

READY RECKONER

Oil Industry Information at a Glance



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



November

2020

Suggestions & Feedback

Readers are invited to send their suggestions & feedback for improvement of the Ready Reckoner to:

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Disclaimer

While every care is taken to check the accuracy of data & information included in the Ready Reckoner, PPAC would not be held responsible for any loss, damage etc. due to action taken by any one based on information contained in this publication.

Preface

The Oil and Gas sector in the country is constantly evolving with a great thrust towards alternate fuels by way of policy intervention, technology and innovation to create a sustainable energy which is accessible to all. The dominance of India in the world energy landscape is apparent with being the third largest energy consumer in the world and having recorded a CAGR of 4.7% in energy consumption for last decade as compared to 1.9% of the world. With a vibrant population of 1.4 billion which is equivalent to 17.7% of world population and the third largest economy (PPP) in the world, India is and will be a key player in the world energy markets. Around 36% of India's energy need is met by the Oil & Gas sector as of 2019.

Petroleum Planning and Analysis Cell (PPAC), is an attached office of the Ministry of Petroleum and Natural Gas (MOP&NG), Government of India and undertakes analysis of trends of consumption, pricing, subsidy and new developments in domestic Oil and Gas energy sector. It is a nodal hub for data in the on the Oil & Gas sector and publishes the aggregated data on an industry basis on its website www.ppac.gov.in. The data is obtained from the Public Sector companies, Government agencies as well as the Private companies.

Oil & Gas statistics is a crucial input for many stakeholders that include the Government, academia, industry and research agencies. Consistent and accurate data enable both decision making and policy making.

Publication entitled 'Ready Reckoner' is brought out twice a year and endeavour is made to deliver accurate and timely information to all stakeholders. This November 2020 edition of PPAC's biannual Ready Reckoner contains the latest data/information for the first half of the financial year 2020-21 and historical time series for stakeholders to access the same on a single platform. The Ready Reckoner is also published on PPAC's website (<http://ppac.gov.in>) and on our mobile app - PPACE which is available on Google Play Store and Apple Store. The publication of Ready Reckoner is a concerted effort by all divisions of PPAC and I would like to place on record my sincere appreciation of the diligent efforts of the officers and staff who have contributed to bring out the current edition. Cooperation of the oil and gas industry and various organizations is acknowledged for their timely inputs.

PPAC welcomes feedback and suggestions for broadening the coverage and contents of the data being disseminated through this publication.



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Petroleum Planning & Analysis Cell

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



VISION & MISSION

Vision

To be the most authentic official source for data and policy analysis on the hydrocarbon sector in the country.

Mission

1. To strengthen the existing data system in PPAC by adopting the latest techniques and best practices.
2. To render effective assistance to the Ministry of Petroleum & Natural Gas in the discharge of its responsibilities, particularly pricing of petroleum products and administration of subsidy schemes.
3. To monitor and analyze developments in the domestic oil and gas sector.
4. To undertake analysis of domestic and international energy markets.
5. To develop a cooperative framework for exchange of information and conduct of studies with other countries and international organizations in the energy sector.

Objectives

1. To ensure effective administration of the subsidy schemes notified by the Government.
2. To monitor and analyze trends in prices of crude oil, petroleum products and natural gas and their impact on the oil companies and consumers, and prepare appropriate technical inputs for policy making.
3. To monitor developments in the domestic market and analyze options for policy changes in pricing, transportation and distribution of petroleum products.
4. To collect, compile and disseminate data on the domestic oil and gas sector in a continuous manner and maintain the data bank.
5. To ensure quality of data in terms of prescribed parameters such as accuracy, completeness and timeliness.
6. To prepare periodic reports on various aspects of oil and gas sector.

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Chapter 1

General

Table 1.1 : Selected indicators of the Indian economy

General

| Sl. no. | Particulars | Source | Unit/ Base | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
|---------|--|-------------------------------|---------------|---------------------------|---------------------------|---------------------------|-----------------------------|--------------------------------------|--------------------------------------|
| 1 | Population (as on 1st March 2011) | Census of India | Billion | 1.2 | - | - | - | - | - |
| 2 | GDP at constant (2011-12 Prices) | MoC&I | Growth % | 8.2 2 nd RE | 7.1 2 nd RE | 6.1 1 st RE | 4.2 PE | 4.8 H1 (PE) | -15.7 H1 (E) |
| 3 | Agricultural production (foodgrains) | MoA | Million tonne | 275.1 | 285.0 | 285.2 | 296.7 4 th AE | 140.6 1 st AE (Kharif) | 144.5 1 st AE (Kharif) |
| | | | Growth % | 9.4 | 3.6 | 0.1 | 4.0 | -0.7 | 2.8 |
| 4 | Index of Industrial Production (Base: 2011-12) | MoSPI | Growth % | 4.6 | 4.4 | 3.8 | -0.8 | 1.3 | -21.1 |
| 5 | Imports | MoC&I | \$ Billion | 384.4 | 465.6 | 514.1 | 474.7 | 248.1 | 148.7 |
| 6 | Exports | MoC&I | \$ Billion | 275.9 | 303.5 | 330.1 | 313.4 | 159.2 | 125.3 |
| 7 | Trade balance | MoC&I | \$ Billion | -108.5 | -162.1 | -184.0 | -161.3 | -88.9 | -23.4 |
| 8 | Wholesale Price Index (all commodities) (average) | MoC&I | 2011-12 = 100 | 111.6 | 114.9 | 119.8 | 121.8 | 121.4 | 120.3 |
| 9 | All India Consumer Price Index (average): | | | | | | | | |
| | i) Industrial workers | Labour Bureau, Govt. of India | 2001=100 | 275.9 | 284.4 | 299.9 | 322.5 | 317.2 | 333.0* |
| | ii) Agricultural labourers | | 1986-87=100 | 869.8 | 888.9 | 907.3 | 979.6 | 953.5 | 1019.6 |
| | iii) Rural labourers | | 1986-87=100 | 875.0 | 895.1 | 915.1 | 986.0 | 960.7 | 1025.8 |
| 10 | Foreign exchange reserves- Total ^f | RBI | \$ Billion | 370.0 | 424.4 | 411.9 | 475.6 | 433.6 | 542.0 |
| 11 | Outstanding external liabilities (as of end of financial year) | MOF | ₹ Crore | 2,28,259 | 2,50,090 | 2,69,961 | 2,92,867 (RE) | - | 3,13,036 2020-21 (BE) |
| 12 | Outstanding internal debt (as of end of financial year) | MOF | ₹ Crore | 72,07,503 | 79,84,787 | 88,13,254 | 97,25,254 (RE) | - | 1,06,36,984 2020-21 (BE) |
| 13 | Centrally Sponsored Schemes & other transfers | MOF | ₹ Crore | 3,91,496 | 4,58,259 | 4,77,967 | 6,16,670 (RE) | - | 7,13,246 2020-21 (BE) |
| 14 | Gross fiscal deficit | MOF | % | 3.5 | 3.5 | 3.4 (RE) | 3.8 (RE) | - | 3.5 2020-21 (BE) |

