229	2694	2484	2626
Dadra Nagar Haveli & Daman & Diu	0	0	0	0	0	0	0
Delhi	809	1059	1133	1229	1254	980	672
Goa	338	315	392	360	375	383	365
Gujarat	2915	2704	3157	3533	5630	5419	5863
Haryana	3115	3835	4497	4999	5639	4975	5205
Himachal Pradesh	95	125	164	188	205	248	492
Jammu & Kashmir	404	436	497	622	726	698	727
Jharkhand	1452	1462	1617	1763	1705	2118	2249
Karnataka	4757	4782	6186	7719	8271	8763	8650
Kerala	2765	3085	3400	3482	4006	3944	3110
Ladakh	-	-	-	-	0	5	19
Madhya Pradesh	3468	3687	4369	4278	4782	4902	5485
Maharashtra	9505	8999	10402	11430	13013	12672	12629
Manipur	36	54	51	70	78	81	126
Meghalaya	0	0	0	0	0	0	0
Mizoram	9	25	24	28	48	50	46
Nagaland	21	35	32	39	47	57	87
Odisha	2056	2025	2876	2940	3976	3839	4178
Puducherry	5	3	3	3	3	2	3
Punjab	1603	1780	2170	2470	3374	2901	3331
Rajasthan	4910	5011	5435	5899	6820	7044	7952
Sikkim	26	37	44	49	84	81	72
Tamil Nadu	7174	6223	6959	8620	10104	9677	8453
Telangana	2932	3970	4708	5449	6433	5897	4805
Tripura	25	69	63	74	93	110	118
Uttar Pradesh	6353	6907	7812	8651	9204	9250	10742
Uttarakhand	670	675	740	663	811	706	730
West Bengal	2765	3044	3160	3727	5005	4467	4633
Total VAT/Sales Tax	**67601**	**69710**	**80280**	**90503**	**106241**	**102804**	**104504**

Note : Totals may not tally due to round off. P : Provisional

2. As the amounts have been rounded off to the nearest crore, hence some amounts are zero.

Sources : CPSEs (ONGC, OIL, GAIL, IOCL, BPCL, HPCL, CPCL, MRPL, NRL)

VII. 11 : Sales Tax/VAT Payments on ATF by CPSEs

(Value in ₹ Crore)

State/UT	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Andaman & Nicobar Islands	0.00	0.00	0.00	11.12	16.02	14.36	4.32
Andhra Pradesh	47.18	4.21	4.57	6.61	9.26	6.97	2.65
Arunachal Pradesh	0.00	0.10	0.09	5.11	2.05	1.46	1.72
Assam	135.96	94.65	122.13	142.92	224.84	201.75	99.06
Bihar	18.72	17.87	23.38	33.69	48.72	57.09	22.49
Chandigarh	0.00	42.92	27.49	23.87	28.43	28.75	27.53
Chhattisgarh	4.30	1.42	3.77	6.86	8.95	9.22	3.34
Dadra Nagar Haveli & Daman & Diu	1.30	0.82	0.79	0.96	1.71	1.49	1.18
Delhi	776.07	555.94	702.17	860.18	1198.78	1030.51	320.24
Goa	46.73	33.20	50.95	54.43	80.63	75.86	19.33
Gujarat	129.65	79.29	134.61	154.59	215.05	169.36	68.22
Haryana	50.96	29.75	38.43	60.31	51.81	32.53	22.70
Himachal Pradesh	0.00	9.11	7.70	9.62	12.47	10.15	8.63
Jammu & Kashmir	5.63	48.22	49.17	60.55	96.74	75.31	32.25
Jharkhand	6.15	3.70	5.59	8.27	9.78	11.70	10.40
Karnataka	314.69	207.30	201.05	347.06	383.92	536.29	185.06
Kerala	101.61	67.26	104.44	137.42	197.01	46.85	4.09
Ladakh	-	-	-	-	0	2.76	6.03
Madhya Pradesh	13.74	9.91	9.07	20.47	32.13	28.22	11.44
Maharashtra	797.10	598.44	609.83	720.79	848.93	657.56	179.79
Manipur	4.79	3.15	3.43	5.50	12.93	19.75	4.08
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	1.99	1.32	1.15	1.03	2.63	2.26	0.84
Nagaland	1.98	2.85	2.75	0.60	0.67	0.20	0.09
Odisha	4.65	4.58	10.77	17.57	28.45	23.16	9.11
Puducherry	0.00	0.00	0.00	0.00	0.11	0.02	0.01
Punjab	0.01	15.03	30.72	35.58	54.55	55.08	29.23
Rajasthan	97.60	81.79	89.97	101.99	142.86	97.53	65.39
Sikkim	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Tamil Nadu	224.45	133.05	173.02	223.67	341.02	402.17	116.56
Telangana	91.96	74.15	89.48	51.40	28.31	16.18	6.87
Tripura	4.26	3.67	3.98	6.53	11.87	9.62	2.34
Uttar Pradesh	130.85	110.34	118.22	156.41	211.34	191.63	101.42
Uttarakhand	1.37	2.14	4.98	11.36	16.77	18.37	5.91
West Bengal	155.92	97.27	137.64	179.89	249.35	314.90	116.29
VAT/Sales Tax	**3169.62**	**2333.45**	**2761.34**	**3456.36**	**4568.10**	**4149.04**	**1488.60**

Note : Totals may not tally due to round off. P : Provisional

2. As the amounts have been rounded off to the nearest crore, hence some amounts are zero.

Sources : CPSEs (ONGC, OIL, GAIL, IOCL, BPCL, HPCL, CPCL, MRPL, NRL)

CHAPTER-VIII

Manpower

CHAPTER HIGHLIGHTS

Total manpower employed in oil and gas sector CPSEs stood at 98,028 as on 31.03.2021 in which share of male employee is 91.9% (90,064) and that of female employees is 8.1% (7,964).

Out of 8.1% female employees, highest female deployment (36.5%) corresponds to Marketing vertical followed by Exploration & Production (21%) and Refining (16.9%). Out of 91.9% male employees, highest male deployment (29.7%) corresponds to Exploration & Production vertical followed by Marketing (25.5%) and Refining (25.5%).

Out of 8.1% female employees, highest female deployment (68.8%) corresponds to Executive/Managerial Category followed by Supervisory (11.7%), Clerical (10.8%) and Workmen (8.8%). Out of 91.9% male employees, highest male deployment (57.3%) corresponds to Executive/Managerial Category followed by Workmen (30.3%), Supervisory (8.3%) and Clerical (4.2%).

Exploration & production vertical accounted for the highest manpower deployment (29%) followed by marketing (26.4%) and refinery (24.8%) as on 31.03.2021.

Out of 29% employed in Exploration & Production vertical, 94.1% are male employees and 5.9% are female employees. Among the top three verticals considering manpower deployment, ``Marketing`` vertical is the one with lowest disparity between male (88.8%) and female employees (11.2%).

Executive/Managerial categories employed the highest proportion of manpower (58.2%) followed by Workmen (28.6%), Supervisory (8.5%) and Clerical (4.7%) accounted for the balance as on 31.03.2021.

Out of 58.2% employed in Executive/Managerial category, 90.4% are male employees and 9.6% are female employees. The ``Clerical`` category is the one with lowest disparity between male (81.3%) and female employees deployment (18.7%).

Out of 58.2% employed in Executive/Managerial category, 90.4% are male employees and 9.6% are female employees. The ``Clerical`` category is the one with lowest disparity between male (81.3%) and female employees deployment (18.7%).

ONGC and IOCL together accounted for over 61.3% of the total manpower employed in the oil & gas CPSEs as on 31.03.2021.

VIII. 1 : Sector-wise Manpower Employed in Oil & Gas CPSEs in India (as on 31st March)

(Figures in Number)

Sector	2015	2016	2017	2018	2019	2020	2021(P)	% Share of Total 2021
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Exploration & Production	32850	33455	33150	31823	31019	29987	28381	29.0
Refining	25233	24693	25038	25198	25690	25317	24293	24.8
Marketing	31094	31260	30698	29994	29657	28380	25908	26.4
Pipelines	5087	5384	5689	5869	6101	6205	6138	6.3
Research & Development	2126	2101	1986	1960	1898	1843	1658	1.7
Others	14329	13720	13492	13033	12368	12100	11650	11.9
Grand Total	**110719**	**110613**	**110053**	**107877**	**106733**	**103832**	**98028**	**100**

Note : Figures exclude 'Expatriates/Foreign Experts/on Contract' manpower P : Provisional

Source : Central Public Sector Enterprises

VIII. 2 : Category-wise Manpower Employed in Oil & Gas CPSEs in India (as on 31st March)

(Figures in Number)

Category	2015	2016	2017	2018	2019	2020	2021(P)	% Share of Total 2021
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Executive/ Managerial	59598	59707	59962	59890	60182	59114	57059	58.2
Supervisory	10407	10047	9988	9614	9008	8751	8369	8.5
Clerical	7036	5710	5392	5457	5275	5088	4609	4.7
Workmen	33678	35149	34711	32916	32268	30879	27991	28.6
Grand Total	**110719**	**110613**	**110053**	**107877**	**106733**	**103832**	**98028**	**100**

Note : Figures exclude 'Expatriates/Foreign Experts/on Contract' manpower P : Provisional

Source : Central Public Sector Enterprises

Figure VIII. 1 : Sector- wise Manpower (in %) as on 31.03.2021

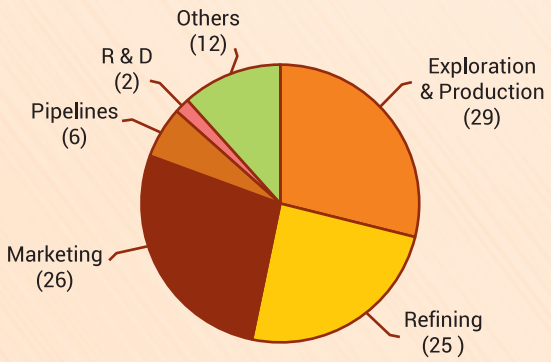
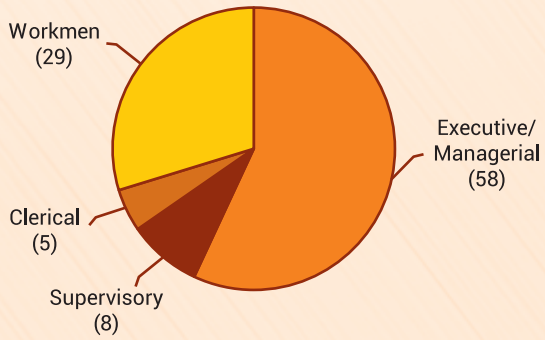


Figure VIII. 2 : Category-wise Manpower (in %) as on 31.03.2021



VIII. 3 : Category-wise and Sector-wise Manpower Employed in Oil & Gas CPSEs in India (as on 31st March)

(Figures in Number)

Category	2015	2016	2017	2018	2019	2020	2021 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Exploration and Production							
1. Executive/Managerial	20785	20258	19394	18574	18128	17304	16046
2. Supervisory	2538	2321	2157	1947	1713	1594	1480
3. Clerical	475	545	574	550	541	550	535
4. Workman	9052	10331	11025	10752	10637	10539	10320
Total	**32850**	**33455**	**33150**	**31823**	**31019**	**29987**	**28381**
2. Refining							
1. Executive/Managerial	10080	10075	10410	10789	11084	11022	10924
2. Supervisory	3371	3144	2958	2809	2699	2575	2374
3. Clerical	1580	700	679	684	684	685	571
4. Workman	10202	10774	10991	10916	11223	11035	10424
Total	**25233**	**24693**	**25038**	**25198**	**25690**	**25317**	**24293**
3. Marketing							
1. Executive/Managerial	14642	15202	15805	16162	16730	16632	16164
2. Supervisory	3101	3193	3515	3540	3452	3426	3301
3. Clerical	3334	3233	2870	2625	2461	2277	1689
4. Workman	10017	9632	8508	7667	7014	6045	4754
Total	**31094**	**31260**	**30698**	**29994**	**29657**	**28380**	**25908**
4. Pipelines							
1. Executive/Managerial	-	3777	4081	4250	4485	4545	4538
2. Supervisory	-	207	222	265	232	251	267
3. Clerical	-	164	162	345	393	393	740
4. Workman	-	1236	1224	1009	991	1016	593
Total	**5087**	**5384**	**5689**	**5869**	**6101**	**6205**	**6138**
5. Research & Development							
1. Executive/Managerial	-	1768	1672	1663	1636	1572	1433
2. Supervisory	-	101	91	84	67	67	54
3. Clerical	-	33	34	28	26	28	25
4. Workman	-	199	189	185	169	176	146
Total	**2126**	**2101**	**1986**	**1960**	**1898**	**1843**	**1658**
6. Others							
1. Executive/Managerial	-	8627	8600	8452	8119	8039	7953
2. Supervisory	-	1081	1045	969	845	838	893
3. Clerical	-	1035	1073	1225	1170	1155	1049
4. Workman	-	2977	2774	2387	2234	2068	1755
Total	**14329**	**13720**	**13492**	**13033**	**12368**	**12100**	**11650**
Grand Total	**110719**	**110613**	**110053**	**107877**	**106733**	**103832**	**98028**

Note : Figures exclude 'Expatriates/Foreign Experts/on Contract' manpower

P : Provisional

Source : Central Public Sector Enterprises

VIII. 4 : Gender-wise & Sector-wise Manpower Employed in Oil & Gas CPSEs as on 31.03.2021

(Figures in Number)

Sector/Category/CPSE	ONGC*	OIL	GAIL	IOCL	BPCL	HPCL	CPCL	MRPL	NRL	Balmer Lawrie	EIL	Total (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Male Employees												
1. Exploration & Production	23625	3001	33	0	35	11	0	0	0	0	0	26705
2. Refining	176	0	0	12738	3572	2569	1433	1703	760	0	0	22951
3. Marketing	60	0	593	12780	4483	4872	16	100	77	0	24	23005
4. Pipelines	74	322	1820	2975	244	403	0	0	6	0	0	5844
5. Research & Development	689	22	9	380	68	86	14	1	1	14	43	1327
6. Others	1732	2442	1946	0	121	591	39	0	77	874	2410	10232
Total	**26356**	**5787**	**4401**	**28873**	**8523**	**8532**	**1502**	**1804**	**921**	**888**	**2477**	**90064**
% Male Manpower of Total	**92.5**	**93.5**	**93.5**	**91.2**	**92.1**	**90.3**	**94.6**	**93.0**	**94.3**	**89.8**	**88.0**	**91.9**
Female Employees												
1. Exploration & Production	1590	79	2	0	3	2	0	0	0	0	0	1676
2. Refining	6	0	0	782	167	167	67	124	29	0	0	1342
3. Marketing	3	0	45	1768	531	541	0	10	0	0	5	2903
4. Pipelines	4	19	86	149	4	32	0	0	0	0	0	294
5. Research & Development	204	4	1	76	15	20	4	1	0	1	5	331
6. Others	316	301	170	0	8	154	15	0	27	100	327	1418
Total	**2123**	**403**	**304**	**2775**	**728**	**916**	**86**	**135**	**56**	**101**	**337**	**7964**
% Female Manpower of Total	7.5	6.5	6.5	8.8	7.9	9.7	5.4	7.0	5.7	10.2	12.0	8.1
Total Employees												
1. Exploration & Production	25215	3080	35	0	38	13	0	0	0	0	0	28381
2. Refining	182	0	0	13520	3739	2736	1500	1827	789	0	0	24293
3. Marketing	63	0	638	14548	5014	5413	16	110	77	0	29	25908
4. Pipelines	78	341	1906	3124	248	435	0	0	6	0	0	6138
5. Research & Development	893	26	10	456	83	106	18	2	1	15	48	1658
6. Others	2048	2743	2116	0	129	745	54	0	104	974	2737	11650
Total Manpower	**28479**	**6190**	**4705**	**31648**	**9251**	**9448**	**1588**	**1939**	**977**	**989**	**2814**	**98028**
% Share of Total Manpower	**29.1**	**6.3**	**4.8**	**32.3**	**9.4**	**9.6**	**1.6**	**2.0**	**1.0**	**1.0**	**2.9**	**100.0**

Notes : Figures exclude 'Expatriates/Foreign Experts/on Contract' manpower P : Provisional * : OVL's Manpower (288 employees) included in ONGC's Others

Source : Central Public Sector Enterprises

VIII. 5 : Gender-wise & Category-wise Manpower Employed in Oil & Gas CPSEs as on 31.03.2021

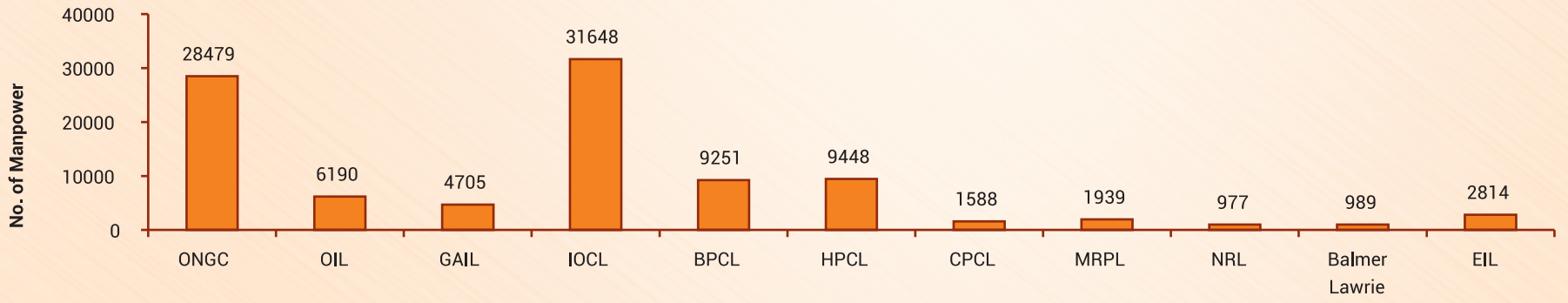
(Figures in Number)

Sector/Category/CPSE	ONGC	OIL	GAIL	IOCL	BPCL	HPCL	CPCL	MRPL	NRL	Balmer Lawrie	EIL	Total (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Male Employees												
1. Executive/Managerial	16283	1465	3545	15890	4870	5213	187	864	477	442	2345	51581
2. Supervisory	1238	576	292	4427	0	0	540	128	0	193	45	7439
3. Clerical	396	474	516	924	487	766	26	0	31	43	86	3749
4. Workmen	8439	3272	48	7632	3166	2553	749	812	413	210	1	27295
Total	**26356**	**5787**	**4401**	**28873**	**8523**	**8532**	**1502**	**1804**	**921**	**888**	**2477**	**90064**
Female Employees												
1. Executive/Managerial	1436	204	266	1872	530	707	10	43	46	62	301	5477
2. Supervisory	130	59	13	630	0	0	47	0	0	25	26	930
3. Clerical	190	70	24	143	189	199	17	0	8	10	10	860
4. Workmen	367	70	1	130	9	10	12	92	2	4	0	697
Total	**2123**	**403**	**304**	**2775**	**728**	**916**	**86**	**135**	**56**	**101**	**337**	**7964**
Total Employees												
1. Executive/Managerial	17719	1669	3811	17762	5400	5920	197	907	523	504	2646	57058
2. Supervisory	1368	635	305	5057	0	0	587	128	0	218	71	8369
3. Clerical	586	544	540	1067	676	965	43	0	39	53	96	4609
4. Workmen	8806	3342	49	7762	3175	2563	761	904	415	214	1	27992
Total	**28479**	**6190**	**4705**	**31648**	**9251**	**9448**	**1588**	**1939**	**977**	**989**	**2814**	**98028**

Notes : Figures exclude 'Expatriates/Foreign Experts/on Contract' manpower P : Provisional *: OVL's Manpower (288 employees) included in ONGC's Others

Source : Central Public Sector Enterprises

Figures VIII. 3 : Regular Manpower Employed in CPSEs as on 31.03.2021



CHAPTER-IX

Energy

CHAPTER HIGHLIGHTS

During FY 2019-20, Oil & Gas Sector contributed to economic activities with Gross Value Added (at current prices) of ₹ 2,20,806 crore vis-à-vis ₹ 2,66,804 crore in FY 2018-19 thus registering a negative growth rate of 17.24%. In addition, it is to note that contribution of Oil & Gas Sector in total GVA (at current prices) has declined from 1.6% in 2018-19 to 1.2% in 2019-20.

During FY 2019-20, Oil & Gas Sector contributed in economic activities with Gross Value Added [at constant prices (2011-12)] of ₹ 2,40,531 crore vis-à-vis ₹ 2,72,817 crore in FY 2018-19 thus registering a negative growth rate of 11.83%. In addition, it is to note that contribution of Oil & Gas Sector in total GVA [at constant prices (2011-12)] has declined from 2.1% in 2018-19 to 1.8% in 2019-20.

Coal & Lignite production in the country declined by 2.6% to 752.69 MMT during the year 2020-21 as compared to 772.97 MMT in 2019-20.

Gross Electricity Generation has increased to 1.64 Million GWh in 2020-21 as compared to 1.62 Million GWh in 2019-20, thus, achieving a growth rate of 1%. Total consumption of electricity that was increasing since 2014-15 to 2019-20, has marked a decline of 0.8% in 2020-21 (1.24 Million GWh) vis-a-vis 2019-20 (1.25 Million GWh).

Total consumption of natural gas and petroleum products, which were increasing since 2014-15 to 2019-20, marked a decline of 5.5% and 9.1% respectively for the first time in 2020-21.

IX. 1 : Gross Value Added by Economic Activity at Current Prices

(Value in ₹ crore)

Sectors		2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.(a)	Petroleum & Natural Gas	120334	116892	112110	115476	95817	112567	105602
(b)	Manufacture of coke and refined petroleum products	168740	226152	196579	180127	201980	154237	115204
	Total Oil & Gas Sector	**289074**	**343044**	**308689**	**295603**	**297797**	**266804**	**220806**
2.	Railways	78724	92459	100451	106786	116584	123498	136648
3.	Transport by other means	427352	481455	515790	568118	617201	665379	709440
4.	Storage	6026	6407	7021	7442	16194	18369	19587
5.	Communication & Services related to broadcasting	177804	206442	237281	247809	247549	258052	290933
6.	Electricity	204852	220178	268059	273734	332024	341036	364861
7.	Gas	16868	15560	14627	19115	23885	27941	28242
8.	Water Supply	22062	28231	32116	40248	41927	49679	55348
9.	Other Utility Services	16373	18289	20163	22611	27881	31976	35193
10.	**GVA**	**10363153**	**11504279**	**12574499**	**13965200**	**15505665**	**17161213**	**18461343**
11.	**Contribution of Oil & Gas in total GVA (%)**	**2.79**	**2.98**	**2.45**	**2.12**	**1.92**	**1.55**	**1.20**
	Growth Rate (%)							
1.(a)	Petroleum & Natural Gas	7.99	-2.86	-4.09	3.00	-17.02	17.48	-6.19
(b)	Manufacture of coke and refined petroleum products	13.57	34.02	-13.08	-8.37	12.13	-23.64	-25.31
	Total	**11.18**	**18.67**	**-10.01**	**-4.24**	**0.74**	**-10.41**	**-17.24**
2.	Railways	8.89	17.45	8.64	6.31	9.18	5.93	10.65
3.	Transport by other means	10.14	12.66	7.13	10.15	8.64	7.81	6.62
4.	Storage	-2.25	6.32	9.58	6.00	117.60	13.43	6.63
5.	Communication & Services related to broadcasting	24.37	16.11	14.94	4.44	-0.10	4.24	12.74
6.	Electricity	21.79	7.48	21.75	2.12	21.29	2.71	6.99
7.	Gas	7.77	-7.75	-6.00	30.68	24.95	16.98	1.08
8.	Water Supply	25.98	27.96	13.76	25.32	4.17	18.49	11.41
9.	Other Utility Services	17.04	11.70	10.25	12.14	23.31	14.68	10.06
10.	GVA	12.61	11.01	9.30	11.06	11.03	10.68	7.58

Source : National Statistical Office, MoSPI

IX. 2 : Gross Value Added at by Economic Activity at Constant Price

(Value in ₹ crore)

Sectors		2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.(a)	Petroleum & Natural Gas	101298	112927	146481	158125	131373	121900	124013
(b)	Manufacture of coke and refined petroleum products	142692	208277	242589	222153	223738	150917	116518
	Total Oil & Gas Sector	**243990**	**321204**	**389071**	**380278**	**355111**	**272817**	**240531**
2.	Railways	73685	80720	85452	82161	87886	91350	94524
3.	Transport by other means	382631	409551	438458	464899	501039	528369	545255
4.	Storage	5209	5529	6245	6100	12976	13701	14052
5.	Communication & Services related to broadcasting	156030	176047	201243	203896	198344	197151	218458
6.	Electricity	152873	163722	170139	185281	207882	221787	224482
7.	Gas	14131	12832	13213	14144	15029	16868	16458
8.	Water Supply	18343	22159	24030	28811	28973	33197	35303
9.	Other Utility Services	14253	15334	16776	18261	20765	22636	24288
10.	**GVA**	**9063649**	**9712133**	**10491870**	**11328285**	**12034171**	**12744203**	**13271471**
11.	**Contribution of Oil & Gas in total GVA (%)**	**2.69**	**3.31**	**3.71**	**3.36**	**2.95**	**2.14**	**1.81**
	Growth Rate (%)							
1.(a)	Petroleum & Natural Gas	-0.53	11.48	29.71	7.95	-16.92	-7.21	1.73
(b)	Manufacture of coke and refined petroleum products	4.91	45.96	16.47	-8.42	0.71	-32.55	-22.79
	Total	**2.58**	**31.65**	**21.13**	**-2.26**	**-6.62**	**-23.17**	**-11.83**
2.	Railways	6.54	9.55	5.86	-3.85	6.97	3.94	3.47
3.	Transport by other means	6.24	7.04	7.06	6.03	7.77	5.45	3.20
4.	Storage	-8.85	6.14	12.95	-2.32	112.71	5.59	2.56
5.	Communication & Services related to broadcasting	16.00	12.83	14.31	1.32	-2.72	-0.60	10.81
6.	Electricity	2.93	7.10	3.92	8.90	12.20	6.69	1.22
7.	Gas	-0.97	-9.19	2.97	7.05	6.26	12.23	-2.43
8.	Water Supply	15.12	20.80	8.44	19.90	0.56	14.58	6.35
9.	Other Utility Services	10.36	7.58	9.41	8.85	13.71	9.01	7.30
10.	**GVA**	**6.05**	**7.15**	**8.03**	**7.97**	**6.23**	**5.90**	**4.14**

Source : National Statistical Office, MoSPI

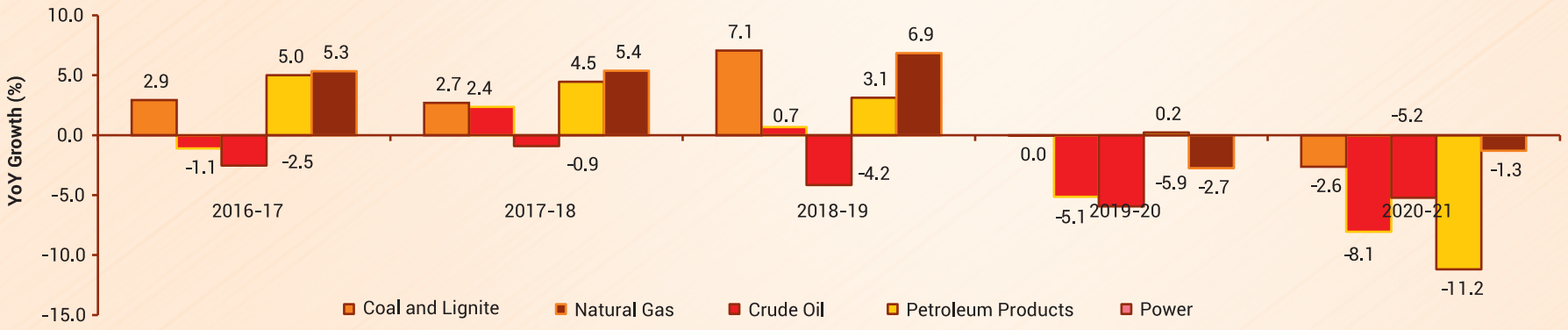
IX. 3 : Gross Production of Various Energy Sources in India

Year	Coal & Lignite					Hydro-Carbon			Power									
	Coal			Lignite	Grand Total	Natural Gas	Crude Oil	Petroleum Products	Thermal				Hydro	Nuclear	ORS*	Total	Non-Utilities	Gross Electricity Generation
	Cooking	Non -Cooking	Total						Steam	Diesel	Gas	Total						
	(TMT)					(MMSCM)	(TMT)		(GWh)									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
2014-15	57446	551733	609179	48270	657449	33657	37461	221136	835291	1576	41075	877941	129244	36102	61785	1105072	162057	1267129
2015-16	60887	578343	639230	43842	683072	32249	36942	231923	895340	551	47122	943013	121377	37414	65781	1167584	168372	1335956
2016-17	61661	596207	657868	45230	703098	31897	36009	243551	944022	401	49094	993516	122378	37916	81548	1235358	172046	1407404
2017-18	40148	635252	675400	46644	722044	32649	35684	254405	986591	348	50208	1037146	126123	38346	101839	1303455	179777	1483232
2018-19	41132	687586	728718	44283	773001	32873	34203	262361	1022265	215	49834	1072314	134894	37813	126759	1371779	213074	1584853
2019-20	52936	677938	730874	42100	772974	31184	32170	262940	994197	199	48443	1042838	155769	46472	138337	1383417	239567	1622983
2020-21 (P)	44787	671297	716084	36610	752694	28673	30494	233513	981239	129	51027	1032395	150304	42949	146411	1372059	267800	1639859

P : Provisional GWh : Giga Watt hour (106 x Kilo Watt hour) * : Other renewable sources

Source : M/o Coal, M/o Power, CEA and Oil Companies.

Figure IX. 1 : YoY growth in gross production of various energy sources in India



IX. 4 : Imports & Exports of Various Energy Sources in India

Year	Coal			Lignite			Natural Gas	Crude Oil	Petroleum Products			Electricity		
	Import	Export	Net Import	Import	Export	Net Import	Import	Import	Import	Export	Net Import	Import	Export	Net Import
	(TMT)						(MMSCM)	(TMT)				(GWh)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2014-15	212103	1238	210865	1	3	-2	18607	189435	21301	63932	-42631	5008	4433	575
2015-16	203949	1575	202374	1	1	0	21388	202850	29456	60539	-31083	5244	5150	94
2016-17	190953	1773	189180	19	5	14	24849	213932	36287	65513	-29226	5617	6710	-1093
2017-18	208273	1503	206770	10	4	6	27439	220433	35461	66833	-31372	5072	7203	-2131
2018-19	235240	1313	233927	19	40	-21	28740	226498	33348	61096	-27747	4396	8469	-4073
2019-20	248540	1030	247510	50	93	-43	33887	226955	43788	65685	-21898	6351	9491	-3140
2020-21 (P)	214990	800	214190	20	150	-130	32861	196461	43248	56769	-13521	9319	9426	-108

P : Provisional

Source : M/o Coal, M/o Power, CEA and Oil Companies.

IX. 5 : Consumption of Various Energy Sources in India

Year	Coal	Lignite	Total Coal & Lignite	Natural Gas	Crude Oil	Petroleum Products	Electricity
	(TMT)			(MMSCM)	(TMT)		(GWh)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2014-15	822131	46954	869085	51300	223242	165520	948522
2015-16	836727	42211	878938	52517	232865	184674	1001191
2016-17	837220	43155	880375	55697	245362	194597	1061183
2017-18	898519	46317	944836	59170	251935	206166	1123427
2018-19	968253	45811	1014064	60798	257205	213216	1209972
2019-20	950106	42317	992423	64144	254386	214127	1248086
2020-21 (P)	905883	-	905883	60645	221773	194295	1237800

Note: Consumption of Crude oil in terms of Crude oil processed NA : Not Available P : Provisional

Source : M/o Coal, M/o Power, CEA and Oil Companies.

IX. 6 : Availability of Various Energy Sources in India

Year	Coal	Lignite	Total Coal & Lignite	Natural Gas	Crude Oil	Petroleum Products	Electricity
	(TMT)			(MMSCM)	(TMT)		(GWh)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2014-15	827516	49584	877100	51300	226896	178505	1054355
2015-16	847576	45475	893051	52517	239792	200840	1104228
2016-17	858576	47318	905894	55697	249941	214325	1163290
2017-18	896086	46977	943063	59170	256117	223033	1232505
2018-19	958250	42724	1000974	60798	260701	234614	1307685
2019-20	1001853	42234	1044087	64144	259124	241046	1323048
2020-21 (P)	955054	35876	990930	60645	228605	241046	1315110

Note : NA : Not Available P : Provisional

1. Availability of Coal & Lignite is equal to sum of Production (Coking + Non-coking), Change of Vendible Stock (closing stock-Opening stock) and net imports (Imports-Exports)
2. Availability of Natural Gas is equal to sum of net production of gas and imports of LNG
3. Availability of Crude oil is equal to sum of gross production and imports of crude oil.
4. Availability of Petroleum products is equal to sum of production of petroleum products and gas and net imports (Imports-Exports) of petroleum products.
5. Net Availability of Electricity is sum of Gross Electricity Generated from Utilities - Consumption in Power Station Auxiliaries + Purchases from Non-Utilities + Net Import from Other Countries

Source : M/o Coal, M/o Power, CEA and Oil Companies.

IX. 7 : Availability of Petroleum Products (Product-wise)

(Figures in MMT)

Items		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
LPG	Production	9.84	10.57	11.33	12.38	12.79	12.82	12.07
	Imports	8.31	8.96	11.10	11.38	13.24	14.81	16.48
	Export	0.25	0.20	0.32	0.36	0.42	0.46	0.45
	Availability	17.90	19.33	22.11	23.40	25.60	27.17	28.10
Motor Spirit	Production	32.33	35.32	36.59	37.78	38.04	38.62	3.58
	Imports	0.37	1.01	0.48	0.17	0.67	2.15	1.35
	Export	16.05	16.82	15.42	14.04	12.88	12.71	11.61
	Availability	16.65	19.52	21.65	23.92	25.82	28.05	-6.68
Naphtha	Production	17.39	17.86	19.95	20.01	19.79	20.68	19.40
	Imports	1.03	2.93	2.78	2.21	2.08	1.66	1.20
	Export	7.01	7.12	8.73	8.95	6.96	8.90	6.51
	Availability	11.42	13.68	14.00	13.27	14.90	13.44	14.09
Kerosene	Production	7.56	7.50	6.04	4.41	4.07	3.21	2.39
	Imports	0.03	0.04	0.00	0.00	0.00	0.00	0.00
	Export	0.02	0.01	0.02	0.02	0.02	0.18	0.02
	Availability	7.57	7.53	6.03	4.39	4.05	3.03	2.38
ATF	Production	11.10	11.79	13.83	14.59	15.48	15.24	7.09
	Imports	0.14	0.29	0.34	0.30	0.26	0.06	0.00
	Export	5.52	5.69	7.27	7.18	7.39	6.91	3.54
	Availability	5.72	6.39	6.90	7.71	8.35	8.40	3.55
Diesel (HSD+LDO)	Production	94.79	99.02	103.11	108.47	111.24	111.84	101.17
	Imports	0.12	0.18	1.01	1.36	0.56	2.80	0.65
	Export	25.57	24.04	27.45	29.74	27.93	31.65	30.58
	Availability	69.34	75.16	76.67	80.09	83.86	82.98	71.24
Fuel Oils	Production	11.92	9.73	9.96	9.49	10.03	8.61	7.24
	Imports	0.90	1.17	0.92	1.21	1.42	4.58	6.45
	Export	4.76	2.81	2.25	2.53	2.20	1.53	1.18
	Availability	8.06	8.09	8.64	8.17	9.26	11.66	12.52
Lube Oils	Production	0.95	1.04	1.03	1.04	0.95	0.93	1.07
	Imports	2.15	2.26	2.13	2.54	2.46	2.67	2.69
	Export	0.01	0.02	0.01	0.01	0.01	0.01	0.01
	Availability	3.08	3.28	3.15	3.56	3.40	3.60	3.75
Bitumen	Production	4.63	5.16	5.19	5.28	5.80	5.24	5.25
	Imports	0.52	0.88	0.95	0.95	0.88	1.63	2.05
	Export	0.09	0.10	0.04	0.06	0.02	0.03	0.01
	Availability	5.05	5.94	6.10	6.16	6.66	6.85	7.29
Petroleum Coke	Production	12.45	13.32	13.94	14.75	14.68	15.53	12.66
	Imports	6.16	10.04	14.42	12.78	7.93	10.67	8.26
	Export	0.61	0.84	0.67	0.56	1.12	0.47	0.58
	Availability	18.00	22.52	27.68	26.97	21.48	25.74	20.33
Others	Production	18.19	20.62	22.59	26.21	29.50	30.22	61.59
	Imports	1.56	1.69	2.17	2.56	3.87	2.75	4.11
	Export	4.04	2.91	3.34	3.39	2.14	2.85	2.29
	Availability	15.70	19.40	21.41	25.38	31.23	30.11	63.42
Total Petroleum Products	Production	221.14	231.92	243.55	254.40	262.36	262.94	233.51
	Imports	21.30	29.46	36.29	35.46	33.35	43.79	43.25
	Export	63.93	60.54	65.51	66.83	61.10	65.69	56.77
	Availability	178.50	200.84	214.32	223.03	234.61	241.04	219.99

Note : Total may not tally due to rounding off. P : Provisional

Source : Oil Companies & Petroleum Planning & Analysis Cell.

CHAPTER-X

FINANCE

CPSEs: Key Financials Indicators

CHAPTER HIGHLIGHTS

Total budgeted Internal and Extra Budgetary Resources (IEBR) for CPSE's under the Ministry of Petroleum and Natural gas in 2021-22 (₹ 1,04,620 crore) was 6.2% higher over 2020-21 (₹ 98,522 crore).

Actual expenditure of IEBR during 2020-21 (₹ 1,11,194 crore) is 5.14% higher than actual expenditure in 2019-20 (₹ 1,05,603 crore) and 112.7% of BE 2020-21 (₹ 98,522 crore).

Capital expenditure (CAPEX) for the FY 2020-21 is ₹ 1,11,922 crore i.e. 112.8% of the total BE ₹ 99,250 crore and 4.4% higher of actual CAPEX of FY 2019-20.

Total dividend paid to the Central Government by the Oil & Gas CPSEs is ₹ 10,393 crore for the year 2020-21. IOCL (₹ 5,091 crore) followed by BPCL (₹ 2,413 crore) and ONGC (₹ 1,330 crore), are the top three contributor for the year 2020-21.

The dividend paid (payment-basis) by Oil & gas CPSEs under the Ministry of Petroleum and Natural Gas, for the year 2020-21 (₹ 22,738 crore) is 11.5% lower than the dividend paid in 2019-20 (₹ 25,685 crore).

Total profit earned after tax by the Oil & Gas for the year 2020-21 (₹ 74,718 crore) is 177.3% higher than the profit earned after tax in 2019-20 (₹ 26,941 crore). IOCL (₹ 21,836 crore) followed by BPCL (₹ 19,042 crore) and ONGC (₹ 11,246 crore), are the top three earner for the year 2020-21.

X. 1 : Budget Outlay & Actual Expenditure of CPSEs

(Value in ₹ crore)

CPSEs	2016-17	2017-18	2018-19	2019-20	2020-21			2021-22
	Actual	Actual	Actual	Actual	BE	Actual	% Achievement over BE	BE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CPSE-wise Internal & Extra Budget Resources								
Oil & Natural Gas Co. Ltd.	28,006	72,902	29,450	29,538	32,502	26,859	82.64	29,800
ONGC Vides Ltd.	17,617	6,798	5,827	5,435	7,235	5,734	79.25	8,380
Oil India Ltd.	11,083	8,154	3,181	4,247	3,877	13,332	343.87	4,108
Gail Authority India Ltd.	1,814	3,680	7,143	4,562	5,412	6,253	115.55	5,861
Indian Oil Corporation Ltd.	20,737	21,457	28,208	31,421	26,233	28,684	109.34	28,547
Bharat Petroleum Corporation Limited	16,949	8,998	10,993	11,064	9,000	11,064	122.94	10,000
Hindustan Petroleum Corporation Ltd.	5,757	7,210	12,438	16,311	11,500	14,700	127.83	14,500
Mangalore Refinery & Petrochemicals Ltd	616	1,281	1,072	1,318	1,150	2,179	189.47	850
Chennai Petroleum Corporation Ltd.	1,269	1,020	1,314	961	569	583	102.48	384
Numaligarh Refinery Ltd.	503	420	465	529	949	1,029	108.43	2,000
Balmer Lawrie & Co. Ltd.	74	83	132	46	35	43	122.69	40
Engineers India Ltd.	*	*	87	171	60	733	1221.23	150
Total (I&EBR)	**1,04,426**	**1,32,004**	**1,00,309**	**1,05,603**	**98,522**	**1,11,194**	**112.86**	**1,04,620**
Sector-wise Internal & Extra Budget Resources								
Exploration & Production Sector	72,383	95,455	49,613	44,769	52,019	52,994	101.88	49,186
Refining & Marketing Sector	30,524	32,794	46,990	56,668	41,654	52,663	123.51	49,804
Petro-Chemicals Sector	1,446	3,672	3,487	3,949	4,754	4,762	125.75	5,441
Engineering Sector	74	83	219	217	95	776	816.51	190
Total (I & EBR)	**1,04,426**	**1,32,004**	**1,00,309**	**1,05,603**	**98,522**	**1,11,194**	**112.86**	**1,04,620**
Gross Budgetary Support (GBS) for Jagdishpur-Haldia & Bokaro-Dhamra Pipeline.	450	400	1,207	1,552	728	728	100.00	250
Total CAPEX**	**1,04,876**	**1,32,404**	**1,01,515**	**1,07,155**	**99,250**	**1,11,922**	**112.77**	**1,04,870**
Total OPEX	**91,733**	**93,058**	**1,18,436**	**1,13,669**	**1,29,736**	**1,03,750**	**79.97**	**1,23,598**

Note : ** Operating expenses includes all revenue expenses (excluding Depreciation & Finance cost etc.)

1. GAIL : Excluding VGF Grant for Phulpur Haldia Pipeline Project (Rs. 728.03 cr) in FY 2020-21 and Planned Rs 250 cr in FY 2021-22.
2. OIL : Investment in NRL amounting to Rs. 8,677.27 Crore in FY 2020-21.
3. EIL : Investment in NRL amounting to Rs. 700 Crore in FY 2020-21.
4. Includes BPCL's equity investments in JV / Subsidiaries including BPRL. Capex and investments of BPRL is being reported separately by BPRL.

* For the purpose of reporting IEBR, EIL was introduced first time w.e.f 2018-19.

Source : Central Public Sector Enterprises/Budget Documents and IFD, MoPNG

X. 2 : Financial performance of CPSEs under the Ministry of Petroleum and Natural Gas : 2020-21

Performance Parameters	Unit	ONGC	OVL	OIL	GAIL	IOCL	BPCL	HPCL	MRPL	CPCL	NRL	Balmer Lawrie	EIL
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Cash and Bank Balance at year end	₹ crore	303	5,919	1,067	1,214	1,668	7,053	237	52	5	22	532	1,259
Revenue from Operations (Net)	₹ crore	68,141	12,666	8,618	56,730	5,14,890	2,32,545	2,32,997	32,182	41,899	13,747	1,522	3,105
Authorised Capital	₹ crore	15,000	25,000	2,000	5,000	15,000	2,635	2,500	3,000	400	5,000	300	400
Paid up Capital	₹ crore	6,290	15,000	1,084	4,440	9,181	2,093	1,452	1,753	149	736	171	281
Govt. equity in the CPSE	**%**	**60.41**	**0.00**	**56.66**	**51.45**	**51.50**	**52.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**51.32**
Gross Turnover	₹ crore	68,141	12,931	8,618	56,529	5,20,750	3,00,830	2,69,243	51,019	41,814	18,544	1,593	3,105
Profit After Tax	₹ crore	11,246	1,891	1,742	4,890	21,836	19,042	10,664	-240	238	3,036	116	259
Debt equity ratio	Ratio	0.07	0.79	0.64	0.14	0.93	0.48	0.70	1.43	6.43	0.00	0.00	0.00
Reserves & Surpluses	₹ crore	1,98,268	35,306	26,211	39,043	1,01,319	52,452	34,734	5,776	1,276	4,860	1,137	1,420
Net worth	**₹ crore**	**2,04,559**	**50,306**	**24,500**	**43,379**	**1,00,064**	**54,545**	**36,186**	**0**	**1,425**	**5,596**	**1,308**	**1,701**
Dividend Payable (Accrual)	₹ crore	4,529	600	542	2,238	11,017	17,137	3,227	0	0	2,759	100	112
Dividend as a %age of Equity	%	72.00	4.00	50.00	50.00	0.10	31.42	227.50	0.00	0.00	375.00	60.00	40.00
Dividend as a %age of PAT	%	40.27	31.73	31.13	45.76	0.50	90.00	30.26	0.00	0.00	90.86	88.00	43.32
EPS	₹	8.94	12.61	16.06	10.85	23.78	96.44	70.57	-1.37	15.95	41.27	6.81	4.16
Payout Ratio	%	40.27	31.73	31.13	45.76	50.45	90.00	30.26	0.00	0.00	90.86	87.00	48.08
Long Term Borrowings	**₹ crore**	**6,328**	**32,519**	**11,418**	**5,252**	**61,155**	**22,082**	**25,190**	**10,788**	**3,516**	**0**	**293**	**0**
Short Term Borrowings	₹ crore	8,695	0	4,300	739	41,173	4,233	14,819	5,437	5,651	0	0	0

Note :

GAIL : Cash and Bank Balance at year end excludes Earmarked Balances. Long term borrowing includes Current maturities

BPCL : Paid Up share capital has been adjusted for shares issued to BPCL trust for Investment in shares & BPCL ESPS Trust. Long term borrowings include current maturities of Long term borrowings and excludes Lease liabilities as per Ind AS 116. Net worth refers to Total Equity"

HPCL : On January 31, 2018, based on the Share Purchase agreement (SPA) entered into between Government of India and Oil and Natural Gas Corporation Limited, 51.11% Equity Shares in the Paid up Capital of Hindustan Petroleum Corporation Limited (HPCL) have been acquired by Oil and Natural Gas Corporation Limited.

MRPL : Long terms borrowings includes other financial liabilities (Rs. 865.90 crore for the year 2020-21) also

CPCL : Revenue from Operations (Net) represents amount net of discounts

NRL : There is no direct holding by Govt. of India in Numaligarh Refinery Limited. As on 31.03.2021, % of share holding by NRL's promoters were as: OIL - 80.16%; Govt. of Assam - 15.47% and EIL - 4.37%

Balmer Lawrie : There is no direct holding by Govt. of India in Balmer Lawrie & Co. Ltd. Balmer Lawrie Investments Ltd., a Government Company holds 61.8% of shares in Balmer Lawrie. Central Govt. holds 59.67% in Balmer Lawrie Investments Ltd.

EIL : Cash & Bank Balance Includes Advances received from Clients, Amount held on behalf of Client, Income receive in advance, Unpaid Dividend.

Source : Central Public Sector Enterprises

X. 3 : Dividend Paid (Payment-Basis) by CPSEs under the Ministry of Petroleum and Natural Gas

(Value in ₹ crore)

Name of CPSE	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Oil & Natural Gas Corp. Ltd.	**7914**	**4919**	**9518**	**7764**	**9595**	**7234**	**2202**
Dividend to Central Government of India	5456	3391	6544	5275	6290	4394	1330
Dividend to other Stakeholder	2458	1528	2974	2489	3305	2840	872
ONGC Videsh Ltd.	**0**	**0**	**0**	**210**	**300**	**510**	**300**
Dividend to other Stakeholder	0	0	0	210	300	510	300
Oil India Ltd.	**631**	**1,082**	**1,242**	**1,419**	**1,078**	**1,166**	**553**
Dividend to Central Government of India	427	732	835	938	685	666	313
Dividend to other Stakeholder	204	350	408	480	393	500	240
GAIL India Ltd.	**1129**	**698**	**1459**	**1750**	**1734**	**3286**	**2238**
Dividend to Central Government of India	633	391	804	942	920	1702	1155
Dividend to other Stakeholder	496	306	655	809	814	1583	1083
Indian Oil Corp. Ltd.	**2112**	**2938**	**10804**	**9712**	**9910**	**4843**	**8340**
Dividend to Central Government of India	1449	1721	6231	5535	5383	2545	5091
Dividend to State Government	2	3	12	11	11	6	8
Dividend to other Stakeholder	661	1214	4561	4166	4516	2292	3242
Bharat Petroleum Corp. Ltd.	**1,229**	**2,784**	**5,640**	**3,182**	**3,905**	**5,315**	**4,555**
Dividend to Central Government of India	675	1,529	3,098	1,729	2,091	2,821	2,413
Dividend to State Government	11	24	49	27	34	46	39
Dividend to other Stakeholder	543	1,231	2,493	1,425	1,780	2,448	2,103
Hindustan Petroleum Corp. Ltd.	**525**	**1456**	**3478**	**2321**	**1371**	**1432**	**1486**
Dividend to Central Government of India	268	744	1778	57	0	0	0
Dividend to other Stakeholder	257	712	1700	2264	1371	1432	1486
Mangalore Refinery & Petrochemicals Ltd.	**0**	**0**	**0**	**1,052**	**526**	**175**	**0**
Dividend to other Stakeholder	0	0	0	1,052	526	175	0
Chennai Petroleum Corp. Ltd.	**0**	**0**	**60**	**313**	**275**	**0**	**0**
Dividend to Central Government of India	0	0	0	0	0	0	
Dividend to other Stakeholder	0	0	60	313	275	0	0
Numaligarh Refinery Ltd.	**118**	**552**	**993**	**1,810**	**1,214**	**1,324**	**2,759**
Dividend to State Government	15	68	123	223	150	163	341
Dividend to other Stakeholder	103	484	870	1,586	1,064	1,161	2,418
Balmer Lawrie Ltd.	**51**	**51**	**57**	**80**	**114**	**125**	**128**
Dividend to other Stakeholder	51	51	57	80	114	125	128
Engineers India Ltd.	**202**	**135**	**236**	**190**	**300**	**275**	**177**
Dividend to Central Government of India	140	87	136	99	156	142	91
Dividend to other Stakeholder	62	48	100	90	144	133	86
Total Dividend Paid	**13,912**	**14,614**	**33,487**	**29,801**	**30,323**	**25,685**	**22,738**
on which							
Dividend to Central Government of India	9,049	8,595	19,425	14,576	15,525	12,270	10,393
Dividend to State Government	27	95	183	262	195	215	388
Dividend to other Stakeholder	4,836	5,924	13,878	14,964	14,603	13,200	11,957
Tax on Dividend	**2,605**	**2,891**	**6,682**	**5,369**	**5,781**	**4,665**	**0**
Total Dividend Paid incl. Dividend on Tax	**16,517**	**17,505**	**40,169**	**35,170**	**36,103**	**30,350**	**22,738**

Note :

1. Total may not tally due to round-off
2. Dividend paid excludes Dividend Distribution Tax.

Source : Central Public Sector Enterprises

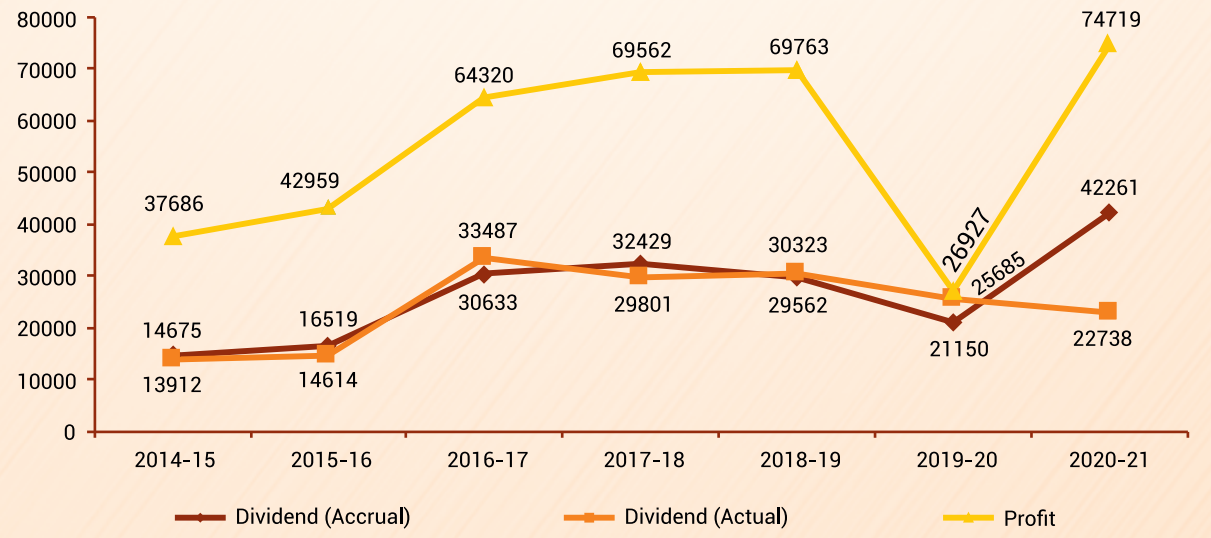
X. 4 : Dividend Payable (Accrual-Basis) by CPSEs under the Ministry of Petroleum and Natural Gas