Note: *Avg. of Apr-Aug 2020 as base year changed to 2016 from 2001 wef Sep 2020; #2016-17-as on March 31, 2017; 2017-18-as on March 30, 2018; 2018-19-as on March 29, 2019; 2019-20-as on March 27, 2019; Apr-Sep 2019-as on September 27, 2019; Apr-Sep 2020-as on September 25, 2020

(P): Provisional; MoA: Ministry of Agriculture; MoF: Ministry of Finance; MoC&I: Ministry of Commerce & Industry; MoSPI: Ministry of Statistics and Programme Implementation; RBI: Reserve Bank of India; E: Estimates; PE: Provisional Estimates; QE: Quick Estimates; AE: Advance Estimates; RE: Revised Estimates; FE: Final Estimates.

Petroleum

| Sl. no. | Particulars | Source | Unit/ Base | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
|---------|--|-----------------|------------|---------|---------|---------|---------|--------------|------------------|
| 1 | Crude oil production in India | ONGC/OIL/DGH | MMT | 36.0 | 35.7 | 34.2 | 32.2 | 16.4 | 15.4 |
| 2 | Consumption of petroleum products in India | OMCs/PPAC | MMT | 194.6 | 206.2 | 213.2 | 214.1 | 106.5 | 86.4 |
| 3 | Petroleum products production in India | Oil Cos | MMT | 243.5 | 254.3 | 262.4 | 262.9 | 128.1 | 107.3 |
| 4 | Imports & exports | | | | | | | | |
| | Crude oil imports | Oil Cos | \$ Billion | 70.2 | 87.8 | 111.9 | 101.4 | 52.6 | 22.5 |
| | Petroleum products imports | Oil Cos & DGCIS | \$ Billion | 10.6 | 13.6 | 16.3 | 17.7 | 8.5 | 5.8 |
| | "Total petroleum imports (crude oil + petroleum products)" | Oil Cos & DGCIS | \$ Billion | 80.8 | 101.4 | 128.3 | 119.1 | 61.0 | 28.2 |
| | Petroleum products exports | Oil Cos | \$ Billion | 29.0 | 34.9 | 38.2 | 35.8 | 18.1 | 8.9 |
| 5 | Gross petroleum imports as % of India's gross imports in value terms | MOC&I/PPAC | % | 21.0 | 21.8 | 24.9 | 25.1 | 24.6 | 19.0 |
| 6 | Gross petroleum exports as % of India's gross exports in value terms | MOC&I/PPAC | % | 10.5 | 11.5 | 11.6 | 11.4 | 11.4 | 7.1 |
| 7 | Import dependency (based on consumption) | PPAC | % | 81.7 | 82.9 | 83.8 | 85.0 | 84.7 | 82.5 |

Note : (P): Provisional, OMCs: Oil Marketing Companies, PPAC: Petroleum Planning & Analysis Cell

Natural Gas

| Sl. no. | Particulars | Source | Unit/ Base | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
|---------|--|--------------------------|------------|---------|---------|---------|---------|--------------|------------------|
| 1 | Gross Production | ONGC/OIL/DGH | MMSCM | 31,897 | 32,649 | 32,875 | 31,184 | 16,005 | 13,954 |
| 2 | Net Production (net of flare and loss) | ONGC/OIL/DGH | MMSCM | 30,848 | 31,731 | 32,058 | 30,257 | 15,539 | 13,492 |
| 3 | LNG Import | LNG importing Cos, DGCIS | MMSCM | 24,849 | 27,439 | 28,740 | 33,887 | 16,417 | 15,881 |
| 4 | "Total Consumption including internal use (Net Production+ LNG import) " | | MMSCM | 55,697 | 59,170 | 60,798 | 64,144 | 31,955 | 29,373 |
| 5 | Import dependency (based on consumption) | PPAC | % | 44.6 | 46.4 | 47.3 | 52.8 | 51.4 | 54.1 |

Note : MMSCMD : Million Standard Cubic Meter per day

Table 1.2 : Global energy consumption, 2019

| Sl.no. | Country | Unit | Oil | Natural Gas | Coal | Nuclear Energy | Hydro Electricity | Renewables | Total Energy |
|--------|---------------------------|------|----------------|----------------|----------------|----------------|-------------------|---------------|-----------------|
| 1 | China | Mtoe | 647.83 | 264.26 | 1950.77 | 74.24 | 270.33 | 158.30 | 3365.73 |
| | Percentage share of fuel | % | 19.25 | 7.85 | 57.96 | 2.21 | 8.03 | 4.70 | 100% |
| | Per capita consumption | Toe | 0.47 | 0.19 | 1.40 | 0.05 | 0.19 | 0.11 | 2.42 |
| 2 | USA | Mtoe | 858.66 | 727.98 | 270.87 | 181.41 | 57.73 | 139.21 | 2235.87 |
| | Percentage share of fuel | % | 38.40 | 32.56 | 12.11 | 8.11 | 2.58 | 6.23 | 100% |
| | Per capita consumption | Toe | 2.63 | 2.23 | 0.83 | 0.56 | 0.18 | 0.43 | 6.84 |
| 3 | India | Mtoe | 237.67 | 51.32 | 444.73 | 9.62 | 34.46 | 28.84 | 806.64 |
| | Percentage share of fuel | % | 29.46 | 6.36 | 55.13 | 1.19 | 4.27 | 3.58 | 100% |
| | Per capita consumption | Toe | 0.18 | 0.04 | 0.33 | 0.01 | 0.03 | 0.02 | 0.60 |
| 4 | Russian Federation | Mtoe | 152.50 | 382.04 | 86.67 | 44.50 | 41.39 | 0.39 | 707.48 |
| | Percentage share of fuel | % | 21.55 | 54.00 | 12.25 | 6.29 | 5.85 | 0.05 | 100% |
| | Per capita consumption | Toe | 1.06 | 2.64 | 0.60 | 0.31 | 0.29 | 0.00 | 4.90 |
| 5 | Japan | Mtoe | 174.86 | 92.97 | 117.16 | 13.97 | 15.74 | 26.26 | 440.97 |
| | Percentage share of fuel | % | 39.65 | 21.08 | 26.57 | 3.17 | 3.57 | 5.96 | 100% |
| | Per capita consumption | Toe | 1.38 | 0.73 | 0.93 | 0.11 | 0.12 | 0.21 | 3.49 |
| 6 | Canada | Mtoe | 104.46 | 103.45 | 13.34 | 21.40 | 81.33 | 12.50 | 336.48 |
| | Percentage share of fuel | % | 31.05 | 30.74 | 3.97 | 6.36 | 24.17 | 3.72 | 100% |
| | Per capita consumption | Toe | 2.82 | 2.79 | 0.36 | 0.58 | 2.19 | 0.34 | 9.08 |
| 7 | Germany | Mtoe | 108.59 | 76.23 | 55.03 | 15.98 | 4.30 | 50.57 | 310.71 |
| | Percentage share of fuel | % | 34.95 | 24.53 | 17.71 | 5.14 | 1.38 | 16.28 | 100% |
| | Per capita consumption | Toe | 1.31 | 0.92 | 0.66 | 0.19 | 0.05 | 0.61 | 3.75 |
| 8 | Brazil | Mtoe | 109.82 | 30.79 | 15.67 | 3.44 | 85.02 | 48.34 | 293.08 |
| | Percentage share of fuel | % | 37.47 | 10.51 | 5.35 | 1.17 | 29.01 | 16.50 | 100% |
| | Per capita consumption | Toe | 0.52 | 0.15 | 0.07 | 0.02 | 0.41 | 0.23 | 1.40 |
| 9 | Iran | Mtoe | 91.04 | 192.28 | 1.24 | 1.36 | 6.17 | 0.12 | 292.20 |
| | Percentage share of fuel | % | 31.16 | 65.80 | 0.42 | 0.47 | 2.11 | 0.04 | 100% |
| | Per capita consumption | Toe | 1.11 | 2.35 | 0.02 | 0.02 | 0.08 | 0.00 | 3.57 |
| 10 | South Korea | Mtoe | 123.13 | 48.12 | 82.08 | 31.08 | 0.59 | 6.91 | 291.92 |
| | Percentage share of fuel | % | 42.18 | 16.49 | 28.12 | 10.65 | 0.20 | 2.37 | 100% |
| | Per capita consumption | Toe | 2.39 | 0.93 | 1.59 | 0.60 | 0.01 | 0.13 | 5.66 |
| 11 | Saudi Arabia | Mtoe | 160.74 | 97.72 | 0.10 | - | - | 0.38 | 258.94 |
| | Percentage share of fuel | % | 62.08 | 37.74 | 0.04 | - | - | 0.15 | 100% |
| | Per capita consumption | Toe | 4.77 | 2.90 | 0.003 | - | - | 0.01 | 7.68 |
| 12 | France | Mtoe | 73.11 | 37.35 | 6.44 | 85.05 | 12.46 | 14.67 | 229.07 |
| | Percentage share of fuel | % | 31.92 | 16.30 | 2.81 | 37.13 | 5.44 | 6.40 | 100% |
| | Per capita consumption | Toe | 1.09 | 0.56 | 0.10 | 1.27 | 0.19 | 0.22 | 3.42 |
| 13 | Indonesia | Mtoe | 78.58 | 37.68 | 81.36 | - | 3.62 | 9.34 | 210.57 |
| | Percentage share of fuel | % | 37.32 | 17.89 | 38.64 | - | 1.72 | 4.44 | 100% |
| | Per capita consumption | Toe | 0.29 | 0.14 | 0.30 | - | 0.01 | 0.03 | 0.79 |
| 14 | United Kingdom | Mtoe | 72.09 | 67.79 | 6.26 | 11.96 | 1.27 | 25.80 | 185.18 |
| | Percentage share of fuel | % | 38.93 | 36.61 | 3.38 | 6.46 | 0.69 | 13.93 | 100% |
| | Per capita consumption | Toe | 1.08 | 1.02 | 0.09 | 0.18 | 0.02 | 0.39 | 2.79 |
| 15 | Mexico | Mtoe | 76.41 | 77.96 | 12.12 | 2.40 | 5.07 | 8.25 | 182.20 |
| | Percentage share of fuel | % | 41.94 | 42.79 | 6.65 | 1.31 | 2.78 | 4.53 | 100% |
| | Per capita consumption | Toe | 0.61 | 0.62 | 0.10 | 0.02 | 0.04 | 0.07 | 1.44 |
| | Sub total | Mtoe | 3069.51 | 2287.93 | 3143.84 | 496.41 | 619.47 | 529.89 | 10147.04 |
| | Others | Mtoe | 1411.65 | 1090.61 | 626.51 | 98.89 | 279.95 | 162.21 | 3669.82 |
| | Total World | Mtoe | 4481.16 | 3378.54 | 3770.35 | 595.31 | 899.42 | 692.09 | 13816.86 |
| | Percentage share of fuel | % | 32.43 | 24.45 | 27.29 | 4.31 | 6.51 | 5.01 | 100% |
| | Per capita consumption | Toe | 0.59 | 0.44 | 0.50 | 0.08 | 0.12 | 0.09 | 1.82 |

Source: BP Statistical Review of World Energy, June 2020.

Note: For calculation of per capita consumption population figures have been taken from World Bank International Data Base for 2018. Conversion factor used for Oil as per product basket of 1 Mtoe = 0.0431 Exajoules, for all other fuels 1 Mtoe = 0.0419 Exajoules. (Approximate conversion factors from BP Statistical Review of World Energy, June 2020.)