(Value in ₹ crore)

Name of CPSE	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Oil & Natural Gas Corp. Ltd.	8,128	7,272	7,764	8,470	8,806	6,290	4,529
ONGC Videsh Ltd.	-	-	210	300	510	300	600
Oil India Ltd.	1,202	962	1,121	1,173	1,155	1,149	542
GAIL India Ltd.	761	698	1,535	1,619	1,809	2,886	2,238
Indian Oil Corp. Ltd.	1,602	3,399	9,226	11,169	8,909	3,902	11,017
Bharat Petroleum Corp. Ltd.	1,627	2,242	4,700	4,555	4,122	3,579	17,137
Hindustan Petroleum Corp. Ltd.	830	1,168	3,048	2,590	2,423	1,486	3,227
Mangalore Refinery & Petrochemicals Ltd.	0	0	1,052	526	175	0	0
Chennai Petroleum Corp. Ltd.	0	60	313	275	0	0	0
Numaligarh Refinery Ltd.	294	515	1,368	1,361	1,251	1,103	2,759
Balmer Lawrie Ltd.	62	69	97	138	151	128	100
Engineers India Ltd.	168	135	200	253	253	325	112
Total	**14,675**	**16,519**	**30,633**	**32,429**	**29,562**	**21,150**	**42,261**

Source : Central Public Sector Enterprises

Figure X. 1 : Dividend and Profit

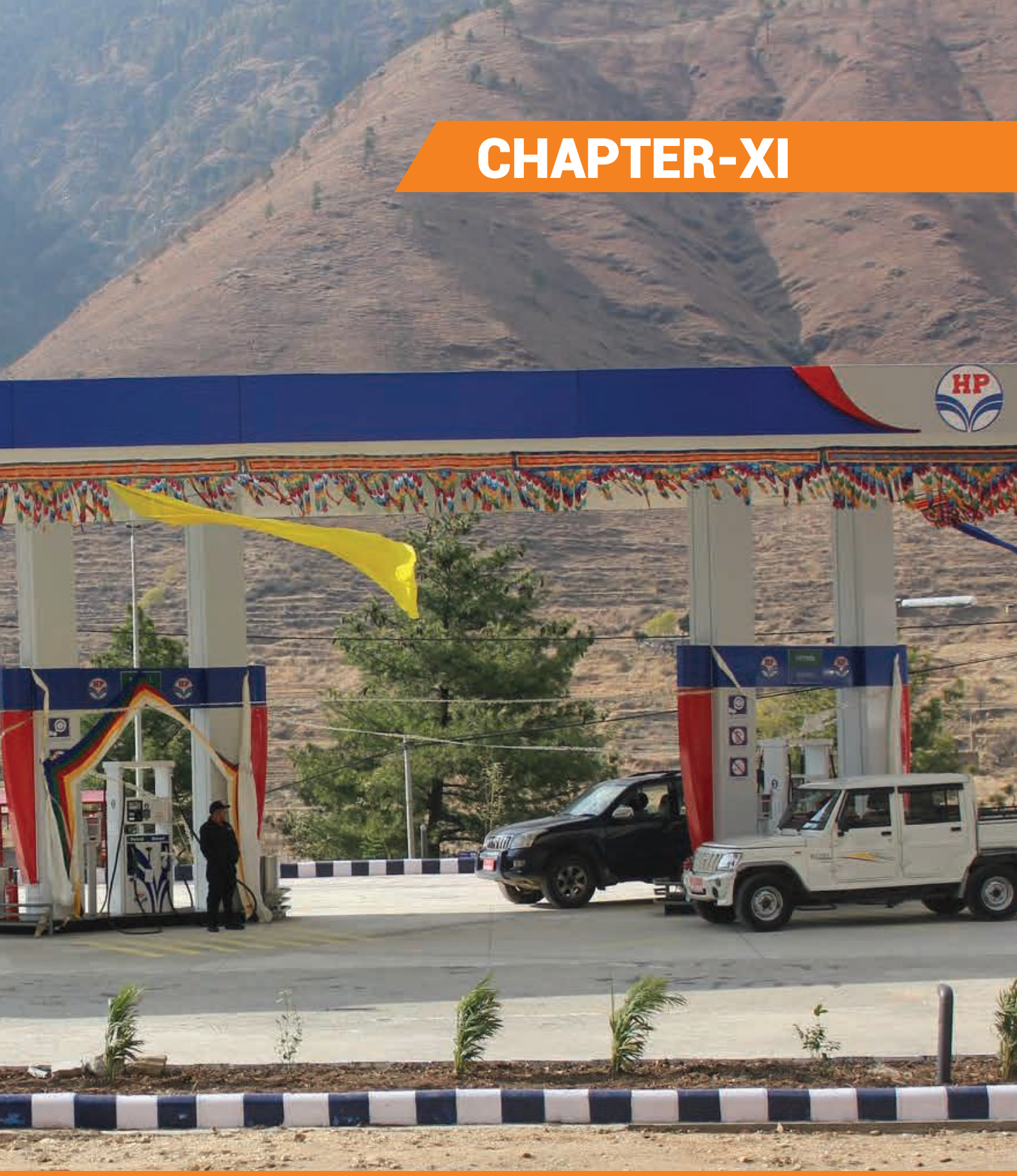


X. 5 : Profit Earned After Tax by CPSEs under the Ministry of Petroleum and Natural Gas

(Value in ₹ crore)

Name of CPSEs	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Oil & Natural Gas Corporation Ltd.	17,733	16,140	17,900	19,945	26,765	13,464	11,246
ONGC (Videsh) Ltd.	1,904	-3,633	757	981	1,682	454	1,891
Oil India Ltd.	2,510	2,302	1,549	2,668	2,590	2,584	1,742
GAIL (India) Ltd.	3,039	2,226	3,503	4,618	6,026	6,621	4,890
Indian Oil Corporation Ltd.	5,273	11,242	19,106	21,346	16,894	1,313	21,836
Bharat Petroleum Corporation Ltd.	5,085	7,432	8,039	7,919	7,132	2,683	19,042
Hindustan Petroleum Corporation Ltd.	2,733	3,726	6,209	6,357	6,029	2,637	10,664
Mangalore Refinery & Petrochemicals Ltd.	-1,712	1,148	3,644	2,224	332	-2,740	-240
Chennai Petroleum Corporation Ltd.	-39	742	1,030	913	-213	-2,078	238
Numaligarh Refineries Ltd.	718	1,210	2,101	2,045	1,968	1,381	3,036
Balmer Lawrie Ltd.	147	164	170	185	189	177	116
Engineers India Ltd.	308	276	325	378	370	430	259
Total	**37,686**	**42,959**	**64,320**	**69,562**	**69,763**	**26,927**	**74,719**

CHAPTER-XI



International Petroleum Statistics

CHAPTER HIGHLIGHTS

In 2020, World's Proven Crude Oil reserves accounted for 1732.4 Thousand million barrels. Middle East with reserves of 835.9 Thousand Million Barrels contributed for the highest share (48%), followed by Central & South America (19%). Noticeably, Asia Pacific region constituted a share of mere 3% of the total basket. India stood at 22nd position in Crude Oil reserves during 2020.

In 2020, World's Proven Natural gas reserves accounted for 188.1 Trillion cubic meters. Considering all regions, Middle East with reserves of 75.8 Trillion cubic meters stood with the highest share (40%). India stood at 21st position in Gas reserves during 2020.

In 2020, World Production of Crude Oil accounted for 88391 Thousand barrels daily (b/d), which is lower by 7% than the Crude Oil production in 2019 (94961 Thousand b/d). Also, United States is the one with the highest share in crude oil production with 16476 thousand b/d (19%) of total World oil production, followed by Saudi Arabia (13%) and Russia (12%). India stood at 21st position in Oil production during 2020.

In 2020, World Natural gas production accounted for 3853.7 BCM which is lower by 3% than the production of in 2019 (3976.2 BCM). United States is leading with the highest share in natural gas production with 914.6 BCM i.e. 24% of total World gas production, followed by Russia (17%) and Iran (7%). India stood at 29th position in Gas production during 2020.

In 2020, World Output of Petroleum Products accounted for 85658 thousand b/d which is 10% lower than the output during 2019 (94644 thousand b/d). Also United States is leading with the highest share in output of petroleum products with 17492 thousand b/d i.e. 20% of total World output of petroleum products, followed by China (15%) and Russia (7%). India stood at 4th position in output of petroleum products during 2020.

In 2020, World Consumption of Crude Oil accounted for 88477 thousand b/d which is 9% lower than Crude Oil consumption in 2019 (97598 thousand b/d). Also, United States is the one with highest share in crude oil consumption with 17178 thousand b/d i.e. 19% of total World oil consumption, followed by China (16%) and India (5%).

In 2020, World Natural Gas Consumption accounted for 3823 BCM which is 2% lower than the 2019 (3904 BCM). Also, United States is leading in natural gas consumption with share of 22% (832 BCM) of total world natural gas consumption followed by Russia (11%) and China (9%). India stood at 13th position in natural gas consumption during 2020.

In 2020, World Oil Refining capacity accounted for 101947 thousand b/d, thus, registering a growth of over 0.2% vis-à-vis 2019 (101748 thousand b/d). Also, India with refining capacity of 5018 thousand b/d constituted for 5% in total World refining capacity and stood at 4th position during 2020.

In 2020, World imports of Crude Oil accounted for 42900 thousand b/d which is 8% lower than the 2019 (46745 thousand b/d). Among all countries, China has the highest share of 25% (10853 thousand b/d) followed by United States (14%) and India (9%).

In 2020, OPEC Countries accounted for 19701 thousand b/d contributing 47% in World crude oil export (41988 thousand b/d). Among all countries, Saudi Arabia is leading with 16% (6659 thousand b/d) followed by Russia (11%) and Iraq (8%).

In 2020, Russia is the highest exporter of Natural Gas with share of 16% in total World export of Natural Gas (1244 BCM).

In 2020, Germany is leader among all Countries in import of Natural Gas with 13% of total World import of Natural Gas (1244 BCM). India is stood at 12th position in imports of natural gas during 2020.

In 2020, Singapore is the highest importer of petroleum products with share of 8% in total World imports of petroleum products (25870 thousand b/d). India stood at 5th and 7th position in imports and exports of petroleum products respectively during 2020.

In 2020, the World primary energy consumption, which were increasing since 2014 to 2019, marked a decline of 4% for the first time in 2020. China has the highest share of 26% (145 Exajoules) in Global Primary energy consumption among all countries.

India with consumption of 32 Exajoules (6%) stood as the third largest consumer of Primary Energy. Coal accounted for the highest consumption share (55%) in the India primary energy consumption followed by Crude Oil (28%), Natural Gas (7%), Hydroelectricity (5%), Renewables (5%) and Nuclear Energy (1%).

XI. 1 : World Energy Outlook-2020

Total Primary Energy Consumption (Exajoules)		Refining Capacity (Thousand barrels daily)	
World	**557**	**World**	**101947**
India (Rank 3)	**32**	**India (Rank 4)**	**5018**
Top Five Countries		**Top Five Countries**	
China	**145**	**United States of America**	**18143**
United States of America	88	China	16691
India	32	Russian Federation	6736
Russian Federation	28	India	5018
Japan	17	South Korea	3572
Production - Oil (Thousand barrels daily)		**Consumption- Oil (Thousand barrels daily)**	
World	**88391**	**World**	**88477**
India (Rank 21)	**771**	**India (Rank 3)**	**4669**
Top Five Countries		**Top Five Countries**	
United States of America	16476	United States of America	17178
Saudi Arabia	11039	China	14225
Russian Federation	10667	India	4669
Canada	5135	Saudi Arabia	3544
Iraq	4114	Japan	3268
Production - Natural Gas (BCM)		**Consumption- Natural Gas (BCM)**	
World	**3854**	**World**	**3823**
India (Rank 29)	**24**	**India (Rank 13)**	**60**
Top Five Countries		**Top Five Countries**	
United States of America	915	United States of America	832
Russian Federation	638	Russian Federation	411
Iran	251	China	331
China	194	Iran	233
Qatar	171	Canada	113
Crude Oil Imports (Thousand barrels daily)		**Crude Oil Exports (Thousand barrels daily)**	
World	**42900**	**World**	**41988**
India (Rank 3)	**4033**	**India**	**0**
Top Five Countries		**Top Five Countries**	
China	10853	Saudi Arabia	6659
United States of America	5877	Russia	4654
India	4033	Iraq	3428
South Korea	2660	United States of America	3175
Japan	2472	Canada	3038
Petroleum Product Imports (Thousand barrels daily)		**Petroleum Product Exports (Thousand barrels daily)**	
World	**25870**	**World**	**27841**
India (Rank 5)	**1051**	**India (Rank 7)**	**1216**
Top Five Countries		**Top Five Countries**	
United States of America	2088	United States of America	5333
Singapore	1981	Russia	2419
Netherlands	1556	Netherlands	1918
China	1318	Singapore	1440
Mexico	1051	China	1324
Natural Gas Imports (BCM)		**Natural Gas Exports (BCM)**	
World	**1244**	**World**	**1244**
India (Rank 12)	**34**	**India**	**0**
Top Five Countries		**Top Five Countries**	
Germany	156	Russia	200
China	138	United States of America	150
Japan	107	Qatar	144
United States of America	72	Norway	113
Italy	66	Australia	103

Note : Detail country-wise XI.5, XI.6, XI.8 to XI.10, XI.12 to XI.17 & XI.22.

Source : BP Statistical Review of World Energy, June 2021 and OPEC Annual Statistical Bulletins, 2021

XI. 2 : Economic Indicators of OPEC Nations' during 2020

Country	Export of Crude Oil	Export of Natural Gas	Exports of Petroleum Products	Imports of Petroleum Products	Value of Petroleum Exports	Value of Total Export	Petroleum Exports as % of total Exports	Proven Crude Oil Reserves	Gas Reserves	Crude Oil Production	Natural Gas Marketed Production	Production of Petroleum Products	Refinery Throughput	Crude Refining Capacity	Oil Demand
	(000' b/d)	BCM	(000' b/d)	(000' b/d)	(Million $)	(Million $)		(Million Barrels)	(BCM)	(000' b/d)	BCM	(000' b/d)	(000' b/d)	(000' b/d)	(000' b/d)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Algeria	439	39	503	36	13169	21092	62.4	12200	4504	899	85.1	615	639	677	383
Angola	1220	1	16	134	18704	20696	90.4	7231	301	1272	11.3	44	47	80	99
Congo	282	0	4	0	3687	5376	68.6	1811	284	300	0.4	16	17	21	7
Equatorial Guinea	115	4	0	4	1765	2856	61.8	1100	39	114	6.0	na	na	na	5
Gabon	196	0	9	7	2875	5613	51.2	2000	26	207	0.5	16	17	25	45
Iran	405	13	281	92	7656	40237	19.0	208600	34077	1985	253.8	1577	1587	2201	1692
Iraq	3428	0	151	77	44287	46811	94.6	145019	3714	3997	7.4	587	543	829	550
Kuwait	1826	0	527	15	35231	46863	75.2	101500	1784	2438	12.9	780	572	800	461
Libya	347	4	66	147	5711	6883	83.0	48363	1505	389	17.7	80	86	634	183
Nigeria	1879	36	0	466	27730	37984	73.0	36910	5750	1493	49.9	1	1	461	466
Saudi Arabia	6659	0	1017	353	119359	173864	68.7	261600	8438	9213	119.0	2177	2173	2927	3037
U.A.E	2418	9	840	120	32943	335238	9.8	107000	7726	2779	55.1	925	936	1272	828
Venezuela	487	0	70	69	7960	8236	96.6	303561	5590	569	18.0	339	345	2276	300
Total OPEC	**19701**	**105**	**3483**	**1519**	**321078**	**751748**	**42.7**	**1236895**	**73737**	**25654**	**637.1**	**7157**	**6962**	**12202**	**8055**

Note :

1. Totals may not add up due to independent rounding.

2. Crude oil exports may include lease condensate and volume of oil in transit.

Source : OPEC Annual Statistical Bulletin, 2021

XI. 3 : World Proven Oil Reserves (Country-wise)

(Figures in Thousand million barrels)

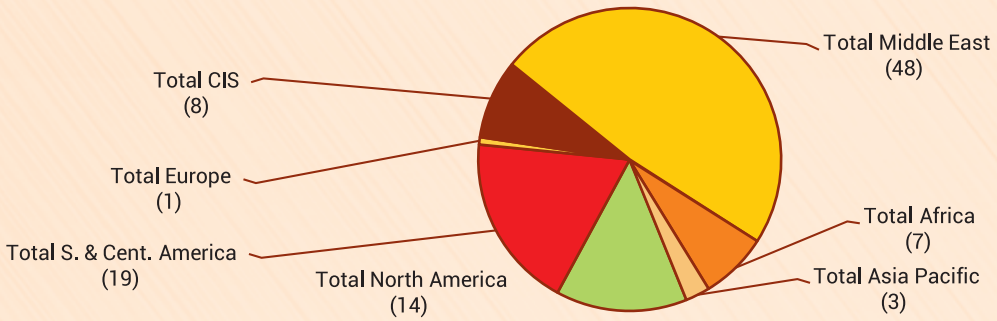
S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Venezuela	299.95	300.88	302.25	302.81	303.81	303.81	303.81	17.5
2	Saudi Arabia	266.58	266.46	266.21	295.96	297.67	297.58	297.53	17.2
3	Canada	172.16	171.51	170.53	171.79	170.73	169.12	168.09	9.7
4	Iran	157.53	158.40	157.20	155.60	155.60	157.80	157.80	9.1
5	Iraq	143.07	142.50	148.77	147.22	145.02	145.02	145.02	8.4
6	Russian Federation	103.16	102.38	106.28	106.59	107.22	107.80	107.80	6.2
7	Kuwait	101.50	101.50	101.50	101.50	101.50	101.50	101.50	5.9
8	United Arab Emirates	97.80	97.80	97.80	97.80	97.80	97.80	97.80	5.6
9	US	54.96	47.99	49.97	61.23	68.89	68.76	68.76	4.0
10	Libya	48.36	48.36	48.36	48.36	48.36	48.36	48.36	2.8
11	Nigeria	37.45	37.06	37.45	37.45	36.97	36.89	36.89	2.1
12	Kazakhstan	30.00	30.00	30.00	30.00	30.00	30.00	30.00	1.7
13	China	25.17	25.63	25.66	25.95	26.19	25.96	25.96	1.5
14	Qatar	25.71	25.24	25.24	25.24	25.24	25.24	25.24	1.5
15	Algeria	12.20	12.20	12.20	12.20	12.20	12.20	12.20	0.7
16	Brazil	16.18	13.00	12.63	12.79	13.44	12.71	11.93	0.7
17	Norway	6.54	8.01	7.60	7.92	8.64	8.52	7.90	0.5
18	Angola	8.42	9.52	9.52	8.38	8.16	7.78	7.78	0.4
19	Azerbaijan	7.00	7.00	7.00	7.00	7.00	7.00	7.00	0.4
20	Mexico	9.81	9.71	7.64	7.04	6.46	6.07	6.07	0.4
21	Oman	5.15	5.31	5.37	5.37	5.37	5.37	5.37	0.3
22	**India**	**5.74**	**4.79**	**4.68**	**4.55**	**4.48**	**4.66**	**4.54**	**0.3**
23	Vietnam	4.40	4.40	4.40	4.40	4.40	4.40	4.40	0.3
24	South Sudan	3.50	3.50	3.50	3.50	3.50	3.50	3.50	0.2
25	Egypt	3.68	3.47	3.38	3.33	3.20	3.15	3.15	0.2
26	Yemen	3.00	3.00	3.00	3.00	3.00	3.00	3.00	0.2
27	Republic of Congo	2.87	2.98	2.98	2.98	2.98	2.88	2.88	0.2
28	Malaysia	3.60	3.02	2.84	2.73	2.73	2.73	2.73	0.2
29	United Kingdom	2.81	2.54	2.31	2.50	2.70	2.50	2.50	0.1
30	Syria	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.1
Rest of World		33.64	33.25	31.49	30.46	30.37	30.18	30.35	1.8
Total World		**1694.44**	**1683.90**	**1690.28**	**1728.17**	**1736.14**	**1734.81**	**1732.37**	**100.0**
of which : OECD		253.6	246.8	244.6	256.7	263.7	261.5	260.0	15.0
Non-OECD		1440.8	1437.1	1445.6	1471.5	1472.4	1473.3	1472.4	85.0
OPEC		1180.6	1182.6	1189.0	1215.0	1214.5	1216.0	1216.0	70.2
Non-OPEC		513.8	501.3	501.2	513.2	521.7	518.8	516.4	29.8
European Union		2.7	2.6	2.4	2.4	2.4	2.4	2.4	0.1

Notes : 1. Total may not add up due to rounding off. P : Provisional

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

Source : BP Statistical Review of World Energy, June 2021.

Figures XI. 1 : Region-wise Distribution of Proven Crude Oil reserves-2020 (%)



XI. 4 : World Proven Gas Reserves (Country-wise)

(Figures in Trillion cubic metres)

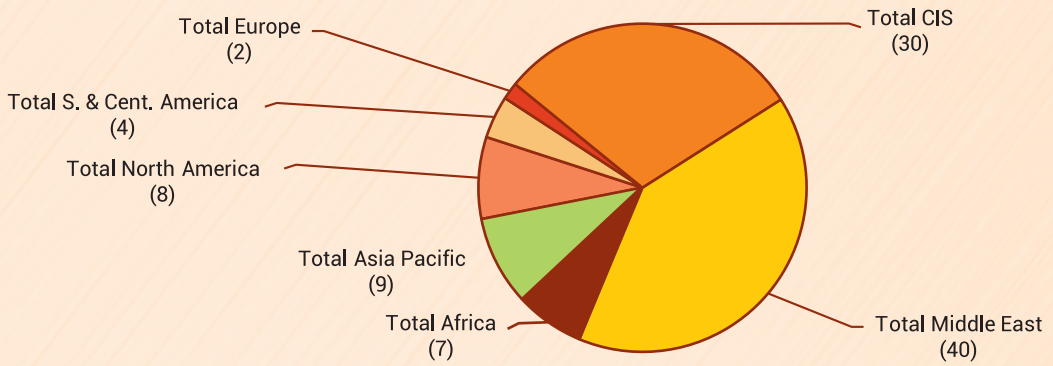
S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Russian Federation	35.05	34.96	34.83	37.89	37.64	37.56	37.39	19.9
2	Iran	32.13	31.64	31.85	31.93	32.02	32.10	32.10	17.1
3	Qatar	25.39	25.15	24.92	24.70	24.68	24.67	24.67	13.1
4	Turkmenistan	13.60	13.60	13.60	13.60	13.60	13.60	13.60	7.2
5	US	10.00	8.34	8.74	11.89	12.87	12.62	12.62	6.7
6	China	3.58	4.68	5.48	6.07	6.36	8.40	8.40	4.5
7	Venezuela	6.24	6.33	6.37	6.34	6.30	6.26	6.26	3.3
8	Saudi Arabia	7.91	8.01	8.04	5.65	5.89	5.98	6.02	3.2
9	United Arab Emirates	5.94	5.94	5.94	5.94	5.94	5.94	5.94	3.2
10	Nigeria	5.06	5.02	5.20	5.35	5.39	5.47	5.47	2.9
11	Iraq	3.00	3.00	3.63	3.56	3.54	3.53	3.53	1.9
12	Azerbaijan	1.34	1.32	1.32	1.32	2.09	2.50	2.50	1.3
13	Australia	2.39	2.39	2.39	2.39	2.39	2.39	2.39	1.3
14	Canada	1.89	2.07	2.00	1.98	1.91	1.99	2.35	1.3
15	Algeria	4.34	4.34	4.34	4.34	4.34	4.34	2.28	1.2
16	Kazakhstan	1.71	1.71	2.26	2.26	2.26	2.26	2.26	1.2
17	Egypt	2.10	2.01	2.14	2.14	2.14	2.14	2.14	1.1
18	Kuwait	1.69	1.69	1.69	1.69	1.69	1.69	1.69	0.9
19	Libya	1.43	1.43	1.43	1.43	1.43	1.43	1.43	0.8
20	Norway	1.91	1.84	1.75	1.72	1.61	1.53	1.43	0.8
21	**India**	**1.37**	**1.20**	**1.18**	**1.24**	**1.29**	**1.33**	**1.32**	**0.70**
22	Indonesia	2.88	2.82	2.91	2.88	2.76	1.43	1.25	0.7
23	Ukraine	1.14	1.07	1.05	1.03	1.09	1.09	1.09	0.6
24	Malaysia	1.11	1.00	0.95	0.91	0.91	0.91	0.91	0.5
25	Uzbekistan	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.4
26	Oman	0.66	0.66	0.66	0.66	0.67	0.67	0.67	0.4
27	Vietnam	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.3
28	Israel	0.18	0.17	0.17	0.46	0.41	0.57	0.59	0.3
29	Myanmar	0.52	0.51	0.49	0.47	0.46	0.45	0.43	0.2
30	Argentina	0.32	0.34	0.33	0.35	0.36	0.39	0.39	0.2
Rest of World		**6.79**	**6.46**	**6.41**	**6.16**	**5.51**	**5.55**	**5.47**	**2.9**
Total World		**183.16**	**181.19**	**183.54**	**187.83**	**189.05**	**190.27**	**188.07**	**100.0**
of which: OECD		18.11	16.46	16.50	19.85	20.17	20.01	20.28	10.8
Non-OECD		165.05	164.73	167.03	167.97	168.88	170.26	167.79	89.2
European Union		1.10	1.09	0.98	0.95	0.51	0.45	0.44	0.2

Notes : 1. Total may not add up due to rounding off. P : Provisional

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

Source : BP Statistical Review of World Energy, June 2021.

Figures XI. 2 : Region-wise Distribution of Proven Gas Reserves-2020 (%)



XI. 5 : World Crude Oil Production (Country-wise)

(Figures in Thousand barrels daily)

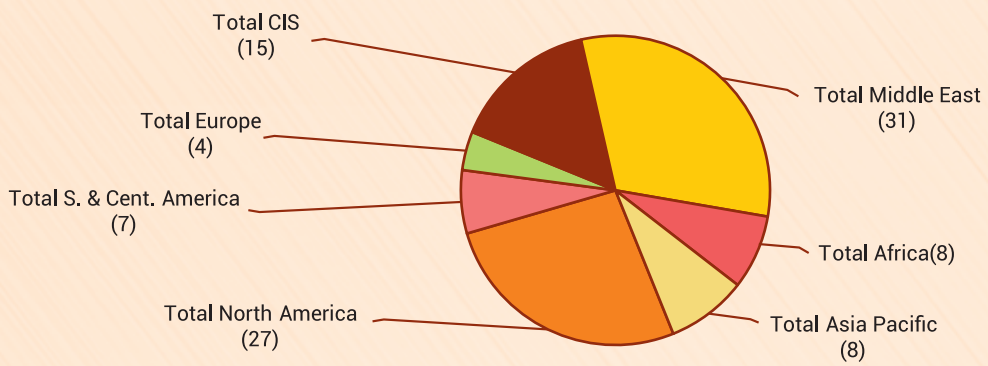
S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	US	11804	12789	12361	13154	15334	17072	16476	18.6
2	Saudi Arabia	11519	11998	12406	11892	12261	11832	11039	12.5
3	Russian Federation	10927	11087	11342	11374	11562	11679	10667	12.1
4	Canada	4271	4388	4464	4813	5244	5372	5135	5.8
5	Iraq	3239	3986	4423	4538	4632	4779	4114	4.7
6	China	4246	4309	3999	3846	3798	3836	3901	4.4
7	United Arab Emirates	3603	3898	4038	3910	3912	3999	3657	4.1
8	Iran	3714	3853	4578	4854	4608	3399	3084	3.5
9	Brazil	2341	2525	2591	2721	2679	2876	3026	3.4
10	Kuwait	3106	3069	3150	3009	3050	2976	2686	3.0
11	Norway	1886	1946	1997	1971	1851	1737	2001	2.3
12	Mexico	2784	2587	2456	2224	2068	1918	1910	2.2
13	Kazakhstan	1710	1695	1655	1838	1904	1919	1811	2.0
14	Qatar	1975	1933	1938	1882	1898	1863	1809	2.0
15	Nigeria	2276	2201	1900	1969	2007	2102	1798	2.0
16	Algeria	1589	1558	1577	1540	1511	1487	1332	1.5
17	Angola	1701	1796	1745	1671	1519	1420	1324	1.5
18	United Kingdom	854	964	1015	1005	1092	1118	1029	1.2
19	Oman	943	981	1004	971	978	971	951	1.1
20	Colombia	990	1006	886	854	865	886	781	0.9
21	**India**	**905**	**893**	**874**	**885**	**869**	**830**	**771**	**0.9**
22	Indonesia	847	838	876	838	808	781	743	0.8
23	Azerbaijan	861	851	838	793	796	775	716	0.8
24	Egypt	714	726	691	660	674	653	616	0.7
25	Argentina	638	646	610	590	591	620	600	0.7
26	Malaysia	649	696	726	718	718	663	596	0.7
27	Venezuela	2692	2631	2347	2096	1475	918	540	0.6
28	Ecuador	557	543	548	531	517	531	479	0.5
29	Australia	436	384	359	327	344	458	470	0.5
30	Thailand	464	481	489	486	472	471	418	0.5
Rest of World		**4593**	**4376**	**4108**	**4607**	**4814**	**5018**	**3913**	**4.4**
Total World		**88834**	**91632**	**91989**	**92568**	**94852**	**94961**	**88391**	**100**
of which: OECD		23600	24616	24019	24828	27258	28992	28216	31.9
Non-OECD		65235	67015	67969	67741	67593	65968	60175	68.1
OPEC		35262	36677	37799	37615	37357	35464	31116	35.2
Non-OPEC		53572	54955	54190	54953	57495	59497	57275	64.8
European Union		552	535	471	465	448	415	394	0.4

Notes : 1. Total may not add up due to rounding off. P : Provisional

2. Production includes crude oil, shale oil, oil sands, condensates (both lease condensate and gas plant condensate) and NGLs (natural gas liquids - ethane, LPG and naphtha separated from the production of natural gas).

Source : BP Statistical Review of World Energy, June 2021.

Figures XI. 3 : Region-wise Distribution of Crude Oil Production-2020 (%)



XI. 6 : World Natural Gas Production (Country-wise)

(Figures in Billion cubic metres)

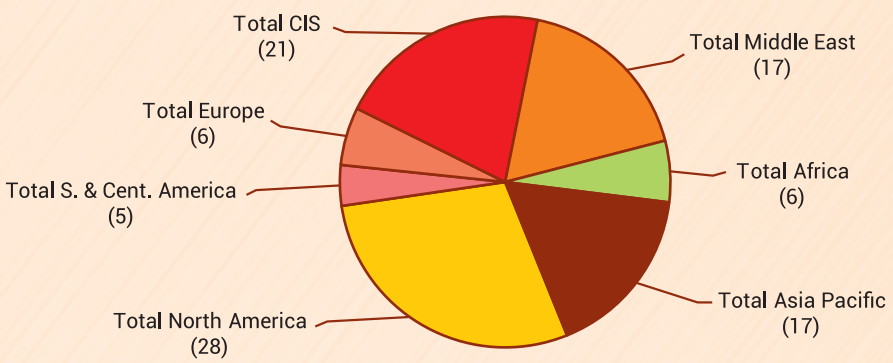
S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	US	704.73	740.30	727.36	746.17	840.94	929.99	914.62	23.7
2	Russian Federation	591.16	584.44	589.28	635.56	669.11	679.04	638.49	16.6
3	Iran	175.45	183.55	199.34	213.80	232.01	241.42	250.79	6.5
4	China	131.18	135.67	137.94	149.20	161.42	177.56	194.01	5.0
5	Qatar	169.43	175.76	174.55	170.47	169.07	172.10	171.32	4.4
6	Canada	158.99	160.76	171.98	173.90	176.78	168.99	165.19	4.3
7	Australia	64.93	74.10	94.00	110.12	126.02	143.15	142.52	3.7
8	Saudi Arabia	97.26	99.23	105.32	109.25	112.10	111.15	112.10	2.9
9	Norway	107.49	116.13	115.89	123.73	121.29	114.26	111.45	2.9
10	Algeria	80.17	81.41	91.39	92.98	93.84	86.95	81.46	2.1
11	Malaysia	72.17	76.85	76.70	78.47	77.23	79.26	73.19	1.9
12	Indonesia	76.40	76.16	75.08	72.70	72.80	67.58	63.15	1.6
13	Turkmenistan	63.50	65.87	63.22	58.68	61.52	63.16	58.96	1.5
14	Egypt	46.96	42.59	40.25	48.81	58.56	64.94	58.47	1.5
15	United Arab Emirates	52.89	58.60	59.52	59.50	58.03	58.03	55.43	1.4
16	Nigeria	39.98	47.57	42.64	47.21	48.27	49.28	49.43	1.3
17	Uzbekistan	56.30	53.61	53.12	53.40	57.16	57.29	47.07	1.2
18	United Kingdom	37.43	40.66	41.74	41.88	40.72	39.54	39.48	1.0
19	Argentina	34.49	35.49	37.28	37.15	39.43	41.62	38.29	1.0
20	Oman	29.35	30.75	31.48	32.32	36.33	36.69	36.93	1.0
21	Thailand	39.09	37.48	37.27	35.95	34.73	35.77	32.71	0.8
22	Kazakhstan	31.71	31.89	32.10	34.46	34.13	34.04	31.69	0.8
23	Pakistan	34.99	35.05	34.68	34.65	34.20	32.69	30.61	0.8
24	Mexico	51.30	47.95	43.65	38.27	35.19	31.29	30.07	0.8
25	Trinidad & Tobago	38.07	35.96	31.28	31.87	33.96	34.56	29.47	0.8
26	Azerbaijan	18.38	18.78	18.28	17.76	19.05	24.32	25.84	0.7
27	Bangladesh	23.02	25.85	26.45	26.59	26.58	25.28	24.71	0.6
28	Brazil	23.35	23.80	24.12	27.18	25.16	25.75	23.93	0.6
29	**India**	**29.36**	**28.14**	**26.58**	**27.69**	**27.49**	**26.91**	**23.76**	**0.62**
30	Netherlands	60.39	45.87	44.29	37.93	32.33	27.84	19.97	0.5
Rest of World		**297.99**	**301.39**	**305.30**	**308.56**	**297.43**	**295.75**	**278.54**	**7.2**
Total World		**3437.89**	**3511.66**	**3552.07**	**3676.21**	**3852.86**	**3976.21**	**3853.66**	**100.00**
of which: OECD		1242.1	1281.0	1296.7	1331.1	1430.9	1510.8	1478.5	38.4
Non-OECD		2195.8	2230.6	2255.4	2345.1	2422.0	2465.4	2375.2	61.6
European Union		99.9	84.3	82.3	76.8	68.8	61.1	47.8	1.2

Notes : 1. Total may not add up due to rounding off. P : Provisional

2. Excludes gas flared or recycled. Includes natural gas produced for Gas-to-Liquids transformation.

Source : BP Statistical Review of World Energy, June 2021.

Figures XI. 4 : Region-wise Distribution of Natural Gas Production-2020 (%)



XI.7: World Output of Petroleum Products (Country-wise)

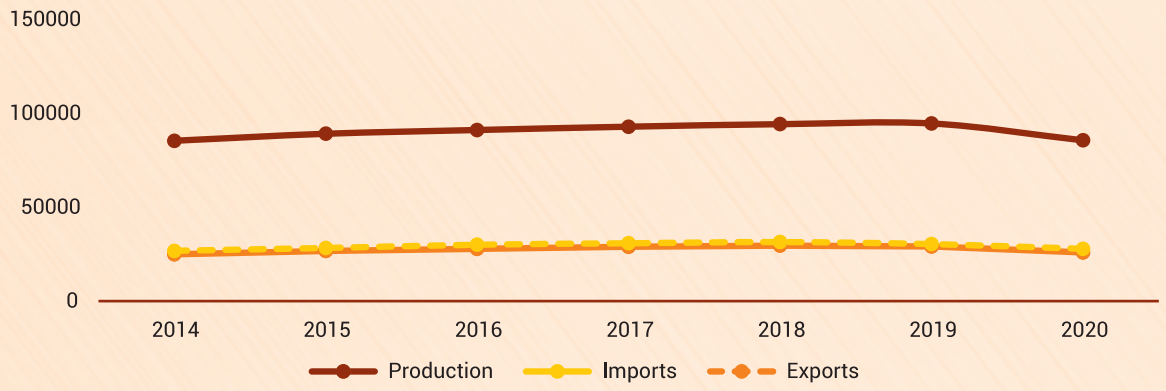
(Figures in Thousand barrels daily)

S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	United States	19654	19886	20079	20298	20693	20439	17492	20.4
2	China	9879	10175	10449	11059	11608	12501	12982	15.2
3	Russia	5904	5954	5976	6147	6264	6257	5932	6.9
4	India	4798	4888	5236	5268	5371	5545	4877	5.7
5	South Korea	2767	3006	3122	3302	3388	3396	3138	3.7
6	Japan	3518	3509	3546	3467	3290	3277	2733	3.2
7	Saudi Arabia	2042	2204	2511	2630	2817	2586	2177	2.5
8	Canada	2052	2021	1888	2009	1889	2196	2044	2.4
9	Germany	2115	2164	2204	2158	2064	2077	1980	2.3
10	Brazil	2211	2063	1912	1787	1764	1637	1679	2.0
11	IR Iran	1658	1664	1618	1680	1691	1705	1577	1.8
12	Italy	1408	1567	1571	1607	1548	1522	1272	1.5
13	Netherlands	1214	1278	1283	1282	1302	1329	1185	1.4
14	Spain	1244	1336	1346	1361	1398	1357	1153	1.3
15	Singapore	1307	1268	1297	1322	1242	1236	1150	1.3
16	Thailand	na	na	1206	1235	1257	1143	1123	1.3
17	United Kingdom	1333	1341	1283	1290	1255	1262	1025	1.2
18	Indonesia	885	863	889	908	1008	970	994	1.2
19	United Arab Emirates	644	940	1089	1043	1027	1005	925	1.1
20	France	1264	1271	1283	1304	1232	1120	807	0.9
21	Kuwait	892	874	857	883	891	886	780	0.9
22	Turkey	na	na	619	658	590	772	734	0.9
23	Mexico	1339	1221	1046	845	677	660	640	0.7
24	Algeria	651	576	621	609	621	660	614	0.7
25	Iraq	508	419	449	539	718	747	587	0.7
26	Belgium	735	729	704	732	702	734	580	0.7
27	Poland	516	566	559	554	592	600	565	0.7
28	Egypt	496	512	487	491	519	509	542	0.6
29	Malaysia	na	na	512	487	477	544	489	0.6
30	Argentina	571	549	532	517	511	521	484	0.6
Rest of World		**13833**	**16323**	**14991**	**15465**	**15858**	**15451**	**13398**	**15.6**
Total World		**85438**	**89167**	**91165**	**92937**	**94264**	**94644**	**85658**	**100**
of which : OECD		43812	44683	44657	45343	45406	45373	39494	46.1
OPEC		8123	8115	8394	8571	8631	8368	7157	8.4

Notes : Data may includge products from GTL and condensate units. Na : Not Available P : Provisional

Source : OPEC Annual Statistical Bulletins 2021

Figures XI. 5 : Trends in Production, Imports & Exports of World Petroleum Products (in '000'b/d)



XI.8: World Crude Oil Consumption (Country-wise)

(Figures in Thousand barrels daily)

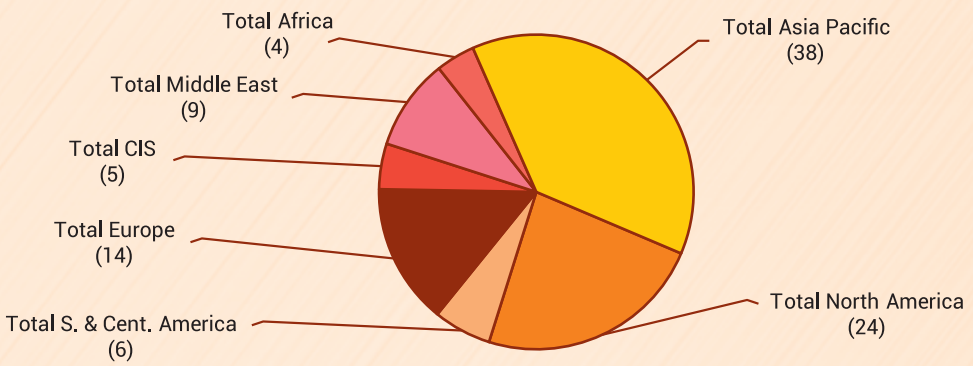
S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	US	18131	18524	18622	18878	19447	19475	17178	19.4
2	China	11120	12066	12499	13137	13576	14005	14225	16.1
3	**India**	**3832**	**4147**	**4544**	**4724**	**4974**	**5148**	**4669**	**5.3**
4	Saudi Arabia	3760	3879	3865	3799	3617	3635	3544	4.0
5	Japan	4279	4113	3988	3953	3824	3689	3268	3.7
6	Russian Federation	3300	3197	3265	3271	3320	3393	3238	3.7
7	South Korea	2398	2503	2696	2738	2720	2703	2560	2.9
8	Brazil	2725	2558	2433	2481	2392	2438	2323	2.6
9	Canada	2419	2442	2452	2423	2501	2537	2282	2.6
10	Germany	2273	2269	2307	2374	2255	2270	2045	2.3
11	Iran	1764	1582	1585	1644	1717	1841	1715	1.9
12	Singapore	1259	1329	1372	1406	1431	1401	1332	1.5
13	Mexico	1960	1939	1950	1883	1836	1698	1312	1.5
14	France	1544	1544	1529	1540	1538	1528	1305	1.5
15	Thailand	1270	1313	1347	1390	1400	1405	1271	1.4
16	Indonesia	1642	1552	1508	1610	1649	1626	1230	1.4
17	United Kingdom	1491	1538	1587	1594	1569	1531	1192	1.3
18	Italy	1196	1264	1255	1274	1300	1259	1054	1.2
19	Spain	1165	1209	1252	1260	1286	1287	1050	1.2
20	Taiwan	1052	1077	1083	1067	1074	1022	973	1.1
21	Turkey	771	915	973	1022	989	996	903	1.0
22	Australia	994	985	988	1030	1041	1031	890	1.0
23	United Arab Emirates	858	949	1034	1017	1015	969	798	0.9
24	Netherlands	856	826	843	818	843	807	746	0.8
25	Malaysia	802	751	838	801	801	841	728	0.8
26	Western Africa	549	566	634	697	808	816	726	0.8
27	Egypt	795	820	840	786	731	734	659	0.7
28	Poland	521	542	594	646	663	679	637	0.7
29	Iraq	680	686	757	723	704	716	628	0.7
30	Argentina	678	694	675	670	640	563	503	0.6
Rest of World		**14592**	**15008**	**15064**	**15444**	**15602**	**15555**	**13492**	**15.2**
Total World		**90677**	**92787**	**94381**	**96099**	**97265**	**97598**	**88477**	**100.0**
of which: OECD		44239	44950	45426	45916	46372	46056	40282	45.5
Non-OECD		46438	47836	48954	50184	50892	51542	48195	54.5
European Union		10748	10911	11090	11318	11348	11298	9774	11.0

Notes : 1. Total may not add up due to rounding off. P : Provisional

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

Source : BP Statistical Review of World Energy, June 2021.

Figures XI. 6 : Region-wise Distribution of Crude Oil Consumption-2020 (%)



XI. 9 : World Natural Gas Consumption (Country-wise)

(Figures in Billion cubic metres)

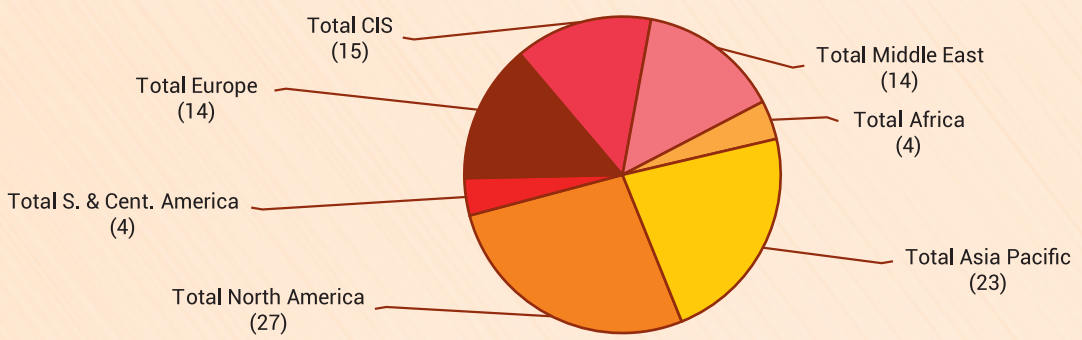
S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	US	722.3	743.6	749.1	740.0	821.7	849.2	832.0	21.8
2	Russian Federation	422.2	408.7	420.6	431.1	454.5	444.3	411.4	10.8
3	China	188.4	194.7	209.4	241.3	283.9	308.4	330.6	8.6
4	Iran	173.4	184.0	196.3	205.0	219.6	223.4	233.1	6.1
5	Canada	110.4	110.5	106.4	110.3	116.4	117.8	112.6	2.9
6	Saudi Arabia	97.3	99.2	105.3	109.3	112.1	111.2	112.1	2.9
7	Japan	124.8	118.7	116.4	117.0	115.7	108.1	104.4	2.7
8	Germany	73.9	77.0	84.9	87.7	85.9	88.7	86.5	2.3
9	Mexico	78.8	80.8	83.0	86.0	87.6	88.0	86.3	2.3
10	United Kingdom	70.1	72.0	80.7	78.5	79.5	77.3	72.5	1.9
11	United Arab Emirates	63.4	71.5	71.9	72.4	71.2	71.5	69.6	1.8
12	Italy	59.0	64.3	67.5	71.6	69.2	70.8	67.7	1.8
13	**India**	**48.5**	**47.8**	**50.8**	**53.7**	**58.1**	**59.3**	**59.6**	**1.6**
14	Egypt	46.2	46.0	49.4	55.9	59.6	58.9	57.8	1.5
15	South Korea	50.0	45.6	47.6	49.8	57.8	56.0	56.6	1.5
16	Thailand	49.9	51.0	50.6	50.1	50.0	50.9	46.9	1.2
17	Turkey	46.6	46.0	44.5	51.6	47.2	43.4	46.4	1.2
18	Argentina	46.2	46.7	48.2	48.3	48.7	46.6	43.9	1.1
19	Algeria	36.1	37.9	38.6	39.5	43.4	45.1	43.1	1.1
20	Uzbekistan	48.5	46.3	43.3	43.1	44.4	44.4	43.0	1.1
21	Indonesia	44.0	45.8	44.6	43.2	44.5	43.9	41.5	1.1
22	Pakistan	35.0	36.5	38.7	40.7	43.6	44.5	41.2	1.1
23	Australia	37.2	38.8	37.9	37.1	35.8	42.1	40.9	1.1
24	France	37.9	40.8	44.5	44.8	42.8	43.7	40.7	1.1
25	Malaysia	44.7	46.8	45.0	45.0	44.7	44.7	38.2	1.0
26	Netherlands	34.5	34.1	35.2	36.1	35.4	37.0	36.6	1.0
27	Qatar	38.4	43.3	41.2	41.2	34.1	36.7	35.0	0.9
28	Spain	27.5	28.5	29.1	31.7	31.5	36.0	32.4	0.8
29	Brazil	40.7	42.9	37.1	37.6	35.9	35.7	32.1	0.8
30	Turkmenistan	20.0	25.4	25.1	24.8	28.4	31.5	31.3	0.8
Rest of World		**484.24**	**503.06**	**515.59**	**529.34**	**534.51**	**544.75**	**536.75**	**14.0**
Total World		**3400.1**	**3478.2**	**3558.6**	**3653.7**	**3837.9**	**3903.9**	**3822.8**	**100.0**
of which: OECD		1591.2	1623.7	1657.6	1678.7	1763.9	1800.0	1757.7	46.0
Non-OECD		1808.9	1854.5	1901.0	1975.0	2074.0	2104.0	2065.1	54.0
European Union		331.4	346.7	368.2	385.2	378.1	391.2	379.9	9.9

Notes : 1. Total may not add up due to rounding off. P : Provisional

2. Excludes gas flared or recycled. Includes natural gas produced for Gas-to-Liquids transformation.

Source : BP Statistical Review of World Energy, June 2021.

Figures XI. 7 : Region-wise Distribution of Natural Gas Consumption-2020 (%)



XI. 10 : World Oil Refining Capacity (Country-wise)

(Figures in Thousand barrels daily*)

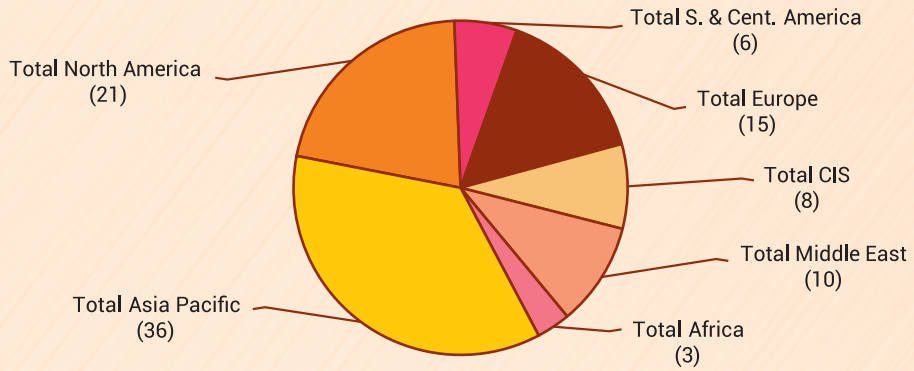
S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	US	17967	18317	18617	18598	18808	18974	18143	17.8
2	China	15253	15024	14895	15231	15655	16199	16691	16.4
3	Russian Federation	6366	6472	6543	6545	6551	6676	6736	6.6
4	**India**	**4319**	**4307**	**4620**	**4699**	**4972**	**4994**	**5018**	**4.9**
5	South Korea	3123	3128	3259	3298	3346	3393	3572	3.5
6	Japan	3749	3721	3600	3343	3343	3343	3285	3.2
7	Saudi Arabia	2899	2899	2901	2826	2835	2905	2905	2.8
8	Iran	2075	2075	2075	2220	2330	2495	2475	2.4
9	Brazil	2238	2281	2289	2285	2285	2290	2290	2.2
10	Germany	2077	2049	2051	2069	2085	2085	2085	2.0
11	Canada	1929	1931	1934	1970	1939	2054	2065	2.0
12	Italy	1900	1900	1900	1900	1900	1900	1900	1.9
13	Spain	1546	1562	1562	1562	1564	1586	1586	1.6
14	Mexico	1522	1522	1522	1546	1558	1558	1558	1.5
15	Singapore	1514	1514	1514	1514	1514	1514	1514	1.5
16	United Arab Emirates	728	1149	1149	1229	1229	1307	1331	1.3
17	Venezuela	1303	1303	1303	1303	1303	1303	1303	1.3
18	United Kingdom	1337	1337	1227	1227	1227	1227	1251	1.2
19	France	1375	1375	1245	1245	1245	1245	1245	1.2
20	Thailand	1252	1252	1235	1235	1235	1235	1245	1.2
21	Netherlands	1279	1298	1298	1299	1299	1291	1229	1.2
22	Taiwan	1197	988	988	1083	1083	1083	1131	1.1
23	Indonesia	1099	1111	1111	1111	1094	1111	1127	1.1
24	Malaysia	612	612	618	625	625	625	955	0.9
25	Iraq	791	763	779	779	849	919	919	0.9
26	Turkey	596	596	596	596	818	822	822	0.8
27	Kuwait	936	936	936	736	736	736	800	0.8
28	Egypt	810	810	810	810	795	795	795	0.8
29	Belgium	776	776	776	776	776	776	776	0.8
30	Algeria	651	651	651	657	657	657	657	0.6
Rest of World		**14250**	**14238**	**14416**	**14380**	**14471**	**14649**	**14539**	**14.3**
Total World		**97470**	**97898**	**98420**	**98696**	**100125**	**101748**	**101947**	**100**
of which: OECD		44501	44787	44869	44700	45193	45541	44804	43.9
Non-OECD		52969	53111	53550	53995	54933	56207	57143	56.1
European Union		12824	12871	12761	12757	12758	12770	12663	12.4

Notes : Total may not add up due to rounding off. P : Provisional

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

Source : BP Statistical Review of World Energy, June 2021.