Mtoe: Million tonnes of oil equivalent, Toe: Tonnes of oil equivalent



Chapter 2

Exploration & Crude Oil Production

Table 2.1 : World top 30 crude oil proved reserves countries

| Sl. no. | Country | At end 2019 | | |
|-----------|------------------------------------|-------------------------|--------------------------|----------------------------|
| | | Thousand million tonnes | Thousand million barrels | Reserves /Production ratio |
| 1 | Venezuela | 48.0 | 303.8 | * |
| 2 | Saudi Arabia | 40.9 | 297.6 | 68.9 |
| 3 | Canada | 27.3 | 169.7 | 82.3 |
| 4 | Iran | 21.4 | 155.6 | 120.6 |
| 5 | Iraq | 19.6 | 145.0 | 83.1 |
| 6 | Russian Federation | 14.7 | 107.2 | 25.5 |
| 7 | Kuwait | 14.0 | 101.5 | 92.8 |
| 8 | United Arab Emirates | 13.0 | 97.8 | 67.0 |
| 9 | US | 8.2 | 68.9 | 11.1 |
| 10 | Libya | 6.3 | 48.4 | 107.9 |
| 11 | Nigeria | 5.0 | 37.0 | 48.0 |
| 12 | Kazakhstan | 3.9 | 30.0 | 42.6 |
| 13 | China | 3.6 | 26.2 | 18.7 |
| 14 | Qatar | 2.6 | 25.2 | 36.7 |
| 15 | Brazil | 1.8 | 12.7 | 12.1 |
| 16 | Algeria | 1.5 | 12.2 | 22.5 |
| 17 | Angola | 1.1 | 8.2 | 15.8 |
| 18 | Norway | 1.1 | 8.5 | 13.5 |
| 19 | Azerbaijan | 1.0 | 7.0 | 24.6 |
| 20 | Mexico | 0.8 | 5.8 | 8.3 |
| 21 | Oman | 0.7 | 5.4 | 15.2 |
| 22 | India | 0.6 | 4.7 | 15.5 |
| 23 | Vietnam | 0.6 | 4.4 | 51.0 |
| 24 | South Sudan | 0.5 | 3.5 | 69.1 |
| 25 | Republic of Congo | 0.4 | 3.0 | 24.1 |
| 26 | Egypt | 0.4 | 3.1 | 12.3 |
| 27 | Yemen | 0.4 | 3.0 | 84.2 |
| 28 | Malaysia | 0.4 | 2.8 | 11.9 |
| 29 | United Kingdom | 0.4 | 2.7 | 6.6 |
| 30 | Indonesia | 0.3 | 2.5 | 8.7 |
| | Subtotal | 240.5 | 1703.3 | |
| | Others | 4.1 | 30.6 | |
| | Total World | 244.6 | 1733.9 | 49.9 |
| | of which: OECD | 38.3 | 260.1 | 25.1 |
| | Non-OECD | 206.3 | 1473.7 | 60.4 |
| | OPEC | 171.8 | 1214.7 | 93.6 |
| | Non-OPEC | 72.8 | 519.2 | 23.9 |
| | European Union | 0.7 | 5.0 | 9.0 |
| | Canadian oil sands: Total | 26.4 | 162.4 | |
| | of which: Under active development | 3.3 | 20.1 | |
| | Venezuela: Orinoco Belt | 42.0 | 261.8 | |

Source: BP Statistical Review of World Energy, June 2020; * More than 500 years.

Crude oil is the raw natural resource composed of hydrocarbon deposits and other organic materials. A type of fossil fuel, crude oil can be refined to produce usable products such as gasoline, diesel, and various other petroleum products.

Notes: Total proved reserves of oil - 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 total proved oil reserves 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.

Reserves-to-production (R/P) ratio - If the reserves remaining at the end of any year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that rate. Canadian oil sands 'under active development' are an official estimate. Venezuelan Orinoco Belt reserves are based on the OPEC Secretariat and government announcements. Reserves and R/P ratio for Canada includes Canadian oil sands. Reserves and R/P ratio for Venezuela includes the Orinoco Belt. Saudi Arabia's oil reserves include NGLs from 2017.

Reserves include gas condensate and natural gas liquids (NGLs) as well as crude oil.

Shares of total and R/P ratios are calculated using thousand million barrels figures.

Table 2.2 : World top 30 crude oil producing countries, 2019

| Sl.no. | Country | Production* | |
|-----------|----------------------|----------------|-----------------------|
| | | Million tonnes | Million barrels daily |
| 1 | US | 746.7 | 17.0 |
| 2 | Russian Federation | 568.1 | 11.5 |
| 3 | Saudi Arabia | 556.6 | 11.8 |
| 4 | Canada | 274.9 | 5.7 |
| 5 | Iraq | 234.2 | 4.8 |
| 6 | China | 191.0 | 3.8 |
| 7 | United Arab Emirates | 180.2 | 4.0 |
| 8 | Iran | 160.8 | 3.5 |
| 9 | Brazil | 150.8 | 2.9 |
| 10 | Kuwait | 144.0 | 3.0 |
| 11 | Nigeria | 101.4 | 2.1 |
| 12 | Mexico | 94.9 | 1.9 |
| 13 | Kazakhstan | 91.4 | 1.9 |
| 14 | Qatar | 78.5 | 1.9 |
| 15 | Norway | 78.4 | 1.7 |
| 16 | Angola | 69.1 | 1.4 |
| 17 | Algeria | 64.3 | 1.5 |
| 18 | Libya | 57.8 | 1.2 |
| 19 | United Kingdom | 51.8 | 1.1 |
| 20 | Oman | 47.3 | 1.0 |
| 21 | Colombia | 46.7 | 0.9 |
| 22 | Venezuela | 46.6 | 0.9 |
| 23 | Indonesia | 38.2 | 0.8 |
| 24 | Azerbaijan | 38.1 | 0.8 |
| 25 | India | 37.5 | 0.8 |
| 26 | Egypt | 33.6 | 0.7 |
| 27 | Malaysia | 29.8 | 0.7 |
| 28 | Argentina | 28.8 | 0.6 |
| 29 | Ecuador | 28.5 | 0.5 |
| 30 | Australia | 20.6 | 0.5 |
| | Sub total | 4290.7 | 91.0 |
| | Others | 193.8 | 4.1 |
| | Total World | 4484.5 | 95.2 |
| | of which: OECD | 1288.3 | 28.4 |
| | Non-OECD | 3196.2 | 66.8 |
| | OPEC | 1680.0 | 35.6 |
| | Non-OPEC | 2804.5 | 59.6 |
| | European Union | 72.0 | 1.5 |

Source: BP Statistical Review of World Energy, June 2020

Note: * Includes crude oil, shale oil, oil sands, condensates (lease condensate or gas condensates that require further refining) and NGLs (natural gas liquids - ethane, LPG and naphtha separated from the production of natural gas).