Figures XI. 8 : Region-wise Distribution of Refinery Capacity-2020 (%)



XI. 11 : World Oil Refinery Throughput (Country-wise)

(Figures in Thousand barrels daily*)

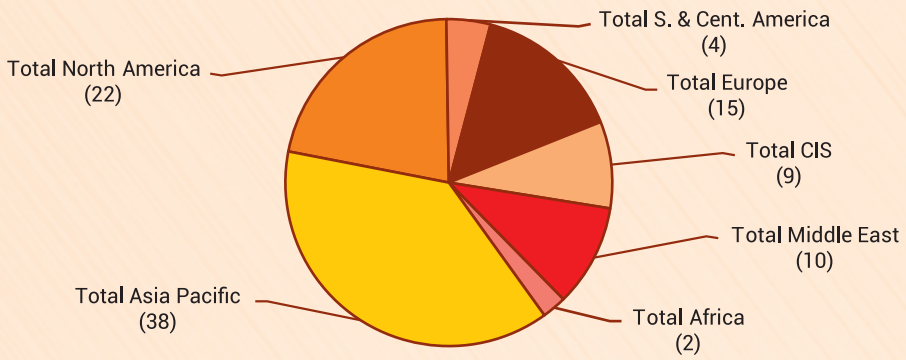
S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	US	15848	16188	16187	16590	16969	16563	14212	18.8
2	China	10165	10824	11304	11844	12574	13433	13857	18.4
3	Russian Federation	5926	5773	5715	5703	5864	5824	5498	7.3
4	**India**	**4475**	**4561**	**4930**	**5010**	**5154**	**5119**	**4493**	**6.0**
5	South Korea	2516	2784	2928	3061	3031	2922	2679	3.5
6	Japan	3289	3258	3280	3214	3059	3046	2492	3.3
7	Saudi Arabia	2201	2447	2753	2802	2770	2649	2326	3.1
8	Iran	1941	1868	1875	1961	2027	2236	2182	2.9
9	Brazil	2085	1972	1812	1741	1733	1751	1769	2.3
10	Germany	1833	1875	1887	1870	1775	1763	1701	2.3
11	Canada	1615	1640	1594	1757	1653	1822	1585	2.1
12	Netherlands	1090	1157	1172	1180	1192	1217	1134	1.5
13	Italy	1198	1347	1293	1399	1346	1355	1115	1.5
14	Spain	1185	1306	1302	1326	1363	1318	1105	1.5
15	Thailand	1005	1107	1056	1093	1131	1025	1005	1.3
16	United Kingdom	1125	1118	1071	1073	1041	1044	886	1.2
17	United Arab Emirates	643	1098	1078	1119	1096	1037	871	1.2
18	Indonesia	848	836	885	885	916	918	826	1.1
19	Singapore	839	901	929	994	974	930	798	1.1
20	Taiwan	850	838	861	848	889	890	726	1.0
21	France	1096	1152	1122	1149	1085	978	662	0.9
22	Turkey	406	526	531	542	472	675	654	0.9
23	Egypt	530	530	509	508	519	562	602	0.8
24	Mexico	1155	1064	933	767	612	592	591	0.8
25	Algeria	615	591	584	573	601	569	557	0.7
26	Belgium	645	644	640	685	663	693	544	0.7
27	Kuwait	879	905	841	686	679	663	539	0.7
28	Iraq	487	409	440	527	596	611	536	0.7
29	Poland	486	532	517	508	540	546	513	0.7
30	Malaysia	552	514	574	570	566	586	491	0.6
Rest of World		**10397**	**10350**	**10038**	**10168**	**10171**	**9616**	**8564**	**11.3**
Total World		**77925**	**80113**	**80641**	**82152**	**83063**	**82954**	**75512**	**100.0**
of which: OECD		37297	38387	38279	39096	38905	38478	33449	44.3
Non-OECD		40628	41727	42362	43056	44158	44476	42063	55.7
European Union		10029	10670	10627	10907	10755	10542	9240	12.2

Notes : Total may not add up due to rounding off. P : Provisional

* : Atmospheric distillation capacity on a calendar-day basis.

Source : BP Statistical Review of World Energy, June 2021.

Figures XI. 9 : Region-wise Distribution of Refinery Throughput-2020 (%)



XI. 12 : World Imports of Crude Oil (Country-wise)

(Figures in Thousand barrels daily*)

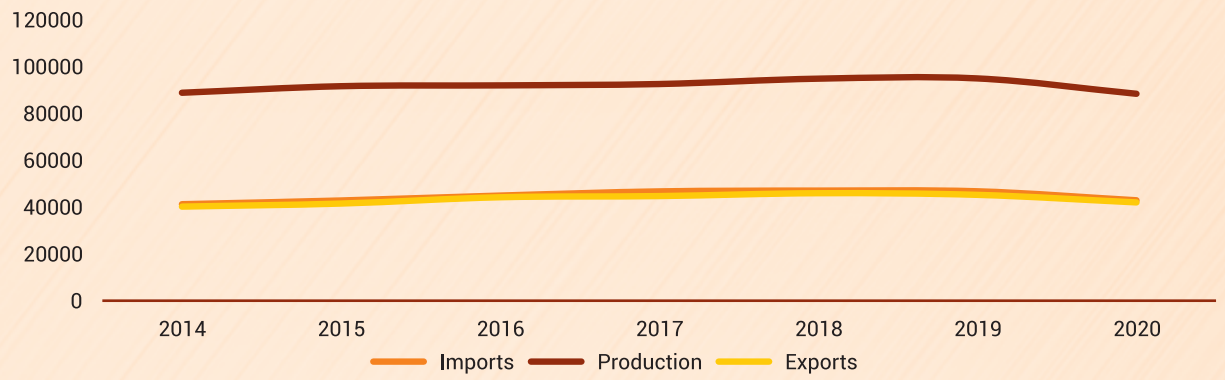
S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	China	6178	6731	7625	8426	9260	10181	10853	25.3
2	United States	7344	7363	7850	7969	7768	6801	5877	13.7
3	**India**	**3791**	**3936**	**4308**	**4341**	**4544**	**4507**	**4033**	**9.4**
4	South Korea	2476	2781	2925	3041	3035	2924	2660	6.2
5	Japan	3245	3234	3158	3235	3056	3023	2472	5.8
6	Germany	1807	1843	1837	1832	1720	1737	1671	3.9
7	Spain	1192	1308	1292	1332	1365	1339	1105	2.6
8	Italy	1086	1262	1226	1340	1253	1275	1014	2.4
9	Netherlands	957	1057	1090	1092	1097	1153	998	2.3
10	Thailand	806	874	853	906	942	932	837	2.0
11	Singapore	786	806	897	982	919	848	753	1.8
12	Canada	564	566	889	807	743	803	718	1.7
13	United Kingdom	940	856	798	894	892	910	709	1.7
14	France	1077	1146	1092	1149	1061	976	666	1.6
15	Turkey	353	506	503	520	424	628	591	1.4
16	Belgium	650	648	642	689	667	697	551	1.3
17	Greece	421	446	473	478	491	461	459	1.1
18	Sweden	378	406	397	401	402	344	375	0.9
19	South Africa	459	421	432	403	437	409	372	0.9
20	Belarus	454	462	366	365	368	363	321	0.7
21	Malaysia	209	179	198	209	210	284	248	0.6
22	Australia	441	318	333	335	361	329	238	0.6
23	Indonesia	383	374	366	344	336	216	233	0.5
24	Egypt	na	na	83	87	142	121	221	0.5
25	Bahrain	211	218	212	223	220	226	179	0.4
26	United Arab Emirates	na	na	52	68	42	53	163	0.4
27	Romania	138	136	153	159	170	178	154	0.4
28	Chile	173	162	170	177	173	185	147	0.3
29	Brazil	333	252	134	150	186	189	134	0.3
30	Bulgaria	102	121	124	137	128	141	97	0.2
Rest of World		**4284**	**4411**	**4444**	**4612**	**4627**	**4515**	**4050**	**9.4**
Total World		**41238**	**42821**	**44922**	**46701**	**47036**	**46745**	**42900**	**100.0**
of which : OECD		25116	26224	26868	27650	26914	25962	22447	52.3

Notes : Total may not add up due to rounding off. P : Provisional

1. Data may include lease condensate and volumes of oil in transit.

Source : OPEC Annual Statistical Bulletins 2021

Figures XI. 10 : Trends in Production, Imports & Exports of World Crude Oil (in '000'b/d)



XI. 13 : World Imports of Natural Gas (Country-wise)

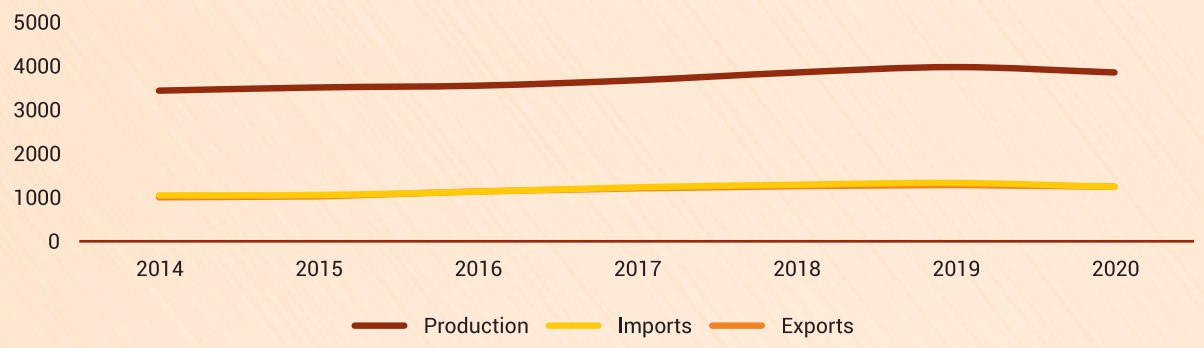
(Figures in Billion Standard Cubic Metres)

S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Germany	92.6	103.0	150.6	153.6	162.4	158.9	155.5	12.5
2	China	57.7	59.7	72.8	92.0	121.3	129.7	138.4	11.1
3	Japan	127.5	122.5	120.1	120.5	119.4	111.3	107.3	8.6
4	United States	76.3	77.0	85.1	85.9	81.8	77.6	72.3	5.8
5	Italy	55.8	61.2	65.3	69.6	67.9	70.9	66.2	5.3
6	South Korea	49.1	44.4	44.5	49.9	58.6	54.2	53.9	4.3
7	Netherlands	16.5	26.1	29.5	32.9	44.3	52.7	53.3	4.3
8	Turkey	49.3	48.4	46.4	55.1	50.0	45.2	48.0	3.9
9	France	45.1	44.7	46.4	48.3	49.3	54.7	46.1	3.7
10	United Kingdom	43.4	45.1	48.5	47.6	48.2	47.6	43.9	3.5
11	Belgium	29.8	35.0	39.4	42.1	43.8	43.1	42.7	3.4
12	**India**	**18.6**	**18.7**	**26.2**	**26.7**	**29.6**	**31.5**	**34.3**	**2.8**
13	Spain	33.2	30.6	30.4	33.0	33.6	37.6	32.8	2.6
14	Canada	21.9	19.6	22.3	25.3	23.2	26.1	23.6	1.9
15	United Arab Emirates	25.8	27.1	27.5	26.0	26.1	22.5	22.7	1.8
16	Russia	24.2	18.0	15.9	18.2	15.1	19.0	18.7	1.5
17	Belarus	18.4	17.3	17.2	17.6	18.8	18.8	17.4	1.4
18	Ukraine	19.2	16.5	11.1	14.1	10.6	14.2	16.8	1.3
19	Malaysia	4.6	3.3	12.8	13.4	14.5	14.4	15.7	1.3
20	Myanmar	na	na	12.8	13.8	14.2	14.4	15.6	1.3
21	Poland	12.0	10.9	12.5	13.2	13.9	15.8	14.5	1.2
22	Austria	7.8	6.0	7.4	8.5	10.8	15.1	13.3	1.1
23	Indonesia	na	na	4.5	6.6	9.0	10.7	11.1	0.9
24	Iraq	-	-	0.0	1.5	4.1	6.1	7.2	0.6
25	Australia	6.3	7.3	6.9	6.2	6.3	5.8	6.7	0.5
26	Brazil	17.5	19.0	13.4	10.7	10.8	10.2	6.3	0.5
27	Kazakhstan	4.8	4.7	5.2	5.6	8.5	9.7	6.2	0.5
28	Argentina	11.2	10.7	11.6	12.2	10.9	7.3	6.0	0.5
29	Kuwait	3.0	3.9	4.3	4.8	4.4	4.5	5.3	0.4
30	Tunisia	2.9	3.0	3.3	3.7	4.1	4.4	4.2	0.3
Rest of World		**128.8**	**141.1**	**145.0**	**153.2**	**145.4**	**151.6**	**138.4**	**11.1**
Total World		**1003.2**	**1024.7**	**1138.7**	**1211.7**	**1260.6**	**1285.7**	**1244.4**	**100.0**
of which: OECD		728.4	755.8	823.2	868.4	880.9	889.6	847.2	68.1
OPEC		34.2	40.4	41.0	37.0	40.6	34.4	36.5	2.9

Notes : Total may not add up due to rounding off. P : Provisional

Source : OPEC Annual Statistical Bulletins 2021

Figures XI. 11 : Trends in Production, Imports & Exports of World Natural Gas (in BCM)



XI. 14 : World Imports of Petroleum Products (Country-wise)

(Figures in Thousand barrels daily)

S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Singapore	2354.2	2535.7	2472.6	2621.3	2334.9	2243.8	2088.3	8.1
2	United States	1897.0	2086.0	2205.0	2175.0	2174.0	2340.0	1981.0	7.7
3	Netherlands	1792.5	1900.5	1925.9	1925.9	1864.5	1797.5	1556.0	6.0
4	China	957.7	1150.9	1220.3	1368.5	1397.5	1389.4	1318.4	5.1
5	**India**	**487.9**	**636.5**	**814.1**	**843.5**	**776.5**	**968.6**	**1050.7**	**4.1**
6	South Korea	885.7	844.2	919.5	890.6	957.9	994.7	962.6	3.7
7	Mexico	616.4	712.1	735.5	846.0	1089.6	1138.2	932.9	3.6
8	France	897.3	857.0	822.9	860.8	896.1	938.7	926.4	3.6
9	Japan	992.7	972.9	868.9	923.5	976.0	896.3	918.7	3.6
10	Malaysia	530.3	569.5	647.8	760.1	751.6	679.3	795.3	3.1
11	Germany	791.9	800.1	824.2	880.4	866.5	907.5	746.0	2.9
12	Brazil	610.5	556.1	550.5	697.8	640.2	725.3	606.1	2.3
13	Australia	429.7	545.5	550.5	606.1	625.3	633.9	589.7	2.3
14	United Kingdom	607.8	652.4	737.2	700.0	754.0	703.7	533.8	2.1
15	Belgium	490.1	546.7	550.8	575.5	621.3	564.1	529.6	2.0
16	Indonesia	554.6	506.0	498.6	575.8	641.6	945.4	503.0	1.9
17	Nigeria	438.7	441.0	423.4	391.7	442.0	459.6	465.9	1.8
18	Turkey	480.2	498.3	520.8	556.4	573.3	443.6	382.3	1.5
19	Saudi Arabia	465.0	588.0	591.1	486.8	898.4	319.4	353.1	1.4
20	Spain	330.3	321.7	363.0	399.7	361.9	364.7	308.2	1.2
21	Italy	252.5	261.9	323.8	346.5	362.9	322.1	269.8	1.0
22	Morocco	163.2	161.0	256.8	271.6	266.9	269.7	240.1	0.9
23	Ukraine	168.8	163.1	196.2	201.2	213.1	222.0	220.7	0.9
24	Canada	241.6	240.7	248.3	274.3	304.9	312.8	196.1	0.8
25	Ecuador	157.4	151.7	122.6	134.2	193.8	187.5	164.5	0.6
26	Egypt	185.8	367.2	351.3	318.2	278.3	263.8	148.8	0.6
27	Libya	113.9	106.2	107.9	130.9	136.8	144.1	147.4	0.6
28	Angola	99.1	134.5	75.8	70.6	99.5	64.9	134.3	0.5
29	United Arab Emirates	349.8	358.0	340.2	344.4	350.6	265.9	120.2	0.5
30	IR Iran	39.9	52.5	61.6	96.0	101.0	97.5	91.6	0.4
Rest of World		**6542**	**7033**	**7502**	**7749**	**7583**	**7549**	**6588**	**25.5**
Total World		**24925**	**26751**	**27830**	**29023**	**29534**	**29153**	**25870**	**100.0**
of which : OECD		12396	13170	13727	14061	14507	14466	12791	49.4
OPEC		1990	2046	1939	1890	2424	1684	1519	5.9

Notes : Total may not add up due to rounding off. P : Provisional

Source : OPEC Annual Statistical Bulletins 2021

XI. 15 : World Exports of Crude Oil (Country-wise)

(Figures in Thousand barrels daily)

S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Saudi Arabia	7153.5	7163.3	7463.4	6968.3	7371.5	7038.1	6658.6	15.9
2	Russia	4488.4	4899.3	5079.3	5057.5	5206.8	5253.0	4653.5	11.1
3	Iraq	2515.5	3004.9	3803.5	3802.0	3862.0	3968.2	3428.4	8.2
4	United States	350.8	464.6	591.0	1158.0	2048.0	2982.0	3175.0	7.6
5	Canada	2276.2	2301.2	2742.2	2892.9	3177.8	3279.3	3037.7	7.2
6	United Arab Emirates	2496.7	2441.5	2407.8	2378.7	2296.5	2414.2	2418.4	5.8
7	Nigeria	2120.1	2114.0	1738.0	1811.1	1979.5	2008.2	1879.3	4.5
8	Kuwait	1994.8	1963.8	2128.2	2010.0	2050.0	1986.3	1826.3	4.3
9	Norway	1203.2	1234.7	1372.2	1361.2	1254.5	1233.5	1501.8	3.6
10	Kazakhstan	1250.9	1229.3	1229.5	1370.7	1401.2	1410.9	1416.7	3.4
11	Brazil	517.3	736.0	891.3	1127.4	1147.0	1301.3	1401.0	3.3
12	Angola	1607.9	1710.9	1670.1	1576.7	1420.6	1318.7	1219.7	2.9
13	Mexico	1219.8	1247.1	1273.8	1264.1	1283.3	1199.9	1198.5	2.9
14	Oman	804.3	788.0	887.5	803.0	807.8	838.6	859.9	2.0
15	United Kingdom	570.7	594.8	620.2	692.7	818.0	834.4	724.3	1.7
16	Colombia	722.0	667.0	613.5	641.5	590.3	611.6	541.0	1.3
17	Qatar	595.5	490.7	503.4	466.0	477.3	524.5	502.8	1.2
18	Azerbaijan	669.4	663.1	655.1	615.3	608.6	559.3	500.3	1.2
19	Venezuela	1964.9	1974.2	1835.0	1596.4	1273.1	846.6	486.8	1.2
20	Algeria	622.9	642.2	668.7	632.5	571.0	584.2	438.7	1.0
21	IR Iran	1109.2	1081.1	1921.7	2125.0	1849.6	651.1	404.5	1.0
22	Ecuador	422.4	432.9	400.2	379.8	367.2	397.8	361.8	0.9
23	Libya	329.4	288.4	350.1	792.1	998.5	1035.7	347.2	0.8
24	Congo	260.9	227.0	254.3	261.2	307.1	309.4	282.2	0.7
25	Malaysia	229.0	338.1	342.8	344.8	357.5	287.0	280.0	0.7
26	Australia	244.3	221.8	199.5	179.8	214.6	248.8	253.2	0.6
27	Gabon	207.4	206.4	205.2	188.4	174.1	206.9	196.1	0.5
28	Bahrain	na	na	131.9	154.8	156.3	155.8	150.9	0.4
29	Sudans	168.0	166.0	119.6	98.5	114.8	138.2	135.4	0.3
30	Equatorial Guinea	196.7	182.4	157.6	124.8	121.0	110.2	114.5	0.3
Rest of World		**1889**	**2036**	**1938**	**1823**	**1619**	**1488**	**1593**	**3.8**
Total World		**40202**	**41510**	**44194**	**44699**	**45924**	**45222**	**41988**	**100.0**
of which : OECD		6019	6223	6940	7716	8913	9876	9958	23.7
OPEC		23002	23000	24604	24267	24275	22478	19701	46.9

Notes : Total may not add up due to rounding off. P : Provisional

Source : OPEC Annual Statistical Bulletins 2021

XI. 16 : World Exports of Natural Gas (Country-wise)

(Figures in Billion Standard Cubic Metres)

S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Russia	193.9	197.7	208.0	229.4	249.9	262.4	199.9	16.1
2	United States	42.9	50.5	66.1	89.3	102.2	131.8	149.5	12.0
3	Qatar	122.6	129.9	130.3	128.6	143.4	143.0	143.7	11.6
4	Norway	106.8	114.2	114.4	122.5	121.0	111.3	113.0	9.1
5	Australia	32.4	39.5	58.7	74.8	91.6	100.3	102.6	8.2
6	Canada	78.0	78.3	84.3	85.1	79.8	76.6	70.9	5.7
7	Germany	20.1	26.4	27.5	35.9	38.4	41.8	50.1	4.0
8	Netherlands	58.7	51.0	56.6	48.0	54.5	47.7	40.0	3.2
9	Algeria	44.2	43.4	54.0	53.9	51.4	42.8	39.5	3.2
10	Nigeria	26.8	26.7	25.1	32.5	28.6	36.0	35.6	2.9
11	Turkmenistan	45.0	40.3	37.7	37.7	36.4	37.4	32.6	2.6
12	Malaysia	34.9	35.0	34.2	36.8	34.0	35.3	31.3	2.5
13	Belgium	13.2	17.1	21.2	24.0	24.6	28.9	28.9	2.3
14	Indonesia	31.7	30.3	30.4	29.8	29.6	24.9	22.5	1.8
15	Kazakhstan	10.8	12.3	12.5	14.2	17.6	17.8	13.2	1.1
16	IR Iran	8.4	8.5	8.6	12.9	12.3	12.4	12.7	1.0
17	Bolivia	17.8	18.1	17.8	16.4	15.1	12.7	12.4	1.0
18	Trinidad & Tobago	17.0	15.9	14.2	12.6	16.4	17.1	12.0	1.0
19	Uzbekistan	8.1	7.6	10.1	10.3	12.9	12.2	11.7	0.9
20	Myanmar	11.7	13.9	12.8	12.2	11.3	12.2	11.5	0.9
21	Oman	10.3	10.0	10.6	11.2	13.4	8.5	10.6	0.9
22	Azerbaijan	7.8	7.3	7.6	8.0	9.2	11.3	9.9	0.8
23	United Kingdom	10.8	14.2	10.3	11.3	7.6	8.0	9.6	0.8
24	France	7.1	5.5	3.7	6.0	5.9	10.8	9.1	0.7
25	United Arab Emirates	13.5	13.2	9.3	8.8	8.9	9.3	8.8	0.7
26	Brunei	7.8	8.5	8.5	8.9	8.3	8.3	7.8	0.6
27	Egypt	0.7	0.0	0.7	1.2	1.2	6.7	7.1	0.6
28	China	na	na	3.4	3.5	3.4	3.6	5.2	0.4
29	Libya	5.0	4.7	4.7	4.5	4.3	5.7	4.3	0.3
30	Peru	5.2	4.8	5.1	5.3	4.7	5.1	4.2	0.3
Rest of World		**54.0**	**31.0**	**44.2**	**56.5**	**53.3**	**49.8**	**33.6**	**2.7**
Total World		**1047.1**	**1055.7**	**1132.4**	**1232.2**	**1291.2**	**1331.6**	**1243.8**	**100.0**
of which : OECD		-	388.2	450.4	514.3	544.0	577.8	584.3	47.0
OPEC		-	102.1	108.4	119.5	111.6	111.3	105.4	8.5

Notes : Total may not add up due to rounding off. P : Provisional

Source : OPEC Annual Statistical Bulletins 2021

XI. 17 : World Exports of Petroleum Products (Country-wise)

(Figures in Thousand barrels daily)

S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Share of Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	United States	3825.0	4273.7	4670.0	5218.0	5553.0	5490.0	5333.0	19.2
2	Russia	2610.7	2725.8	2501.7	2478.6	2509.9	2555.9	2419.4	8.7
3	Netherlands	2081.2	2245.3	2303.6	2332.6	2305.8	2247.2	1917.6	6.9
4	Singapore	1761.0	1870.5	1995.0	2088.3	1776.7	1621.8	1440.0	5.2
5	China	692.7	836.4	1088.5	1168.8	1276.1	1460.0	1324.0	4.8
6	South Korea	1206.1	1279.5	1313.4	1367.0	1432.3	1408.6	1258.8	4.5
7	**India**	**1374.1**	**1245.4**	**1401.7**	**1411.4**	**1344.3**	**1359.8**	**1216.2**	**4.4**
8	Saudi Arabia	987.8	1154.7	1502.6	1438.2	1971.2	1300.3	1016.6	3.7
9	United Arab Emirates	255.9	414.8	630.0	653.7	916.0	881.8	839.6	3.0
10	Malaysia	466.3	440.8	609.3	632.1	662.6	645.9	774.8	2.8
11	Kuwait	751.1	739.4	707.4	640.0	630.4	637.1	527.0	1.9
12	Algeria	582.6	605.4	541.1	569.7	532.1	506.2	503.4	1.8
13	Belgium	523.9	531.7	537.9	623.9	621.6	607.8	502.4	1.8
14	Italy	417.5	564.8	580.1	636.3	579.0	556.8	461.8	1.7
15	Qatar	522.1	521.0	568.1	639.4	552.2	537.6	460.0	1.7
16	Germany	433.5	453.4	465.3	482.8	461.1	449.0	452.1	1.6
17	Canada	464.0	483.9	435.3	491.1	443.9	484.6	416.9	1.5
18	Spain	384.7	411.5	423.3	471.3	452.7	419.6	398.2	1.4
19	United Kingdom	483.8	484.9	523.7	505.6	483.4	450.9	396.5	1.4
20	Norway	372.4	402.2	351.5	432.8	415.8	428.4	387.8	1.4
21	Japan	509.3	559.5	594.8	575.3	548.1	609.4	350.3	1.3
22	Brazil	152.8	124.5	124.4	133.1	170.5	217.2	283.9	1.0
23	IR Iran	469.9	514.3	515.0	270.2	272.1	284.6	280.7	1.0
24	France	411.3	440.3	428.1	434.7	424.2	367.4	277.9	1.0
25	Bahrain	248.3	249.3	230.3	240.7	237.9	249.1	213.3	0.8
26	Sweden	245.9	297.7	320.6	349.8	346.5	230.3	200.5	0.7
27	Egypt	45.2	46.5	36.3	43.6	73.3	125.8	165.6	0.6
28	Iraq	9.3	13.7	36.8	20.1	45.7	106.6	151.0	0.5
29	Mexico	201.6	191.1	182.1	156.1	140.5	115.5	138.8	0.5
30	Kazakhstan	na	na	136.4	145.9	127.6	120.9	113.8	0.4
Rest of World		**4303.8**	**4186.5**	**4282.5**	**4158.1**	**4140.7**	**3898.1**	**3619.5**	**13.0**
Total World		**26794**	**28309**	**30037**	**30809**	**31447**	**30374**	**27841**	**100.0**
of which : OECD		13096	14421	14942	15872	15964	15657	14208	51.0
OPEC		3492	3853	4307	3899	4673	3886	3483	12.5

Notes : Total may not add up due to rounding off. P : Provisional

Source : OPEC Annual Statistical Bulletins 2021

XI. 18 : Spot Prices of Key OPEC Crude

(Figures in US $/bbl.)