Excludes liquid fuels from other sources such as biofuels and synthetic derivatives of coal and natural gas. This also excludes liquid fuel adjustment factors such as refinery processing gain. Excludes oil shales/kerogen extracted in solid form.

Table 2.3 : World top 30 oil consuming countries, 2019

| Sl. no. | Country | Consumption * | |
|----------|----------------------|----------------|-----------------------|
| | | Million tonnes | Million barrels daily |
| 1 | US | 841.8 | 19.4 |
| 2 | China | 650.1 | 14.1 |
| 3 | India | 242.0 | 5.3 |
| 4 | Japan | 173.6 | 3.8 |
| 5 | Saudi Arabia | 158.8 | 3.8 |
| 6 | Russian Federation | 150.8 | 3.3 |
| 7 | South Korea | 120.0 | 2.8 |
| 8 | Brazil | 109.7 | 2.4 |
| 9 | Germany | 106.9 | 2.3 |
| 10 | Canada | 102.8 | 2.4 |
| 11 | Iran | 89.4 | 2.0 |
| 12 | Indonesia | 77.1 | 1.7 |
| 13 | Mexico | 74.9 | 1.7 |
| 14 | France | 72.4 | 1.5 |
| 15 | Singapore | 72.2 | 1.4 |
| 16 | United Kingdom | 71.2 | 1.5 |
| 17 | Spain | 63.7 | 1.3 |
| 18 | Thailand | 61.6 | 1.5 |
| 19 | Italy | 57.6 | 1.2 |
| 20 | Australia | 49.1 | 1.0 |
| 21 | Turkey | 47.9 | 1.0 |
| 22 | United Arab Emirates | 44.6 | 1.0 |
| 23 | Taiwan | 44.1 | 1.0 |
| 24 | Netherlands | 38.3 | 0.8 |
| 25 | Malaysia | 35.3 | 0.8 |
| 26 | Iraq | 34.8 | 0.7 |
| 27 | Egypt | 34.7 | 0.7 |
| 28 | Belgium | 32.0 | 0.7 |
| 29 | Poland | 30.9 | 0.7 |
| 30 | Argentina | 27.6 | 0.6 |
| | Sub total | 3716.0 | 82.6 |
| | Others | 729.2 | 15.7 |
| | Total World | 4445.2 | 98.3 |
| | of which: OECD | 2052.3 | 45.8 |
| | Non-OECD | 2392.9 | 52.5 |
| | European Union | 609.5 | 12.9 |

Source: BP Statistical Review of World Energy, June 2020

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

Notes: Differences between these world consumption figures and world production statistics are accounted for by stock changes, consumption of non-petroleum additives and substitute fuels and unavoidable disparities in the definition, measurement or conversion of oil supply and demand data.

Table 2.4 : World top 30 crude oil refining capacity* countries

| (Thousand barrels daily) | | | | | |
|--------------------------|----------------------|--------------|---------------|-------------|-------------|
| Sl.no. | Country | 2009 | 2019 | Addition | % Change |
| 1 | US | 17597 | 18974 | 1377 | 7.8 |
| 2 | China | 11334 | 16199 | 4865 | 42.9 |
| 3 | Russian Federation | 5425 | 6721 | 1296 | 23.9 |
| 4 | India | 3574 | 5008 | 1433 | 40.1 |
| 5 | South Korea | 2746 | 3393 | 648 | 23.6 |
| 6 | Japan | 4630 | 3343 | (1287) | -27.8 |
| 7 | Saudi Arabia | 2109 | 2835 | 726 | 34.4 |
| 8 | Iran | 1860 | 2405 | 545 | 29.3 |
| 9 | Brazil | 1992 | 2290 | 298 | 15.0 |
| 10 | Germany | 2362 | 2085 | (278) | -11.8 |
| 11 | Canada | 1976 | 2054 | 78 | 4.0 |
| 12 | Italy | 2396 | 1900 | (496) | -20.7 |
| 13 | Spain | 1362 | 1586 | 225 | 16.5 |
| 14 | Mexico | 1463 | 1558 | 95 | 6.5 |
| 15 | Singapore | 1427 | 1514 | 87 | 6.1 |
| 16 | Netherlands | 1280 | 1309 | 30 | 2.3 |
| 17 | United Arab Emirates | 702 | 1307 | 605 | 86.2 |
| 18 | Venezuela | 1303 | 1303 | - | 0.0 |
| 19 | France | 1847 | 1245 | (602) | -32.6 |
| 20 | Thailand | 1236 | 1235 | (1) | -0.1 |
| 21 | United Kingdom | 1757 | 1227 | (530) | -30.2 |
| 22 | Indonesia | 1099 | 1094 | (6) | -0.5 |
| 23 | Taiwan | 1197 | 1083 | (114) | -9.5 |
| 24 | Iraq | 853 | 919 | 66 | 7.7 |
| 25 | Turkey | 613 | 822 | 209 | 34.1 |
| 26 | Egypt | 810 | 795 | (15) | -1.9 |
| 27 | Belgium | 786 | 776 | (10) | -1.3 |
| 28 | Kuwait | 936 | 736 | (200) | -21.4 |
| 29 | Algeria | 554 | 657 | 103 | 18.5 |
| 30 | Malaysia | 572 | 625 | 53 | 9.3 |
| | Sub total | 77797 | 86998 | 9201 | 11.8 |
| | Others | 14570 | 14342 | (228) | -1.6 |
| | Total World | 92367 | 101340 | 8973 | 9.7 |
| | of which: OECD | 45780 | 45138 | (642) | -1.4 |
| | Non-OECD | 46587 | 56202 | 9615 | 20.6 |
| | European Union | 15548 | 14053 | (1496) | -9.6 |

Source: BP Statistical Review of World Energy, June 2020

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

Table 2.5 : Indigenous crude oil and condensate production

| (Million metric tonne) | | | | | | |
|---|-------------|-------------|-------------|-------------|--------------|------------------|
| Particulars | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| PSU companies | | | | | | |
| ONGC | 20.9 | 20.8 | 19.6 | 19.2 | 9.5 | 9.6 |
| OIL | 3.3 | 3.4 | 3.3 | 3.1 | 1.6 | 1.5 |
| PSU total | 24.1 | 24.2 | 22.9 | 22.4 | 11.1 | 11.1 |
| PSU total (crore barrels) | 17.7 | 17.7 | 16.7 | 16.4 | 8.2 | 8.1 |
| PSC total | 10.4 | 9.9 | 9.6 | 8.2 | 4.4 | 3.6 |
| PSC total (crore barrels) | 7.6 | 7.2 | 7.1 | 6.0 | 3.2 | 2.6 |
| Total crude oil | 34.5 | 34.0 | 32.5 | 30.5 | 15.5 | 14.7 |
| Condensate | 1.5 | 1.6 | 1.7 | 1.6 | 0.8 | 0.7 |
| Total (crude oil + condensate) | 36.0 | 35.7 | 34.2 | 32.2 | 16.4 | 15.4 |
| Total (crude oil + condensate) (crore barrels) | 26.4 | 26.2 | 25.1 | 23.6 | 12.0 | 11.3 |

Source: Oil companies and DGH

Table 2.6 : Self sufficiency in petroleum products

| (Million metric tonne) | | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|------------------|
| Particulars | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| i) Indigenous crude oil processing | 33.5 | 32.8 | 31.7 | 29.3 | 15.0 | 13.9 |
| a) Products from indigeneous crude | 31.3 | 30.6 | 29.6 | 27.3 | 14.0 | 13.0 |
| b) Products from fractionators | 4.3 | 4.6 | 4.9 | 4.8 | 2.4 | 2.1 |
| ii) Total production from indigenous crude and condensate (a+b) | 35.6 | 35.2 | 34.5 | 32.1 | 16.3 | 15.1 |
| iii) Total domestic consumption | 194.6 | 206.2 | 213.2 | 214.1 | 106.5 | 86.4 |
| Percentage of self sufficiency (ii/iii) | 18.3% | 17.1% | 16.2% | 15.0% | 15.3% | 17.5% |

Source: Oil companies (P): Provisional

Note:

1. Production of petroleum products from indigenous crude considered at 93.3% of indigenous crude oil processing.
2. The balance demand of petroleum products is met through import of crude oil and POL products.

Table 2.7 (A) : Status of blocks under NELP (As on 01.10.2020)

| Round | Offered | Awarded | | | | Relinquished/Proposed for Relinquishment | | | | Operational | | | |
|--------------|------------|------------|---------------|------------|------------|--|---------------|-----------|------------|-------------|---------------|-----------|-----------|
| | | Deep water | Shallow water | Onland | Total | Deep water | Shallow water | Onland | Total | Deep water | Shallow water | Onland | Total |
| NELP-I | 48 | 7 | 16 | 1 | 24 | 5 | 15 | 1 | 21 | 2 | 1 | | 3 |
| NELP-II | 25 | 8 | 8 | 7 | 23 | 8 | 8 | 6 | 22 | 0 | | 1 | 1 |
| NELP-III | 27 | 9 | 6 | 8 | 23 | 9 | 5 | 5 | 19 | 0 | 1 | 3 | 4 |
| NELP-IV | 24 | 10 | | 10 | 20 | 10 | 0 | 7 | 17 | 0 | | 3 | 3 |
| NELP-V | 20 | 6 | 2 | 12 | 20 | 6 | 1 | 9 | 16 | 0 | 1 | 3 | 4 |
| NELP-VI | 55 | 21 | 6 | 25 | 52 | 21 | 4 | 19 | 44 | 0 | 2 | 6 | 8 |
| NELP-VII | 57 | 11 | 7 | 23 | 41 | 11 | 4 | 17 | 32 | 0 | 3 | 6 | 9 |
| NELP-VIII | 70 | 8 | 11 | 13 | 32 | 8 | 9 | 12 | 29 | 0 | 2 | 1 | 3 |
| NELP-IX | 34 | 1 | 3 | 15 | 19 | 1 | 2 | 6 | 9 | 0 | 1 | 9 | 10 |
| TOTAL | 360 | 81 | 59 | 114 | 254 | 79 | 48 | 82 | 209 | 2 | 11 | 32 | 45 |

Source: DGH

Table 2.7(B): Status of blocks under OALP round of HELP and DSF Rounds (As on 01.10.2020)

| Round | Offered | Awarded | | | | Relinquished/Proposed for Relinquishment | | | | Operational | | | |
|----------------|------------|------------------------|---------------|------------|------------|--|---------------|-----------|-----------|------------------------|---------------|------------|------------|
| | | Deep/ Ultra Deep water | Shallow water | Onland | Total | Deep/ Ultra Deep water | Shallow water | Onland | Total | Deep/ Ultra Deep water | Shallow water | Onland | Total |
| OALP Round-I | 55 | 1 | 8 | 46 | 55 | 0 | 0 | 0 | 0 | 1 | 8 | 46 | 55 |
| OALP Round-II | 14 | 1 | 5 | 8 | 14 | 0 | 0 | 0 | 0 | 1 | 5 | 8 | 14 |
| OALP Round-III | 23 | 1 | 3 | 14 | 18 | 0 | 0 | 0 | 0 | 1 | 3 | 14 | 18 |
| OALP Round-IV | 7 | | | 7 | 7 | 0 | 0 | 0 | 0 | | | 7 | 7 |
| OALP Round-V | 11 | 1 | 2 | 8 | 11 | 0 | 0 | 0 | 0 | 1 | 2 | 8 | 11 |
| DSF Round-I | 46 | 0 | 7 | 23 | 30 | 0 | 1 | 7 | 8 | 0 | 6 | 16 | 22 |
| DSF Round-II | 25 | 0 | 9 | 14 | 23 | 0 | 0 | 3 | 3 | 0 | 9 | 11 | 20 |
| TOTAL | 181 | 4 | 34 | 120 | 158 | 0 | 1 | 10 | 11 | 4 | 33 | 110 | 147 |