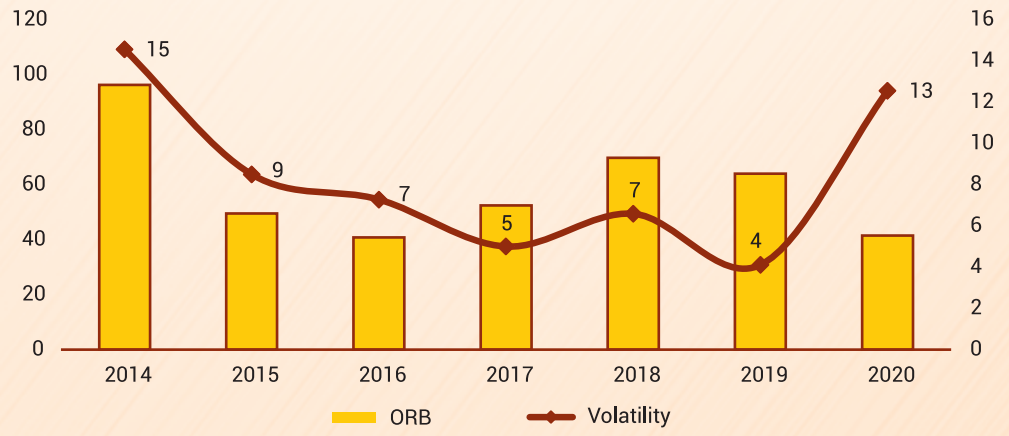
Country	Crude	2014	2015	2016	2017	2018	2019	2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Algeria	Saharan Blend	99.68	52.79	44.28	54.12	71.44	64.49	42.12
Angola	Girassol	99.19	52.96	43.61	54.47	71.72	66.11	42.64
Congo	Djeno	na	49.25	41.98	52.77	68.59	61.80	35.77
Equatorial Guinea	Zafiro	98.28	50.96	42.43	54.04	71.36	65.74	41.54
Gabon	Rabi Light	na	52.83	42.62	53.16	70.30	63.18	40.22
IR Iran	Iran Heavy	96.18	48.80	39.57	51.71	67.97	61.85	40.77
Iraq	Basrah Light	94.45	47.87	39.53	51.87	68.62	63.64	41.55
Kuwait	Kuwait Export	95.32	48.13	39.30	51.60	68.90	64.25	41.49
Libya	Es Sider	98.51	51.38	42.69	52.82	69.78	63.81	40.06
Nigeria	Bonny Light	100.85	52.95	44.02	54.55	72.11	65.63	41.53
Saudi Arabia	Arab Light	97.18	49.85	40.96	52.59	70.59	64.96	41.91
United Arab Emirates	Murban	99.45	53.87	44.83	54.82	72.20	64.72	42.98
Venezuela	Merey	86.88	41.11	34.02	47.63	64.47	54.04	28.12
OPEC	**ORB**	**96.29**	**49.49**	**40.76**	**52.43**	**69.78**	**64.04**	**41.47**
ORB	Volatilityl	14.56	8.50	7.28	5.00	6.59	4.11	12.55
ORB	Coefficient of variation2, %	15.12	17.18	17.85	9.54	9.44	6.43	30.26

Notes :

1. Standard deviation of daily prices.
2. Ratio of volatility to annual average price.

Source : OPEC Annual Statistical Bulletins 2021

Figure XI. 12 : Trend of OPEC reference Basket Spot Prices (in $/bbl)



XI. 19 : Crude Oil Spot Prices

(Figures in US $/bbl.)

Country	Crude	2014	2015	2016	2017	2018	2019	2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Algeria	Zarzaitine	99.19	53.00	44.02	54.08	71.35	64.42	41.72
Angola	Cabinda	98.07	51.77	42.83	54.30	71.15	65.34	42.29
Egypt	Suex Mix	95.13	48.94	40.41	51.56	68.47	62.61	40.23
Indonesia	Minas	98.68	49.17	41.66	52.36	65.44	60.25	41.08
Iran	Iran Light	97.26	51.40	41.66	52.36	69.10	62.74	40.36
Libya	Brega	98.79	52.08	43.73	53.62	70.65	63.76	40.12
Malaysia	Miri	105.10	57.93	46.39	56.93	75.90	69.30	47.15
Malaysia	Tapis	103.15	55.75	45.69	56.33	73.78	69.15	43.24
Mexico	Isthmus	93.65	51.14	42.37	54.60	68.74	63.00	36.61
Mexico	Maya	85.80	44.11	36.52	47.00	62.71	57.51	36.20
Nigeria	Forcados	101.35	54.14	43.70	54.58	72.56	66.19	41.56
Norway	Ekosfisk	99.72	53.12	44.01	54.49	71.86	65.24	42.33
Norway	Oseberg	99.99	53.54	44.52	55.04	72.34	65.38	42.36
Oman	Oman	97.04	51.21	41.96	53.32	70.10	64.00	43.20
Qatar	Dukhan	98.44	52.87	43.69	54.12	71.22	63.65	42.44
Russia	Urals	98.08	51.90	42.16	53.27	70.13	64.38	41.83
Saudi Arabia	Arab Heavy	93.68	47.01	38.45	50.96	68.79	63.85	41.45
United Kingdom	Brent	99.08	52.41	43.76	54.17	71.22	64.19	41.67
United Kingdom	Forties	99.14	52.50	43.42	54.20	71.21	64.66	41.38
U.S.A	WTI	93.26	48.73	43.27	50.82	65.16	57.02	39.43
UAE	Dubai	96.71	50.94	41.39	53.08	69.68	63.48	42.31

Source : OPEC Annual Statistical Bulletins 2021

XI. 20 : Spot Prices of Petroleum Products in Major Markets

(Figures in US $/bbl.)

Product	Specifications	2014	2015	2016	2017	2018	2019	2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
US Gulf								
Gasoline	Regular unleaded 87	107.90	67.58	57.15	68.57	80.17	72.70	48.80
Gas Oil	0.2% sulphur	111.39	63.80	50.10	62.31	80.99	74.61	44.92
Fuel Oil	3.0 % sulphur	82.67	40.78	32.13	47.05	60.17	52.55	34.72
Singapore								
Gasoline	Premium unleaded 87	111.96	71.41	57.81	69.51	81.30	74.15	47.61
Gas Oil	0.05% sulphur	112.67	64.57	52.05	65.69	84.05	77.22	48.36
Fuel Oil	380 centistokes	86.58	44.27	34.92	49.24	64.74	56.70	37.53
Rotterdam								
Gasoline	Premium unleaded 98	115.10	75.53	63.58	75.13	87.34	79.52	51.34
Gas Oil	10ppm sulphur	112.91	66.03	53.28	66.35	85.94	79.50	49.17
Fuel Oil	3.5% sulphur	83.68	40.75	29.64	44.31	59.04	48.90	33.27

Note : US Gulf and Singapore apply to cargo. Rotterdam prices apply to barge size lots.

Source : OPEC Annual Statistical Bulletins 2021

XI. 21 : Oil Trade Movements

(Figures in Thousand Barrels daily)

Country/Year	2014	2015	2016	2017	2018	2019	2020 (P)	% share in Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Imports								
US	9241	9451	10056	10148	9943	9142	7863	13.0
Europe	12957	13993	14354	14700	14151	14866	12611	21.1
China	7398	8333	9214	10241	11028	11826	12865	16.8
India	4155	4380	4945	4920	5196	5394	5030	7.7
Japan	4383	4332	4180	4142	3940	3780	3310	5.4
Rest of World	**21193**	**22026**	**23776**	**25663**	**25853**	**25397**	**23381**	**36.1**
Total World	**59328**	**62515**	**66526**	**69814**	**70111**	**70404**	**65061**	**100**
Exports								
Canada	3536	3836	3890	4241	4500	4689	4427	6.7
Mexico	1293	1323	1380	1290	1316	1272	1252	1.8
US	4033	4521	5078	5888	7041	8095	8117	11.5
S. & Cent. America	3939	4107	4147	3958	3739	3463	3455	4.9
Europe	2467	2926	3082	3392	3375	3148	2742	4.5
Russia	7792	8313	8814	8992	8117	8380	7433	11.9
Other CIS	2092	2100	2096	2201	2023	2135	2073	3.0
Saudi Arabia	7911	7968	8606	8404	8581	8474	8027	12.0
Middle East	12699	13537	15321	16255	16154	14921	13915	21.2
North Africa	1743	1701	1727	2226	2422	2551	1550	3.6
West Africa	4849	4880	4401	4531	4557	4730	4244	6.7
Asia Pacific (ex Japan)	6450	6780	7356	7811	7731	7992	7399	11.4
Rest of World	**524**	**525**	**625**	**625**	**555**	**555**	**428**	**0.8**
Total World	**59328**	**62515**	**66526**	**69814**	**70111**	**70404**	**65061**	**100**

Note : Bunker fuel use is not included as exports. Intra-area movements (for example, between countries within Europe) are excluded.

Source : BP Statistical Review of World Energy, June 2021.

XI. 22 : World Primary Energy Consumption by Fuel during 2020 (P)

(Figures in Exajoules)

S. No.	Country	Oil	Natural Gas	Coal	Nuclear Energy	Hydro electricity	Renewables	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	China	28.50	11.90	82.27	3.25	11.74	7.79	**145.46**
2	US	32.54	29.95	9.20	7.39	2.56	6.15	**87.79**
3	**India**	**9.02**	**2.15**	**17.54**	**0.40**	**1.45**	**1.43**	**31.98**
4	Russian Federation	6.39	14.81	3.27	1.92	1.89	^	**28.31**
5	Japan	6.49	3.76	4.57	0.38	0.69	1.13	**17.03**
6	Canada	4.26	4.05	0.50	0.87	3.42	0.54	**13.63**
7	Germany	4.21	3.12	1.84	0.57	0.17	2.21	**12.11**
8	Iran	3.31	8.39	0.07	0.06	0.19	^	**12.03**
9	Brazil	4.61	1.16	0.58	0.14	3.52	2.01	**12.01**
10	South Korea	4.90	2.04	3.03	1.42	^	0.36	**11.79**
11	Saudi Arabia	6.51	4.04	^	-	-	^	**10.56**

S. No.	Country	Oil	Natural Gas	Coal	Nuclear Energy	Hydro electricity	Renewables	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12	France	2.68	1.46	0.19	3.14	0.54	0.68	**8.70**
13	Indonesia	2.34	1.50	3.26	-	0.17	0.37	**7.63**
14	United Kingdom	2.39	2.61	0.19	0.45	0.06	1.20	**6.89**
15	Mexico	2.46	3.11	0.21	0.10	0.24	0.36	**6.48**
16	Turkey	1.82	1.67	1.66	-	0.69	0.45	**6.29**
17	Italy	2.13	2.44	0.21	-	0.41	0.67	**5.86**
18	Australia	1.83	1.47	1.69	-	0.13	0.45	**5.57**
19	Thailand	2.39	1.69	0.73	-	^	0.28	**5.12**
20	Spain	2.21	1.17	0.07	0.52	0.24	0.77	**4.97**
21	South Africa	1.02	0.15	3.48	0.14	^	0.11	**4.90**
22	Taiwan	1.89	0.90	1.63	0.28	^	0.09	**4.82**
23	United Arab Emirates	1.51	2.51	0.11	^	-	^	**4.19**
24	Malaysia	1.38	1.37	1.14	-	0.18	^	**4.11**
25	Vietnam	0.98	0.31	2.10	-	0.61	0.08	**4.09**
26	Poland	1.28	0.78	1.67	-	^	0.27	**4.01**
27	Egypt	1.33	2.08	^	-	0.12	0.09	**3.65**
28	Pakistan	0.88	1.48	0.62	0.08	0.36	^	**3.47**
29	Singapore	2.93	0.45	^	-	-	^	**3.42**
30	Netherlands	1.51	1.32	0.18	^	^	0.33	**3.37**
Rest of World		**28.02**	**23.81**	**9.35**	**2.84**	**8.65**	**3.71**	**76.37**
Total World		**173.73**	**137.62**	**151.42**	**23.98**	**38.16**	**31.71**	**556.63**
of which: OECD		78.52	63.28	27.46	16.67	13.14	18.04	**217.11**
	Non-OECD	95.21	74.34	123.96	7.31	25.02	13.67	**339.52**
	European Union	20.03	13.68	5.91	6.11	3.04	6.97	**55.74**

Notes : Total may not add up due to rounding off. ^ : Less than 0.05. P : Provisional

1. Primary energy comprises commercially traded fuels, including modern renewables used to generate electricity.
2. Energy from all sources of non-fossil power generation is accounted for on an input-equivalent basis.
3. Conversion factor used for Oil as per product basket of 1 Mtoe = 0.0431 Exajoules, for all other fuels 1 Mtoe = 0.0419 Exajoules.
   P : Provisional

Source : BP Statistical Review of World Energy, June 2021.

Figure XI. 13 : Distribution of India's Primary Energy Consumption by Fuel during 2020 (%)

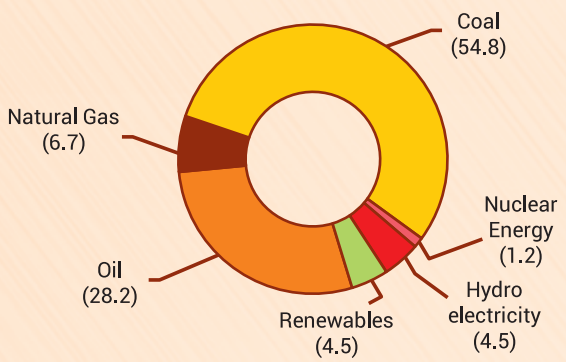
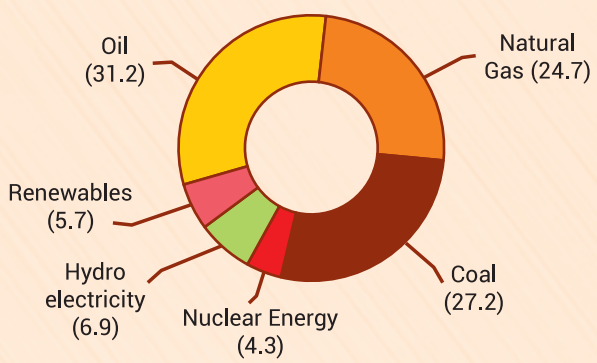


Figure XI. 14 : Distribution of World's Primary Energy Consumption by Fuel during 2020 (%)



XI. 23 : Primary Energy Consumption in Select Countries of the World

(Figures in Exajoules)

S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% share in Total 2020
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	China	124.82	126.53	128.63	132.80	137.58	142.03	**145.46**	**26.1**
2	US	92.99	92.09	91.96	92.26	95.64	94.90	**87.79**	**15.8**
3	**India**	**27.79**	**28.68**	**29.95**	**31.14**	**33.14**	**33.89**	**31.98**	**5.7**
4	Russian Federation	28.72	28.23	28.82	29.00	30.11	29.90	**28.31**	**5.1**
5	Japan	19.22	18.92	18.70	18.91	18.80	18.37	**17.03**	**3.1**
6	Canada	14.19	14.26	14.11	14.24	14.44	14.45	**13.63**	**2.4**
7	Germany	13.16	13.40	13.62	13.78	13.44	13.05	**12.11**	**2.2**
8	Iran	9.98	9.93	10.40	10.79	11.42	11.97	**12.03**	**2.2**
9	Brazil	12.38	12.20	11.89	12.04	12.12	12.42	**12.01**	**2.2**
10	South Korea	11.57	11.75	12.03	12.27	12.43	12.25	**11.79**	**2.1**
11	Saudi Arabia	10.49	10.82	10.96	10.93	10.65	10.68	**10.56**	**1.9**
12	France	9.89	9.95	9.79	9.72	9.88	9.67	**8.70**	**1.6**
13	Indonesia	7.02	7.09	7.17	7.47	8.07	8.65	**7.63**	**1.4**
14	United Kingdom	7.99	8.08	7.99	7.96	7.95	7.73	**6.89**	**1.2**
15	Mexico	7.70	7.69	7.79	7.90	7.84	7.55	**6.48**	**1.2**
16	Turkey	5.23	5.72	6.01	6.37	6.29	6.51	**6.29**	**1.1**
17	Italy	6.24	6.42	6.45	6.52	6.57	6.45	**5.86**	**1.1**
18	Australia	5.54	5.67	5.70	5.67	5.70	5.88	**5.57**	**1.0**
19	Thailand	5.09	5.21	5.32	5.41	5.53	5.51	**5.12**	**0.9**
20	Spain	5.51	5.59	5.64	5.72	5.79	5.60	**4.97**	**0.9**
21	South Africa	5.20	5.09	5.33	5.30	5.10	5.21	**4.90**	**0.9**
22	Taiwan	4.90	4.90	4.90	4.93	4.99	4.90	**4.82**	**0.9**
23	United Arab Emirates	4.04	4.46	4.64	4.65	4.59	4.55	**4.19**	**0.8**
24	Malaysia	3.94	4.00	4.21	4.27	4.33	4.43	**4.11**	**0.7**
25	Vietnam	2.57	2.86	3.09	3.31	3.73	4.17	**4.09**	**0.7**
26	Poland	3.93	3.97	4.15	4.31	4.37	4.24	**4.01**	**0.7**
27	Egypt	3.44	3.52	3.69	3.80	3.85	3.86	**3.65**	**0.7**
28	Pakistan	2.77	2.92	3.18	3.37	3.48	3.51	**3.47**	**0.6**
29	Singapore	3.15	3.35	3.48	3.59	3.61	3.53	**3.42**	**0.6**
30	Netherlands	3.47	3.52	3.59	3.53	3.53	3.51	**3.37**	**0.6**
Rest of World		**76.60**	**77.56**	**78.57**	**79.87**	**81.20**	**82.15**	**76.37**	**13.7**
Total World		**539.56**	**544.41**	**551.74**	**561.82**	**576.13**	**581.51**	**556.63**	**100.0**
of which: OECD		229.65	230.25	231.16	233.28	236.85	234.48	**217.11**	**39.0**
	Non-OECD	309.91	314.16	320.58	328.54	339.28	347.04	**339.52**	**61.0**
	European Union	59.59	60.35	61.03	61.80	61.79	60.74	**55.74**	**10.0**

Notes : Total may not add up due to rounding off. P : Provisional

1. Primary energy comprises commercially traded fuels, including modern renewables used to generate electricity.
2. Energy from all sources of non-fossil power generation is accounted for on an input-equivalent basis.
3. Conversion factor used for Oil as per product basket of 1 Mtoe = 0.0431 Exajoules, for all other fuels 1 Mtoe = 0.0419 Exajoules.

Source : BP Statistical Review of World Energy, June 2021.

XI. 24 : Per Capita Primary Energy Consumption-some International Comparisons during 2020

(Figures in Kg. Oil Equivalent)

S. No.	Country	Oil	Natural Gas	Coal	Nuclear Energy	Hydro electricity	Renewables	Total	Population (Million) Mid-2021
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	China	468.2	201.1	1390.3	55.0	198.4	131.7	2444.6	1412.3
2	US	2335.3	2211.1	679.4	545.2	189.3	454.0	6414.2	323.3
3	**India**	**150.3**	**36.8**	**300.5**	**6.8**	**24.9**	**24.5**	**543.7**	**1393.0**
4	Russian Federation	1016.6	2424.3	535.9	313.9	308.9	6.2	4605.8	145.8
5	Japan	1201.6	715.4	870.6	72.7	131.1	215.4	3206.8	125.4
6	Canada	2587.8	2533.4	309.4	541.2	2134.5	334.8	8441.1	38.2
7	Germany	1175.1	894.8	529.6	164.2	47.5	633.4	3444.6	83.1
8	Iran	903.8	2356.2	20.9	15.8	52.8	2.4	3351.9	85.0
9	Brazil	502.3	129.7	64.9	15.2	395.3	225.0	1332.4	212.8
10	South Korea	2196.5	939.6	1395.6	655.5	15.9	165.0	5368.1	51.8
11	Saudi Arabia	4208.1	2682.9	3.0	-	-	6.1	6900.1	35.9
12	France	951.5	535.0	70.8	1148.6	199.0	249.1	3154.0	65.3
13	Indonesia	197.5	129.7	282.5	-	15.0	32.0	656.6	275.1
14	United Kingdom	820.1	922.8	68.4	157.9	20.3	424.7	2414.2	67.5
15	Mexico	444.0	575.6	38.7	18.8	44.2	65.9	1187.2	128.8
16	Turkey	504.4	475.4	472.4	-	197.5	127.2	1776.9	83.8
17	Italy	839.0	985.3	83.6	-	167.8	271.9	2347.6	59.0
18	Australia	1645.5	1362.0	1562.2	-	119.4	415.0	5104.1	25.8
19	Thailand	830.7	603.5	260.4	-	14.4	98.6	1807.7	66.7
20	Spain	1079.7	587.5	36.7	260.3	123.0	385.6	2472.7	47.4
21	South Africa	392.4	57.9	1382.9	54.9	1.8	45.5	1935.4	60.1
22	Taiwan	1865.3	909.8	1659.7	283.6	27.3	94.5	4840.2	23.5
23	United Arab Emirates	3579.0	6103.7	264.1	35.1	-	120.2	10102.2	9.8
24	Malaysia	974.2	999.4	827.1	-	131.2	32.6	2964.6	32.8
25	Vietnam	226.3	74.7	500.6	-	145.9	20.0	967.5	100.2
26	Poland	778.8	484.9	1043.0	-	11.7	166.5	2484.9	38.2
27	Egypt	302.1	485.5	7.3	-	27.2	20.1	842.2	102.3
28	Pakistan	90.9	157.2	65.8	8.8	37.9	4.7	365.3	225.4
29	Singapore	11943.3	1899.0	82.4	-	-	36.2	13960.9	5.7
30	Netherlands	2008.5	1794.9	244.9	49.5	0.6	443.6	4541.9	17.5
Rest of World		**260.5**	**227.7**	**89.4**	**27.1**	**82.7**	**35.5**	**722.9**	**2495.5**
Total World		**514.3**	**419.1**	**461.1**	**73.0**	**116.2**	**96.6**	**1680.4**	**7837.0**

Notes : Total may not add up due to rounding off. P : Provisional

1. Primary energy comprises commercially traded fuels, including modern renewables used to generate electricity.
2. Energy from all sources of non-fossil power generation is accounted for on an input-equivalent basis.
3. Conversion factor used for Oil as per product basket of 1 Mtoe = 0.0431 Exajoules, for all other fuels 1 Mtoe = 0.0419 Exajoules.
4. Population 2020 data have been taken from "Population Reference Bureau"

Source : BP Statistical Review of World Energy, June 2021.