Source: DGH

Table 2.8 : Domestic oil & gas production vis a vis overseas production

| Year | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
|--|---------|---------|---------|---------|--------------|------------------|
| Total domestic production (MMTOE) | 67.9 | 68.3 | 67.1 | 63.4 | 32.4 | 29.3 |
| Overseas production (MMTOE) | 17.6 | 22.7 | 24.7 | 24.5 | 12.4 | 11.0 |
| Overseas production as percentage of domestic production | 25.9 | 33.2 | 36.8 | 38.7 | 38.3 | 37.5 |

Source: ONGC Videsh Ltd., OIL, GAIL, BPRL, IOCL and HPCL

Table 2.9 : Coal Bed Methane (CBM) Gas development in India

| | | |
|--|--------|--------|
| Prognosticated CBM resources | 92 | TCF |
| Established CBM resources | 9.9 | TCF |
| Total available coal bearing areas | 26,000 | Sq. KM |
| Area awarded | 16,613 | Sq. KM |
| Exploration initiated | 9,336 | Sq. KM |
| Blocks awarded | 33 | Nos. |
| Production of CBM gas April-September 2020 (P) | 313.0 | MMSCM |

Source: DGH

*CBM blocks have been awarded in the states of Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu and West Bengal.

Table 2.10: Status of Shale Gas and oil development in India

| | |
|---|---|
| Policy Guidelines for Exploration & exploitation of Shale gas and oil | <p>Shale gas and oil exploration policy was announced in October, 2013. ONGC and OIL India Ltd have been allotted 50 and 6 blocks respectively for assessment under Phase-I. ONGC identified 50 blocks in 4 basins and OIL identified 6 blocks in 2 basins in Phase-I.</p> <p>Under Hydrocarbon Exploration and Licensing Policy (HELP), 2016 the single licence will enable the contractor to explore conventional as well as unconventional oil and gas resources including CBM, shale gas/oil, tight gas and gas hydrates under a single license.</p> <p>In August 2018, the Government of India notified a Policy framework for Exploration and exploitation of Unconventional hydrocarbons in existing acreages under existing Production Sharing Contracts (PSC), Coal Bed Methane (CBM) Contracts and Nomination fields.</p> |
| Oil India Limited (OIL): Activities during 2019-20 | <p>Jaisalmer PML of Rajasthan, Dibrugarh Extn. PML, Chabua PML, Dumduma PML of Assam: Final evaluation Report based on conventional core results have been submitted to DGH.</p> <p>Dumduma PML: Basic Geochemical analysis have been carried out at OIL's own Laboratories. Detail laboratory analysis is currently in progress at M/S Weatherford Laboratories.</p> <p>Jairampur Extn. PEL and in Deomali PEL, Arunachal Pradesh: Waiting for Environmental Clearance (EC).</p> |
| Oil and Natural Gas Corporation Limited (ONGC): Activities during 2019-20 | <p>During 2019-20, a total of 2 exclusive shale wells (NJSGA in Cambay Basin and MDSGA in KG Basin) and one dual objective well PGAE were drilled.</p> <p>Cambay Basin:</p> <p>The exclusive shale well NJSGA in Cambay basin drilled. Indications of presence of shale oil have been recorded in some wells viz. JMSSGA, NSGB and NJSGA in Cambay basin.</p> <p>In Nawagam Middle Pay (Tight Reservoir) of shale well NGSSGA of Cambay basin was hydro-fractured and on activation produced oil. Another well GNSGC in Cambay basin is awaiting hydro-fracturing.</p> <p>KG Basin:</p> <p>Dual objective well LKEAA in KG basin is under drilling.</p> <p>Indications of presence of shale oil have been recorded in some wells namely WSGGA in KG Basin during activation after hydro-fracturing.</p> |



Chapter 3

Natural Gas

Table 3.1 : World top 30 natural gas reserve countries

| | | (Billion cubic metres) |
|-----------|----------------------|------------------------|
| Sl. no. | Country | 2019 |
| 1 | Russian Federation | 37958 |
| 2 | Iran | 32017 |
| 3 | Qatar | 24681 |
| 4 | Turkmenistan | 19486 |
| 5 | US | 12874 |
| 6 | China | 8399 |
| 7 | Venezuela | 6297 |
| 8 | Saudi Arabia | 5985 |
| 9 | United Arab Emirates | 5939 |
| 10 | Nigeria | 5391 |
| 11 | Algeria | 4335 |
| 12 | Iraq | 3543 |
| 13 | Azerbaijan | 2846 |
| 14 | Kazakhstan | 2652 |
| 15 | Australia | 2390 |
| 16 | Egypt | 2138 |
| 17 | Canada | 1985 |
| 18 | Kuwait | 1695 |
| 19 | Other Africa | 1629 |
| 20 | Norway | 1533 |
| 21 | Libya | 1430 |
| 22 | Indonesia | 1430 |
| 23 | India | 1329 |
| 24 | Uzbekistan | 1211 |
| 25 | Myanmar | 1168 |
| 26 | Ukraine | 1091 |
| 27 | Malaysia | 947 |
| 27 | Oman | 666 |
| 29 | Vietnam | 646 |
| 30 | Israel | 464 |
| | Sub total | 194151 |
| | Others | 4605 |
| | Total World | 198756 |
| | of which: OECD | 20092 |
| | Non-OECD | 178664 |
| | European Union | 677 |

Source: BP Statistical Review of World Energy, June 2020

Table 3.2 : World top 30 natural gas producing countries

| | | (Billion cubic metres) |
|-----------|----------------------|------------------------|
| Sl. no. | Country | 2019 |
| 1 | US | 921 |
| 2 | Russian Federation | 679 |
| 3 | Iran | 244 |
| 4 | Qatar | 178 |
| 5 | China | 178 |
| 6 | Canada | 173 |
| 7 | Australia | 153 |
| 8 | Norway | 114 |
| 9 | Saudi Arabia | 114 |
| 10 | Algeria | 86 |
| 11 | Malaysia | 79 |
| 12 | Indonesia | 68 |
| 13 | Egypt | 65 |
| 14 | Turkmenistan | 63 |
| 15 | United Arab Emirates | 63 |
| 16 | Uzbekistan | 56 |
| 17 | Nigeria | 49 |
| 18 | Argentina | 42 |
| 19 | United Kingdom | 40 |
| 20 | Oman | 36 |
| 21 | Thailand | 36 |
| 22 | Trinidad & Tobago | 35 |
| 23 | Mexico | 34 |
| 24 | Pakistan | 34 |
| 25 | Other Asia Pacific | 30 |
| 26 | Bangladesh | 29 |
| 27 | Netherlands | 28 |
| 28 | Other Africa | 28 |
| 29 | India | 27 |
| 30 | Venezuela | 26 |
| | Sub total | 3707 |
| | Others | 283 |
| | Total World | 3989 |
| | of which: OECD | 1506 |
| | Non-OECD | 2483 |
| | European Union | 101 |