XI. 25 : Growth in Per-Capita Primary Energy Consumption in Select Countries of the World

(Figures in Gigajoule per capita)

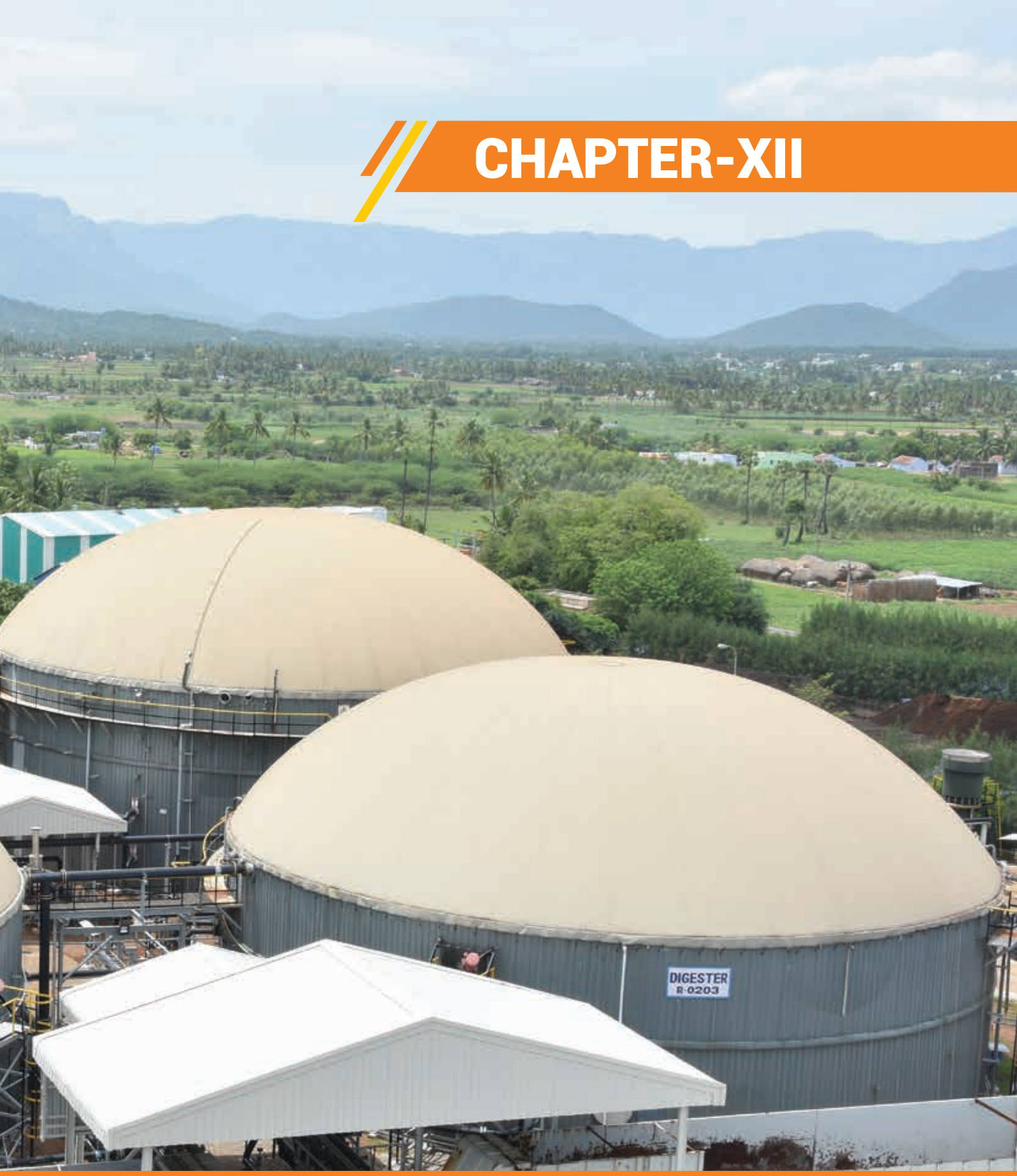
S. No.	Country	2014	2015	2016	2017	2018	2019	2020 (P)	% Growth in 2020 over 2019
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	China	89.19	89.94	90.97	93.46	96.37	99.06	101.06	2.0
2	US	291.80	286.98	284.69	283.79	292.39	288.38	265.24	-8.0
3	**India**	**21.45**	**21.89**	**22.62**	**23.26**	**24.50**	**24.80**	**23.18**	**-6.6**
4	Russian Federation	198.51	194.72	198.40	199.27	206.58	204.95	194.02	-5.3
5	Japan	149.94	147.87	146.38	148.31	147.83	144.80	134.65	-7.0
6	Canada	397.99	395.93	387.74	387.76	389.45	386.28	361.11	-6.5
7	Germany	161.63	163.82	165.68	166.74	161.64	156.27	144.55	-7.5
8	Iran	128.86	126.54	130.76	133.81	139.59	144.41	143.23	-0.8
9	Brazil	61.05	59.67	57.65	57.91	57.85	58.86	56.49	-4.0
10	South Korea	95.32	91.94	94.75	92.93	88.18	88.94	82.65	-7.1
11	Saudi Arabia	339.42	341.15	337.72	330.21	315.87	311.68	303.34	-2.7
12	France	154.12	154.43	151.32	149.83	152.06	148.51	133.35	-10.2
13	Indonesia	27.50	27.45	27.43	28.23	30.15	31.98	27.91	-12.7
14	United Kingdom	122.14	122.70	120.54	119.25	118.36	114.42	101.56	-11.2
15	Mexico	63.95	63.10	63.13	63.30	62.15	59.21	50.23	-15.2
16	Turkey	67.74	72.88	75.30	78.56	76.43	77.99	74.58	-4.4
17	Italy	103.34	106.04	106.25	107.52	108.40	106.47	96.97	-8.9
18	Australia	234.80	237.01	234.77	230.52	228.82	233.19	218.38	-6.4
19	Thailand	74.34	75.78	77.15	78.19	79.61	79.19	73.33	-7.4
20	Spain	117.88	119.80	120.96	122.52	124.02	119.72	106.35	-11.2
21	South Africa	95.32	91.94	94.75	92.93	88.18	88.94	82.65	-7.1
22	Taiwan	208.69	207.96	207.57	208.04	210.37	206.18	202.32	-1.9
23	United Arab Emirates	438.20	481.93	495.87	490.56	476.70	465.97	423.67	-9.1
24	Malaysia	131.92	132.03	137.10	137.24	137.25	138.68	127.07	-8.4
25	Vietnam	28.07	30.88	32.98	34.96	39.01	43.19	42.01	-2.7
26	Poland	103.29	104.48	109.25	113.69	115.11	111.78	106.03	-5.1
27	Egypt	38.06	38.05	39.12	39.39	39.15	38.47	35.64	-7.4
28	Pakistan	14.20	14.62	15.62	16.21	16.39	16.23	15.73	-3.1
29	Singapore	570.55	599.48	615.35	628.79	626.32	607.77	583.89	-3.9
30	Netherlands	205.67	207.98	211.27	207.50	206.84	205.45	196.82	-4.2
Total World		**73.94**	**73.76**	**73.91**	**74.42**	**75.48**	**75.37**	**71.40**	**-5.3**
of which: OECD		174.04	173.44	173.08	173.65	175.31	172.65	159.13	-7.8
	Non-OECD	51.85	51.90	52.30	52.94	54.01	54.59	52.79	-3.3
	European Union	134.79	136.33	137.67	139.21	138.99	136.50	125.18	-8.3

Notes : Total may not add up due to rounding off. P : Provisional

1. Primary energy comprises commercially traded fuels, including modern renewables used to generate electricity.
2. Energy from all sources of non-fossil power generation is accounted for on an input-equivalent basis.

Source : BP Statistical Review of World Energy, June 2021.

CHAPTER-XII



Bio-Fuels

CHAPTER HIGHLIGHTS

Ethanol Blending with Petrol by Oil's CPSEs during Ethanol Supply Year (ESY) 2020-21 was 7.7%. Total 143.77 crore litres ethanol blended in the country during ESY 2020-21 as compared to 170.53 crore litres in 2019-20, which is 15.7% lower.

Highest ethanol blending showing in Uttarakhand, Delhi and Haryana around 10% during ESY 2020-21.

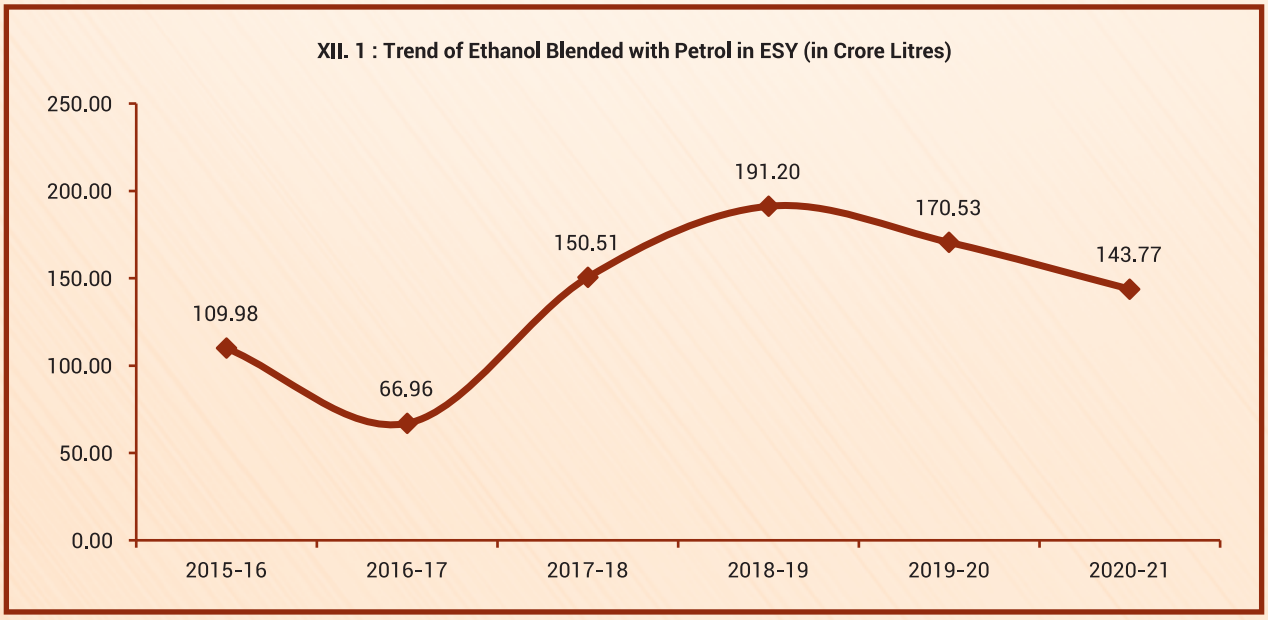
There has been a steep fall in Bio-Diesel procurement and blending during 2020-21. Bio-Diesel blended by CPSEs (0.52 crore litres) which was lower by 95.05% when compared 2019-20 (10.41 crore litres).

Ethanol received by Oil's CPSEs under the Ethanol blending Programme during 2020-21 was 152.02 crore litres which is 12.1% lower as compared to 173.03 crore litres in 2019-20.

Total number of Retail Outlets selling Biofuels blended Petrol/Diesel during 2020-21 was 59829, which increased by 19.8% as compared to 49935 in 2019-20.

XII.1: Ethanol Blended with Petrol

Company Name	Unit	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
As per Financial Year-wise							
IOCL	Crore Litres	41.60	49.00	40.30	79.80	74.90	93.33
	%	3.17	3.38	2.67	4.96	4.44	5.96
BPCL	Crore Litres	21.51	23.71	19.54	49.96	45.72	59.51
	%	2.55	2.63	1.99	4.79	4.17	5.86
HPCL	Crore Litres	26.10	29.10	19.30	53.50	46.10	58.84
	%	3.30	3.45	2.11	5.50	4.90	6.19
Total CPSEs	**Crore Litres**	**89.21**	**101.81**	**79.14**	**183.26**	**166.72**	**211.68**
	%	**3.03**	**3.18**	**2.33**	**5.05**	**4.50**	**6.08**
As per Ethanol Supply Year (ESY) Year-wise							
IOCL	Crore Litres	50.98	35.36	67.61	84.89	78.02	59.51
	%	3.60	2.40	4.30	5.00	5.10	7.25
BPCL	Crore Litres	26.81	15.16	37.56	51.98	45.60	43.53
	%	3.00	1.60	3.70	4.70	4.70	7.95
HPCL	Crore Litres	32.18	16.45	45.34	54.34	46.91	40.73
	%	3.80	1.90	4.80	5.30	5.10	8.01
Total CPSEs	**Crore Litres**	**109.98**	**66.96**	**150.51**	**191.20**	**170.53**	**143.77**
	%	**3.50**	**2.00**	**4.20**	**5.00**	**5.00**	**7.66**



XII. 2 : State-wise Percentage of Ethanol Blended with Petrol (Sales) by CPSEs

As per Financial Year Unit as per Supply Year (ESY) Year-Wise

State/UT	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Andhra Pradesh	4.0	1.8	6.1	4.8	4.8	1.7	4.4	6.1	3.4	8.5
Andman & Nikobar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arunachal Pradesh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Assam	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bihar	5.7	6.5	6.4	6.6	8.8	6.3	6.4	6.6	8.2	9.3
Chandigarh	4.2	3.0	5.9	6.0	9.0	2.7	1.5	6.7	8.9	9.3
Chhattisgarh	0.2	0.0	1.2	4.2	7.7	0.0	0.0	3.8	6.2	8.8
Dadar & Nagar Haveli and Daman & Diu	-	-	-	-	6.4	-	-	-	-	9.7
Delhi	5.5	5.0	8.5	5.5	9.9	4.4	8.5	6.6	7.3	10.0
Goa	3.7	0.0	7.5	3.2	6.1	0.1	4.6	4.6	4.8	9.6
Gujarat	1.5	1.0	4.8	5.1	7.9	0.9	3.2	6.0	6.3	9.4
Haryana	5.1	2.6	6.4	8.1	9.7	2.6	5.9	8.5	9.5	10.0
Himachal Pradesh	2.8	2.6	4.1	4.6	9.1	2.6	0.2	4.8	7.9	9.7
Jammu & Kashmir	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Jharkhand	1.0	0.0	0.0	0.1	5.2	0.1	0.0	0.1	3.8	5.2
Karnataka	3.9	2.7	7.7	6.6	7.6	2.1	6.7	7.0	7.3	9.7
Lakshadweep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerala	0.1	0.0	0.2	0.1	1.0	0.0	0.0	0.2	0.1	3.1
Ladakh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madhya Pradesh	0.3	0.0	3.1	4.5	7.4	0.0	1.1	5.1	6.3	8.7
Maharashtra	6.1	2.7	9.1	5.7	6.9	1.8	7.9	6.6	5.7	9.6
Manipur	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meghalaya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mizoram	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Odisha	0.1	0.1	0.1	0.2	1.0	0.1	0.0	0.1	0.4	2.8
Pondicherry	0.5	0.3	0.7	0.7	1.8	0.3	0.1	1.0	0.4	4.3
Punjab	3.0	3.7	6.4	7.3	9.5	3.6	6.3	7.7	9.1	9.6
Rajasthan	0.0	0.0	0.4	1.8	2.4	0.0	0.1	2.0	1.4	4.7
Sikkim	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tamil Nadu	0.0	0.2	1.2	1.4	3.2	0.1	0.3	2.1	1.1	7.1
Telangana	5.3	1.7	8.2	3.8	5.3	0.4	7.4	5.4	3.1	8.9
Tripura	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uttar Pradesh	7.5	8.2	9.1	8.6	9.6	7.9	8.9	8.9	9.5	9.9
Uttarakhand	5.2	5.5	7.6	8.5	9.8	5.3	5.0	8.3	9.7	10.0
West Bengal	1.6	1.0	1.6	1.1	1.3	1.0	1.2	1.8	1.1	1.5
Total	**3.2**	**2.3**	**5.0**	**4.5**	**6.0**	**2.0**	**4.2**	**5.0**	**5.0**	**7.7**

: Provisional

Source : Oil Companies

XII. 3 : Quantity of Bio Diesel Blended with Diesel

(Figures in Crore Litres)

Company Name	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share in 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
IOCL	0.40	1.19	2.29	3.70	4.10	0.23	44.6
BPCL	0.19	0.67	0.82	1.60	1.26	0.02	3.0
HPCL	0.38	1.10	1.24	2.78	5.05	0.27	52.4
Total CPSEs	**0.97**	**2.96**	**4.35**	**8.08**	**10.41**	**0.52**	**100.0**

Source : Oil Companies P : Provisional

XII. 4 : Ethanol received by CPSE OMCs under Ethanol Blending Programme

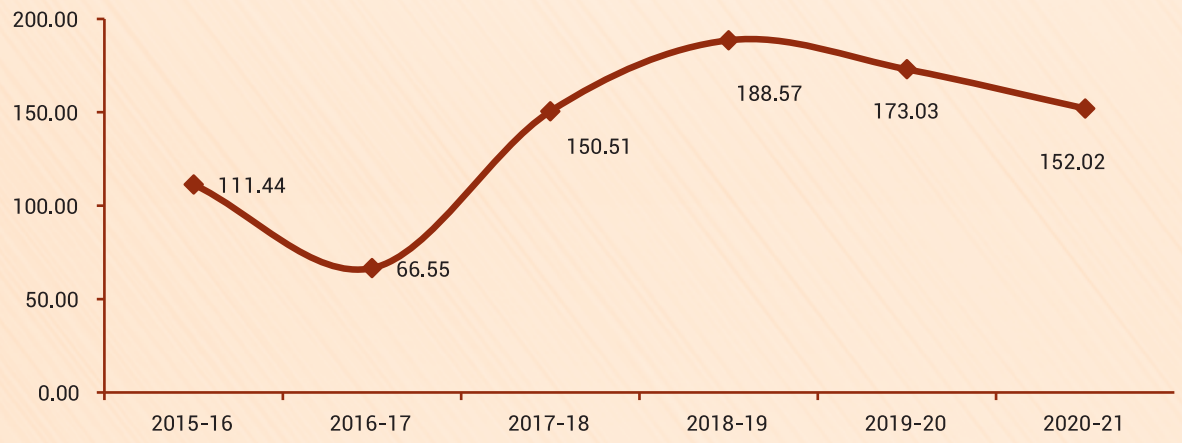
(Figures in Crore Litres)

Company Name	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share in 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
As per Financial Year-wise							
IOCL	42.30	47.40	41.20	82.00	76.70	97.27	43.9
BPCL	19.33	21.89	18.51	48.70	44.85	60.04	27.1
HPCL	18.19	28.67	21.57	56.72	48.42	64.29	29.0
Total CPSEs	**79.82**	**97.96**	**81.28**	**187.42**	**169.97**	**221.60**	**100**
As per Ethanol Supply Year (ESY) Year-wise							
IOCL	52.79	35.94	67.61	84.11	80.39	63.45	41.7
BPCL	25.35	13.43	37.56	50.46	44.35	44.76	29.4
HPCL	33.30	17.18	45.34	54.00	48.30	43.81	28.8
Total CPSEs	**111.44**	**66.55**	**150.51**	**188.57**	**173.03**	**152.02**	**100**

Note : Difference between ethanol received and blending due to stock & inventories etc.

Source : Oil Companies P : Provisional

XII. 2 : Trends of Ethanol received by CPSEs in ESY (in Crore Litres)

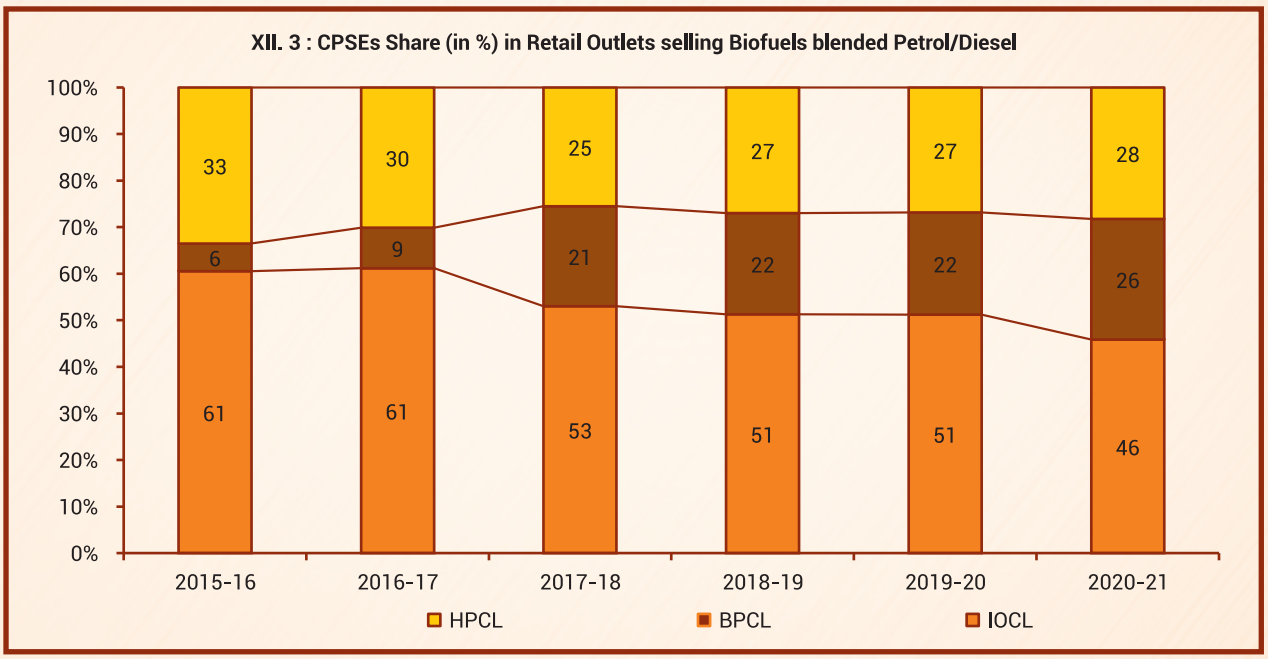


XII. 5 : Number of Retail Outlets selling Biofuels blended Petrol/Diesel

Company Name	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	% Share in 2020-21
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
IOCL	16892	18296	17070	23622	25587	27442	45.87
BPCL	1670	2600	6907	10029	10940	15509	25.92
HPCL	9348	9001	8200	12418	13408	16878	28.21
Total CPSEs	**27910**	**29897**	**32177**	**46069**	**49935**	**59829**	**100**

Source : Oil Companies

P : Provisional



XII. 6 : State-wise/UT-wise Ethanol received by CPSE OMCs under Ethanol Blending Programme

(Figures in Crore Litres)

	2016-17	2017-18	2018-19	2019-20	2020-21 (P)	2016-17	2017-18	2018-19	2019-20	2020-21 (P)
	As per Financial Year-wise					As per Ethanol Supply Year (ESY) Year-wise				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Andhra Pradesh	5.26	2.60	9.66	7.76	8.84	2.27	6.49	10.16	5.34	8.38
Andman & Nikobar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Assam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Bihar	5.01	6.33	7.11	7.45	9.62	5.98	6.28	6.84	8.39	5.57
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chhattisgarh	0.10	0.00	0.94	3.45	6.34	0.00	0.00	3.26	4.70	3.76
Dadar & Nagar Haveli and Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delhi	6.84	6.87	10.71	6.75	7.73	5.64	10.91	8.40	6.69	2.93
Goa	0.83	0.00	1.96	0.85	1.27	0.00	1.17	1.21	0.79	1.18
Gujarat	2.93	2.18	10.59	11.14	15.64	1.76	6.68	13.36	12.36	9.32
Haryana	5.33	3.97	9.97	12.54	15.06	3.58	7.35	12.38	13.07	7.84
Himachal Pradesh	0.00	0.00	0.00	0.11	2.37	0.00	0.00	0.07	1.62	1.33
Jammu & Kashmir	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.05
Jharkhand	0.16	0.00	0.00	0.17	3.49	0.04	0.00	0.07	2.41	1.96
Karnataka	9.12	6.91	21.32	19.61	20.76	5.10	17.81	19.40	18.77	14.13
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Kerala	0.00	0.00	0.00	0.00	1.90	0.00	0.00	0.00	0.00	3.24
Ladakh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Madhya Pradesh	0.39	0.00	5.54	7.99	12.89	0.01	1.79	9.31	10.24	7.41
Maharashtra	24.85	12.45	40.79	25.80	28.82	7.40	35.99	29.78	21.92	21.84
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Odisha	0.01	0.00	0.00	0.00	1.16	0.00	0.00	0.00	0.35	1.60
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Punjab	3.82	4.58	8.44	10.47	12.64	4.41	6.56	10.40	11.53	6.89
Rajasthan	0.00	0.00	0.93	3.27	4.76	0.00	0.10	4.10	2.67	4.49
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tamil Nadu	0.04	0.58	4.34	4.87	11.24	0.18	0.99	7.48	3.52	13.25
Telangana	6.94	2.55	13.08	5.94	8.62	0.43	10.90	8.88	4.65	8.12
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uttar Pradesh	24.70	29.65	37.65	37.79	43.96	27.32	34.01	38.70	40.15	26.08
Uttarakhand	0.00	1.50	2.35	2.43	2.66	1.32	2.00	2.45	2.44	1.43
West Bengal	1.62	1.13	2.03	1.56	1.86	1.11	1.47	2.30	1.44	1.20
Total CPSEs	**97.94**	**81.30**	**187.42**	**169.96**	**221.61**	**66.55**	**150.51**	**188.57**	**173.03**	**152.02**

P : Provisional

Source : Oil Companies

APPENDIX

APPENDICES

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Abbreviations

(I) Companies/Organisations	
AFPC, Syria	**Al Furat Petroleum Company, Syria.**
AGC	**Assam Gas Company**
BL	Balmer Lawrie & Co. Ltd.
BLIL	Balmer Lawrie Investments Ltd.
BORL	Bharat Oman Refinery Ltd.
BP	British Petroleum
BPCL	Bharat Petroleum Corporation Ltd.
CAIRN	Cairn India Limited
CPCL	Chennai Petroleum Corporation Ltd.
DGCIS	Directorate General of Commercial Intelligence and Statistics
DGH	Directorate General of Hydrocarbons
DNPL	Duliajan Numaligarh Pipeline Limited
EIL	Engineers India Ltd
GAIL	Gail (India) Limited
GOI	Government of India
GPOC, South Sudan	Greater Pioneer Operating Company, South Sudan
HMEL	HPCL Mittal Energy Ltd.
HPCL	Hindustan Petroleum Corporation Ltd.
IEC, Russia.	Imperial Energy Corporation, Russia.
IOCL	Indian Oil Corporation Ltd.
ISPRL	Indian Strategic Petroleum Reserves Limited.
MECL	Mansarovar Energy Colombia Ltd.
MoPNG	Ministry of Petroleum & Natural Gas
MoSPI	Ministry of Statistics And Programme Implementation
MRPL	Mangalore Refinery & Petrochemical Ltd.
NEL	Nyara Energy Ltd. (Formerly known as Essar Oil Ltd.)
NRL	Numaligarh Refinery Ltd.
OIL	Oil India Limited
OMC	Oil Marketing Company.
ONGC	Oil & Natural Gas Corporation Ltd.
OPEC	Organization of the Petroleum Exporting Countries
OVL	ONGC Videsh Ltd
P&NG	Petroleum & Natural Gas
PPAC	Petroleum Planning & Analysis Cell.
RBI	Reserve Bank of India.
RIL	Reliance Industries Ltd.

(II) Petroleum Products	
ATF	Aviation Turbine Fuel.
CBFS	Carbon Black Feed Stock
CBM	Coal bed Methane
CNG	Compressed Natural Gas.
EBP	Ethanol Blended Petrol
FO	Furnace Oil
HHS	Hot Heavy Stock
HSD	High Speed Diesel.
HSDO	High Speed Diesel Oil
HSFO	Heavy/High Sulphur Fuel Oil
LABFS	Linear Alkyl Benzene Feed Stock
LDF	Light Distillate Feedstock
LDO	Light Diesel Oil
LNG	Liquefied Natural Gas
LO	Lubricating Oil
LOBS	Lube Oil Base Stocks.
LPG	Liquefied Petroleum Gas.
LSHS	Low Sulphur Heavy Stock
LSWR	Low Sulphur Waxy Residue.
Mogas	Motor Gasoline.
Motor Spirit	Petrol
MS	Motor Spirit/Petrol
MTBE	Methyl Tertiary Butyl Ether
MTO	Mineral Turpentine Oil
NGL	Natural Gas Liquids
Pet-coke	Petroleum Coke.
PNG	Piped Natural Gas
RFO	Residual Fuel Oil
RPO	Rubber Process Oil.
SKO	Superior Kerosene Oil
VGO	Vacuum Gas Oil

(III) Prefixes Used in Metric Tables	
Prefix	Meaning
Centi	One Hundredth (1/100=0.01)
Deci	One Tenth (1/10=0.1)
Deka	Ten(10)
Hecto	One Hundred (100)
Kilo	One Thousand (1,000)
Mega	One Million (1,000,000)
Milli	One Thousandth (1/1000=0.001)
Unit	One (1)

(IV) Others	
A&AA	Assam & Assam Arakan
A.N Islands	Andaman Nicobar Islands
ACG, Azerbaijan	Azeri-Chirag-Deepwater Gunashli, Azerbaijan
Addl.	Additional
bbl.	Barrel
BCM	Billion Cubic Meter
BE	Budgetary Estimates.
BMC	Bombay Municipal Corporation.
Bn.Cu.Mtr.	Billion Cubic Meters
BPA	Bassein Platform A
BPB	Bassein Platform B
CAGR	Compound Annual Growth Rate
CEA.	Chief Economic Advisor
CGD	City Gas Distribution
China Hong Kong SAR	China Hong Kong Special Administrative Region
CIF	Cost Insurance Freight
CIS	Commonwealth of Independent States
CPSEs	Central Public Sector Enterprises
CRBC	Central Region Basin Coast
CSR	Corporate Social Responsibility
CST	Central Sales Tax
Cyl.	Cylinder
DBTL	Direct Benefit Transfer of LPG
Dom.	Domestic
DVPL	Dahej-Vijaipur Pipeline
DWT	Dead Weight Tonnage
EPS	Earning per share
ERBC	Eastern Region Basin cost
FDI	Foreign Direct Investment
FDZ	Free Delivery Zone
FOB	Free on Board
FPC	Federal Power Commission
GBS	Gross Budgetary Support
GCV	Gross Calorific Value
GDP	Gross Domestic Product
GNOP	Greater Nile Oil Project
GREP	Gas Rehabilitation and Expansion
GVA	Gross Value Added
HELP	Hydrocarbon Exploration Licensing Policy
HVJ	Hazira-Vijaipur-Jagdishpur
I&EBR	Internal and Extra Budgetary Resources

(IV) Others(Contd.)	
Int. Con.	Internal Consumption
JV	Joint Venture
K.Cal	Kilocalories
K.g	Kilogram.
KG - D6	Krishna Godavari Dhirubhai 6
Kl	Kilo litre
KM	Kilometer
LK	Line kilometer
ltr	Litre.
M.Sq.Km	Million square kilometer
MMSCMD	Million Metric Standard Cubic Meter per day
MMT	Million Metric Tonnes
MMTOE	Million Metric Ton of Oil Equivalent
MMTPA	Million Metric Tonnes Per Annum
Mn. Tonne	Million Tonne.
MST	Manufacturers' Sales Tax
MT	Metric Ton
MUT	Mumbai-Uran Trunk
MWh	Megawatt Hour
n.a	Not Available
NCV	Net Calorific Value
NE	North East.
NELP	New Exploration Licensing Policy
NNI	Net National Income
NRBC	Northern Region Basin Coast
OEG	Oil Equivalent of Gas
PAT	Profit after Tax.
PDS	Public Distribution System
PMUY	Pradhan Mantri Ujjwala Yojana.
PPP	Purchasing Power Parity
PSC	Production Sharing Contract
R.E.S.	Renewable Energy Source
R/P ratio	Reserves-to-Production Ratio
RBF	Refinery Boiler Fuel and Losses
RE	Revised Estimate
RON	Research Octane Number
RSP	Retail Selling Price
S.& Cent. America	South & Central America
S.E.Z	Special Economic Zone
SAD	Special Additional Duty
SCM	Standard Cubic Meter.
SDR	Special Drawing Right
SION	Standard Input Output Norms
SKM	Square Kilometer
SRBC	Southern Region Basin Coast
t/w/d	Tonne/Well/Day
TCF	Trillion Cubic Feet
TMT	Thousand Metric Tonnes
TMTPA	Thousand Metric Tonnes per Annum.
Tr.Cu.ft.	Trillion Cubic Feet
VAT	Value Added Tax
Vol.	Volume
WPI	Wholesale Price Index
WRBC	Western Region Basin Coast

Conversion Factors

(V) Metric Units	
Linear	
10 Millimetres	1 Centimetre.
10 Centimetres	1 Decimetre
10 Decimetres	1 Metre
10 Metres	1 Decametre
10 Decametres	1 Hectometre
10 Hectometres	1 Kilometre
Area	
100 Sq. Millimetres	1 Sq. Centimetre
100 Sq. Centimetres	1 Sq. Decimetre
100 Sq. Decimetres	1 Sq. Metre
100 Sq. Metres	1 Sq. Decametre-1 Acre.
100 Sq. Acres	1 Sq. Hectometre-1 Hectare.
100 Hectares	1 Sq. Kilometre.
Weight	
10 Milligrams	1 Centigram
10 Centigrams	1 Decigram
10 Decigrams	1 Gram
10 Grams	1 Decagram
10 Decagrams	1 Hectogram
10 Hectograms	1 Kilogram.
100 Kilograms	1 Quintal
1000 Kilograms	1 Metric Tonne.
Capacity	
10 Millilitres	1 Centilitre
10 Centilitres	1 Decilitre
10 Decilitres	1 Litre
10 Litres	1 Decalitre
10 Decalitres	1 Hectolitre
10 Hectolitres	1 Kilolitre
Volume	
1000 Cubic Millimetres	1 Cubic Centimetre
1000 Cubic Centimetres	C
1000 Cubic Decimetres	1 Cubic Metre

(VI) Linear and Square Measures	
Length	
1 Inch	25.4 Millimetres (mm)
	0.0254 Metres.
1 Foot	12 Inches.
	0.333333 Yard
	0.3048 Metre (m).
1 Yard	36 Inches.
	3 Feet
	0.9144 Metre (m)
1 Metre	39.3701 Inches.
	3.28084 Feet
	1.09361 Yards
	0.001 Kilometre (km.)
1 Kilometre	1000 Metre (m)
	0.621371 Mile
1 Mile	1760 Yard
	1.60934 Kilometre (km.)
1 International	6076.12 Feet
1 Nautical Mile	1.852 Kilometre (km)
	1.5152 Statute mile
Area	
1 Square Inch	645.16 Square Millimetres (mm^2).
1 Square Foot	0.0929030 Square Metre (m^2).
1 Square Yard	9 Square Feet.
	0.836127 Square Metre (m^2).
1 Square Metre	10.7639 Square Feet.
	1.19599 Square Yards.
1 Acre	4840 Square Yards
	4046.86 Sq. Metres (m^2)
	0.404686 Hectares.
1 Hectare	10,000 Square Metres (m^2).
	2.47105 Acres.
	0.01 Square Kilometre (km^2)
1 Square Kilometre	100 Hectares.
	0.386102 Square Mile.
1 Square Mile	640 Acres.
	258.999 Hectares
	2.58999 Square Kilometre (km^2).

(VII) Mass and Weights	
1 Ounce	28.3495 Grams (g).
1 Pound	0.453592 Kilogram (Kg.)
	0.00892857 Hundred Weight
1 Kilogram	2.20462 Pounds.
	0.01 Quintal
1 Hundred Weight (Cwt)	112 Pounds.
	50.8023 Kilograms (Kg.)
1 American (Short) Ton	2000 Pounds.
	0.892857 Long Ton
	0.97185 Tonnes
1 Tonne (Metric Ton)	2204.62 Pounds
	1000 Kilograms (Kg.)
	1.10231 Short tons
	0.984207 Long Ton
1 Imperial (Long) Ton	2240 Pounds
	1.12 Short Tons.
	1.01605 Tonnes.
(VIII) Energy and Power	
1 International Table (IT) Calorie	4.1868 Joules (J).
115 C calorie	4.1855 Joules (J)
1 Thermochemical Calorie	4.184 Joules (J)
1 Kilo Calories (IT)	1000 Calories
	3.96832 British Thermal Units
	1.163 Watt Hours
	1 Thermie
1 Kilowatt Hour	3412.14 British Thermal Units
	859.845 Kilo Calories
	3.6 Megajoules (MJ)
	1.34102 Horse Power Hours.
1 Therm	100,000 British Thermal Units (BTU).
	105.506 Megajoules (MJ)
	29.3071 Kilowatt Hours
	25.1996 Thermies
	25200 Kilocalories
1Metric Horsepower (Pferdestaerke or Cheval Vapeur)	735.499 watts (W).
	542.476 Foot Pounds Force/Second.
	0.986320 Imperial Horse Power
1 Imperial Horsepower	745.700 Watts (W)
	550 Foot Pounds Force/Second
	1.01387 Metric Horse Power.
1 Kilowatt	737.562 Foot Pounds Force/Second
	1.35962 Metric Horsepower
	1.34102 Imperial Horsepower.
	1000 Watts.
1 BTU	0.252 Kilocalories
	1.055 Kilojoules

(IX) Cubic Measures Volume	
1 Cubic Inch	16.3871 Cubic Centimetres (cm^3)
1 Pint	0.568261 Cubic Decimetres (dm^3) or Litres.
1 Litre	61.024 Cubic Inches
	1.75975 Pints
	1 Cubic Decimeter (dm^3)
	0.264172 American Gallons
	0.219963 Imperial Gallons
	0.0353147 Cubic Foot
1 Hectolitre	100 Cubic Decimetres (dm3) or
	100 Litres
1 American Gallon	231 Cubic Inches
	3.78541 Cubic Decimetres or Litres
	0.832674 Imperial Gallon.
	0.133681 Cubic Foot.
	0.0238095 American Barrel.
	0.00378541 Cubic Metre (M^3)
1 Imperial Gallon	277.420 Cubic Inches
	4.54609 Cubic Decimetres (dm3) or Litres
	1.20095 American Gallon
	0.160544 Cubic Foot
	0.02894 American Barrel
	0.00454609 Cubic Metre (m^3)
1 Cubic Foot	28.3168 Cubic Decimetres (dm^3) or Litres
	7.48052 American Gallons
	6.22883 Imperial Gallons
	0.17811 American Barrel
	0.0283168 Cubic Metre (m^3)
1 Americal Barrel	9702 Cubic Inches
	158.987 Cubic Decimetres (dm^3) or Litres
	42 American Gallons
	34.9726 Imperial Gallons
	5.6146 Cubic Feet
	0.158987 Cubic Metre (M^3)
1 Cubic Metres	1000 Litres.
	264.172 American Gallons
	219.969 Imperial Gallons
	35.3147 Cubic Feet
1 Kilolitre	1000 Cubic Decimetres (dm^3) or Litres
	6.28981 Americal Barrels.
1 Gross Ton (Shipping)	2.83168 Cubic Metres or 100 Cubic Feet
	or Permanently Enclosed Space
1 Ton of Liquefied Methane	Approx. 16 Barrels
	Approx. 1400 Cubic Metres of Natural
	Gas depending upon Methane Content

(X) Product Conversion Factor			
(Conversion Factor from Volume to Tonnes at Natural Temp.)			
Product	Litres to Metric Tonnes	Tonnes per K.L	American Barrels to Metric Tonnes
Aviation Spirit 100/130	1421	0.7034	8.94
Aviation Spirit 144/145	1449	0.6901	9.11
Aviation Spirit 73 ON	1432	0.6983	9.01
Motor Spirit 79 ON	1427	0.7008	8.98
Motor Spirit 80 ON	1427	0.7008	8.98
Motor Spirit 93 ON	1386	0.7215	8.72
Motor Spirit 95 ON	1359	0.7358	8.55
Motor Spirit 83 ON/87 ON	1411	0.7087	8.88
JP-4	1384	0.7225	8.71
JP-5	1273	0.7855	8.01
Aviation Turbine Fuel	1288	0.7764	8.10
Naphtha	1467	0.6817	9.23
Power Alcohol	1286	0.7776	8.09
Benzol	1154	0.8666	7.26
SBP Spirit/Hexane	1457	0.6863	9.16
Mineral Turpentine (Laws 140/205)	1302	0.7680	8.19
Liquefied Petroleum Gas	1785	0.5602	11.23
Superior Kerosene	1285	0.7782	8.08
Inferior Kerosene	1265	0.7905	7.96
Power Kerosene (Vap. Oil)	1251	0.7994	7.87
High Speed Diesel	1210	0.8263	7.61
Light Diesel Oil	1172	0.8532	7.37
Malarial Oil	1172	0.8532	7.37
Special Larvicides	1175	0.8511	7.39
Furnace Oil	1071	0.9337	6.74
Tea Drier Oil	1071	0.9337	6.74
Hot Heavy Stock/LSHS	1017	0.9833	6.40
Refinery Gas/Ref. Boiler Fuel	1071	0.9337	6.74
Lubricants/Greases	1114	0.8977	7.01
Jute Batching Oil/Wash Oils	1167	C	7.34
Bitumen	1002	0.9980	6.30
SBP/Alcohol Mixture	1414	0.7072	8.89
Methanol Mixture	1106	0.9042	6.96
Carbon Black Feed Stock	1134	0.8818	7.13
Carburetor Testing Fluid	1388	0.7205	8.73
Benzene	1131	0.8812	7.05
Toluene	1148	0.8711	7.19
Demineralised Water	1002	0.9930	6.30
S. Glass Kleanzit	1003	0.9970	6.31
Miscellaneous	1114	0.8977	7.01
Wax/P. Coke/Chemicals	1114	0.8977	7.01
Aromex	1221	0.8190	7.68
Linear Alkyl Benzene Feed Stock	1205	0.8239	7.88

(XI) Volume per Metric Ton of Petroleum Products				
Products	Kilolitre	Imperial Gallon	U.S. Gallon	Barrel
Liquefied Petroleum Gas	1.8519	407.365	489.213	11.648
Aviation Spirit	1.3699	301.332	361.873	8.613
Natural Gasoline	1.3514	297.265	356.990	8.496
Motor Spirit	1.3514	297.265	356.990	8.496
Kerosene	1.2346	271.569	326.137	7.764
Jet Fuel	1.2346	271.569	326.137	7.764
Distillate Fuel Oil	1.1494	252.415	293.522	6.988
Lubricating Oil	1.1111	252.845	303.647	7.231
Fuel Oil N.O.S.	1.0939	241.727	290.301	6.911
Residual Fuel Oils	1.0526	231.551	278.071	6.623
Asphalt and Bitumen	0.9615	211.515	254.013	6.050
Crude Oil	1.1856	260.910	313.340	7.441

(XII) Conversion Factors for Duty Reduction from 15^0 C to 29.5^0 C	
Product	Conversion Factor
Aviation Spirit 100/130	0.9827
Aviation Spirit 114/145	0.982
Aviation Spirit 73 Clear	0.9824
Aviation Turbine Fuel	0.9862
Motor Spirit 83	0.983
Motor Spirit 93	0.9836
High Speed Diesel Oil	0.9879
Kerosene	0.9864
Light Diesel Oil	0.9877
Furnace Oil	0.9899
Special Boiling Point Spirit 55/115	0.9820
Special Boiling Point Spirit 64/69	0.9806
Solvent 1425	0.9820
Hexane	0.9806

(XIII) Crude Oil Conversions*					
To convert the following into	Metric Tonnes	Barrels	Kilolitres	1000 Imp. Gallon	1000 U.S Gallon
Metric Tons	1	7.33	1.16	0.256	0.308
Barrels	0.136	1	0.159	0.035	0.042
Kilolitres	0.863	6.29	1	0.220	0.264
1,000 Imp. Gallons	3.91	28.6	4.55	1	1.201
1,000 U.S. Gallons	3.25	23.8	3.79	0.833	

* Based on World Average Gravity (Excluding Natural Gas liquids)

(XIV) Natural Gas Conversions		
1 SCM (Standard Cubic Meter)	= 1 cubic metre @ 1 atmosphere pressure and 15.56° C	
1 Cubic Metre	= 35.31 Cubic feet	
1 BCM(Billion Cubic Metre) / Year of gas (consumption or production)	= 2.74 MMSCMD	365 Days a Year
1 TCF (Trillion Cubic Feet) of Gas Reserve	= 3.88 MMSCMD	100% Recoverable for 20 years @ 365 days/ annum)
1 MMTPA of LNG	=3.60 MMSCMD	Molecular Weight of 18 @ 365 days/ annum)
1 MT of LNG	=1314 SCM	Molecular Weight of 18
Gross Calorific Value (GCV)	10000 Kcal/ SCM	
Net Calorific Value (NCV)	90% of GCV	
1 Million BTU (MMBTU)	= 25.2 SCM	@10000 Kcal/SCM; 1 MMBTU= 252,000 Kcal)
Specific Gravity of Gas	0.62	Molecular Weight of Dry Air=28.964 gm/mole)
Density of Gas	=0.76 Kg/SCM	Molecular Weight of Gas 18 gm/mol
Gas required for 1 MW of Power generation	=4128 SCM per Day	@50% efficiency of Combined Cycle Operation; at a station heat rate of 860 Kcal/Kwh~ 1720 Kcal/Kwh@50% Thermal Efficiency)
Power Generation from 1 MMSCMD Gas	=242 MW	@50% efficiency of Combined Cycle Operation; at a station heat rate of 860 Kcal/Kwh~ 1720 Kcal/Kwh@50% Thermal Efficiency)

Source : PPAC

(XV) Other Conversion					
Crude oil*					
From	**To convert**				
	tonnes (metric)	**kilolitres**	**barrels**	**US gallons**	**tonnes/year**
Multiply by					
Tonnes (metric)	1	1.165	7.33	307.86	–
Kilolitres	0.8581	1	6.2898	264.17	–
Barrels	0.1364	0.159	1	42	–
US gallons	0.00325	0.0038	0.0238	1	–
Barrels/day	–	–	–	–	49.8

Products				
From	**To convert**			
	barrels to tonnes	**tonnes to barrels**	**kilolitres to tonnes**	**tonnes to kilolitres**
Multiply by				
Liquefied petroleum gas (LPG)	0.086	11.60	0.542	1.844
Gasoline	0.120	8.35	0.753	1.328
Kerosene	0.127	7.88	0.798	1.253
Gas oil/ diesel	0.134	7.46	0.843	1.186
Residual fuel oil	0.157	6.35	0.991	1.010
Product basket	0.125	7.98	0.788	1.269

Natural Gas (NG) and Liquefied Natural Gas (LNG)						
From	To					
	billion cubic metres NG	billion cubic feet NG	million tonnes oil equivalent	million tonnes LNG	trillion British thermal units	million barrels oil equivalent
Multiply by						
1 billion cubic metres NG	1	35.3	0.90	0.74	35.7	6.60
1 billion cubic feet NG	0.028	1	0.025	0.021	1.01	0.19
1 million tonnes oil equivalent	1.11	39.2	1	0.82	39.7	7.33
1 million tonnes LNG	1.36	48.0	1.22	1	48.6	8.97
1 trillion British thermal units	0.028	C	0.025	0.021	1	0.18
1 million barrels oil equivalent	0.15	5.35	0.14	0.11	5.41	1

Units	
1 metric tonne	1.1023 short tons
	2204.62 lb.
1 kilolitre	6.2898 barrels
	1 cubic metre
1 kilocalorie (kcal)	4.187 kJ
	3.968 Btu
1 kilojoule (kJ)	0.239 kcal
	0.948 Btu
1 British thermal unit (Btu)	0.252 kcal
	1.055 kJ
1 kilowatt-hour (kWh	860 kcal
	3412 Btu
	3600 kJ
1 barrel of ethanol	0.57 barrel of oil
1 barrel of biodiesel	0.88 barrel of oil

*Based on worldwide average gravity.

Source : BP Statistical Review of World Energy 2016

Calorific equivalents	
One tonne of oil equivalent equals approximately:	
Heat units	10 million kilocalories
	42 gigajoules
	40 million Btu
Solid fuels	1.5 tonnes of hard coal
	3 tonnes of lignite
Electricity	12 megawatt-hours

One million tonnes of oil or oil equivalent produces about 4400 gigawatt-hours (=4.4 terawatt hours) of electricity in a modern power station.

(XVI) Petroleum Specific Gravities			
Degrees	Specific	Barrels	Long
A.P.I.	Gravity	per tonne*	Ton*
25	0.9042	6.98	7.09
26	0.8984	7.02	7.13
27	0.8927	7.06	7.18
28	0.8871	7.10	7.22
29	0.8816	7.15	7.27
30	0.8762	7.19	7.31
31	0.8708	7.24	7.36
32	0.8654	7.28	7.40
33	0.8602	7.33	7.45
34	0.8550	7.37	7.49
35	0.8499	7.42	7.54
36	0.8448	7.46	7.58
37	0.8398	7.51	7.63
38	0.8348	7.55	7.67
39	0.8299	7.60	7.72
40	0.8251	7.64	7.76
41	0.8203	7.69	7.81
42	0.8156	7.73	7.85

*Approximate figure at 15.6 degrees C or 60 degrees F.

(XVII) Petroleum Specific Gravity Ranges		
Products	Specific	Barrels
	Gravity	Per tonne
Crude Oils	0.80-0.97	8.0-6.6
Aviation gasolines	0.70-0.78	9.1-8.2
Motor Gasolines	0.71-0.79	9.0-8.1
Kerosene	0.78- 0.84	8.2-7.6
Gas Oil	0.82-0.90	7.8-7.1
Diesel Oils	0.82-0.92	7.8-6.9
Lubricating Oils	0.85-0.95	7.5-6.7
Fuel Oils	0.92-0.99	6.9-6.5
Asphaltic Bitumen	1.00-1.10	6.4-5.8

(XVIII) Multiplier for Conversion of one Metric Tonne of Petroleum Products to one Tonne of Oil Equivalent	
L.P.G.	1.130
Naphtha	1.075
Aviation Gasoline	1.070
Motor Gasoline	1.070
Jet Fuel	1.065
Kerosene	1.045
Gas/diesel	1.035
Residual Fuel Oils	0.985
Others	0.960
Asphaltic Bitumen	

(XIX) Average International Calorific Value of different Fuels		
Products	**K Cals./Kg. (M. Cals/Tonne)**	**BTUs/Kg.**
A. Oil Equivalence :		
Average Crude Oil/NGLS(a)	10300	40870
United Nations	10175	40375
B. Oil Products :		
NGL	12135	48150
Motor Gasoline	11135	44190
Kerosene	10638	42210
Jet Fuel	11790	46790
Gas Oil	10790	42820
Fuel Oil	10440	41430
C. Coal Equivalence :		
Average Hard Coal (b)	7000	27775
D. INDIA		
Hard Coal	5000	19840
Lignite-Brown Coal	2310	916
Firewood@	4750	18848
Charcoal@	6900	27379
E. Natural Gas-Production : (Average) India		**K cals/Cu. Metre**
		8000-9480
F. Electricity :		
Output Basis(c)		860
Fuel Input basis(d)		2500-2700

Note :

(a) Represent average global factor for crude Oil/NGL production. For a specific crude oil, relevant conversion factors may have to be used.

(b) Factor used by United Nations to represent average calorific value of hard coals for purposes of standardising coal production to hard coal equivalent base.

(c) Calorific value of 1kwh of electricity.

(d) Represents K cals of hydro-carbon energies required to produce 1 kwh of electricity.

@ : As per Report of Fuel Policy Committee 1974

Conversion Factor: 1 K Cal=4.19 KJoules.

(XX) Coefficients used to Convert from Original Units into Standard Coal Equivalents			
Products	**Hard Coal**	**Lignite Brown Coal**	**Fuel Wood**
A. Primary Solids			
Standard Factor	1	0.385	0.333
India	0.714	0.330	
B. Other Hydrocarbons			
Petroleum Crude		1.454	
Natural Gas Liquids (wt.av.)		1.542	
Gasoline		1.500	
Kerosene & Jet Fuel		1.474	
Gas-Diesel Oil		1.450	
Residual Fuel Oil		1.416	
Liquefied Petroleum Gases		1.554	
Natural Gasoline		1.532	
Condensate		1.512	
Other Natural Gas Liquids		1.512	
Natural Gas (in Tera joules)*		34.121	
Other Gases(in Tera joules)*		34.121	
Hydro, Nuclear and Geothermal Electricity (In 1,000 kwh)		0.123	

Note :

The average calorific value of gas is measured in Kcal/m3 (st.) i.e. in Kcal per cubic metre of gas under standard conditions at 150 C, 013.25 mbar, dry.

		Calendar Years				Financial Years	
Year	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Average for the year	Year	Average for the year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2014	66.75	59.80	60.61	61.93	62.27	2014-15	61.14
2015	62.24	63.50	64.91	65.92	64.14	2015-16	65.46
2016	67.50	66.93	66.96	67.46	67.21	2016-17	67.09
2017	67.01	64.46	64.29	64.74	65.13	2017-18	64.45
2018	64.31	67.04	70.15	72.07	68.39	2018-19	69.94
2019	70.49	69.56	70.34	71.23	70.41	2019-20	70.87
2020	72.36	75.86	74.40	73.78	74.10	2020-21	74.13
2021	72.90	73.72	74.08	-			

Source : RBI

(XXI) Coal Replacement and Equivalents of different Fuels			
Fuels	Original Unit	Unit million tonnes of coal equivalent (mtce)	Unit million tonnes of coal replacement (mtcr)
Coal coking (6640 K cal/Kg), Non Cooking coal used in steam generation (500 Kcal/kg)	1mt	1.0	1.0
Hard Coke	1mt	1.3	1.3
Soft Coke	1mt	1.5	1.3
Firewood (4750 Kcal/Kg.)	1mt	0.95	0.95
Char Coal (6900 Kcal/Kg.)	1mt	1.0	1.0
Oil Products: 10,000 Kcal/Kg.			
Black Products:(Fuel Oil, FO, Refinery Fuel, LSHS & HHS)	1mt	2.0	2.0
Kerosene & LPG	1mt	2.0	8.0
HSDO & LDO	1mt	2.0	9.0
Motor Spirit & Jet Fuel	1mt	2.0	7.5
Natural Gas(9000k CAL/kg)	109m^3	1.8	3.6
Electricity	109 kwh	1.0	1.0

m : Million mt : Million Tonnes

Source : Fuel Policy Committee 1974

(XXII) Approximate Calorific Equivalents(Oil =10000 Kcal/Kg.)	
Items	Million Tonnes of Oil equals
Heat Units	40 million BTU
	397 million therms
	10,000 Tera calories
Solid Fuels	1.5 million tonnes of Coal
Natural Gas (1 cub.ft.=1000 BTU)	3.0 million tonnes of lignite
	1 Cub metre = 9000 K cal.
	1.111 thousand million cub metres
	39.2 thousand million cubic feet
	107 million cubic feet per day of a year
Electricity	12 thousand million KWH
(1 Kwh=3412 BTU)	
(1 Kwh=860 KCal)	

(XXIII) Heat Units & others expressed in terms of Million Tonnes of Oil	
Items	**Million Tonnes of Oil equals**
Heat Units	
10 million BTU	0.25
100 million therms	0.25
10000 Tera calories	1
Solid Fuels	
1 million tonne of coal	0.67
1 million tonne of lignite approximates to	0.33
Natural Gas	
1 thousand million cubic metres(BCM)	0.9
Town Gas	
1 thousand million cubic Metres (BCM)	0.42
Electricity	
12 thousand million KWH	0.86

Note : One Million tonne of oil produces about 4000 million units(KWH) of electricity in a modern power station.

Source : BP Statistical Review of World Energy

NOTES

For further query, please contact :

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