Source: BP Statistical Review of World Energy, June 2020

Table 3.3 : World top 30 natural gas consuming countries

| | | (Billion cubic metres) |
|-----------|----------------------|------------------------|
| Sl. no. | Country | 2019 |
| 1 | US | 847 |
| 2 | Russian Federation | 444 |
| 3 | China | 307 |
| 4 | Iran | 224 |
| 5 | Canada | 120 |
| 6 | Saudi Arabia | 114 |
| 7 | Japan | 108 |
| 8 | Mexico | 91 |
| 9 | Germany | 89 |
| 10 | United Kingdom | 79 |
| 11 | United Arab Emirates | 76 |
| 12 | Italy | 71 |
| 13 | India | 60 |
| 14 | Egypt | 59 |
| 15 | South Korea | 56 |
| 16 | Australia | 54 |
| 17 | Thailand | 51 |
| 18 | Argentina | 47 |
| 19 | Pakistan | 46 |
| 20 | Algeria | 45 |
| 21 | Indonesia | 44 |
| 22 | France | 43 |
| 23 | Uzbekistan | 43 |
| 24 | Turkey | 43 |
| 25 | Malaysia | 42 |
| 26 | Qatar | 41 |
| 27 | Netherlands | 37 |
| 28 | Spain | 36 |
| 29 | Brazil | 36 |
| 30 | Bangladesh | 34 |
| | Sub total | 3387 |
| | Others | 542 |
| | Total World | 3929 |
| | of which: OECD | 1801 |
| | Non-OECD | 2128 |
| | European Union | 470 |

Source: BP Statistical Review of World Energy, June 2020

Table 3.4 : Natural gas at a glance

| | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
|---|-------------|-------------|-------------|-------------|--------------|------------------|
| Gross production | 31897 | 32649 | 32875 | 31184 | 16005 | 13954 |
| Net Production (net of flare and loss) | 30848 | 31731 | 32058 | 30257 | 15539 | 13492 |
| LNG import | 24849 | 27439 | 28740 | 33887 | 16417 | 15881 |
| Total Consumption including internal use (Net Production+ LNG import) | 55697 | 59170 | 60798 | 64144 | 31955 | 29373 |
| Total consumption (in BCM) | 55.7 | 59.2 | 60.8 | 64.1 | 32.0 | 29.4 |

Table 3.5 : Natural gas production

| | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
|--|--------------|--------------|--------------|--------------|--------------|------------------|
| ONGC | | | | | | |
| A) Gross Production | 22088 | 23429 | 24677 | 23746 | 12072 | 10979 |
| B) Flared | 530 | 450 | 449 | 520 | 277 | 240 |
| C) Internal Use | 4499 | 4427 | 4629 | 4697 | 2357 | 2265 |
| D) Loss | 0 | 0 | 0 | 0 | 0 | 0 |
| D) =A-B-C Net Production for Sale | 17059 | 18553 | 19599 | 18529 | 9437 | 8474 |
| Oil India Limited | | | | | | |
| A) Gross Production | 2937 | 2881 | 2722 | 2668 | 1384 | 1242 |
| B) Flared | 117 | 114 | 122 | 155 | 73 | 82 |
| C) Internal Use | 405 | 398 | 382 | 377 | 192 | 186 |
| D) Loss | 2 | 5 | 12 | 13 | 6 | 7 |
| D) =A-B-C Net Production for Sale | 2412 | 2365 | 2207 | 2123 | 1114 | 966 |
| PSC/JVs fields | | | | | | |
| A) Gross Production | 6872 | 6338 | 5477 | 4770 | 2549 | 1733 |
| B) Flared | 330 | 261 | 153 | 185 | 85 | 104 |
| C) Internal Use | 952 | 981 | 1007 | 978 | 503 | 446 |
| D) Loss | 70 | 89 | 81 | 54 | 25 | 28 |
| E) =A-B-C-D Net Production for Sale | 5520 | 5007 | 4235 | 3552 | 1936 | 1154 |
| Grand Total | | | | | | |
| A) Gross Production | 31897 | 32649 | 32875 | 31184 | 16005 | 13954 |
| B) Flared | 977 | 824 | 724 | 860 | 435 | 769 |
| C) Internal Use | 5856 | 5806 | 6017 | 6052 | 3052 | 2555 |
| D) Loss | 72 | 94 | 93 | 67 | 31 | 35 |
| E) =A-B-C-D Net Production for Sale | 24992 | 25925 | 26041 | 24205 | 12487 | 10594 |

Source: Domestic Gas Producers / DGH / LNG Importing companies/DGCIS

Note: LNG import data in Million Metric Tonne (MMT), converted to MMSCM; 1MMT=1325 MMSCM; BCM: Billion Cubic Meter; MMSCMD: Million Standard Cubic Meter per Day.

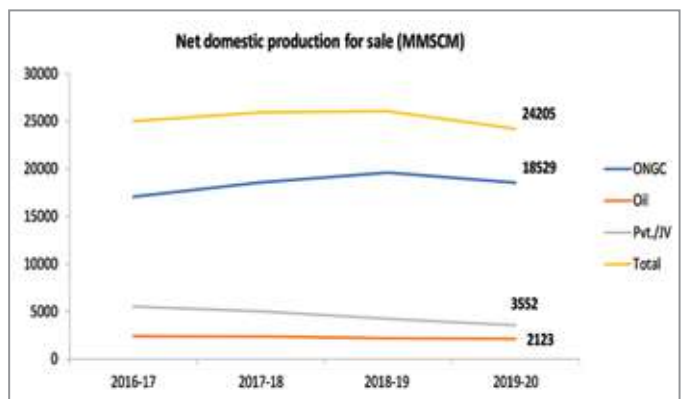
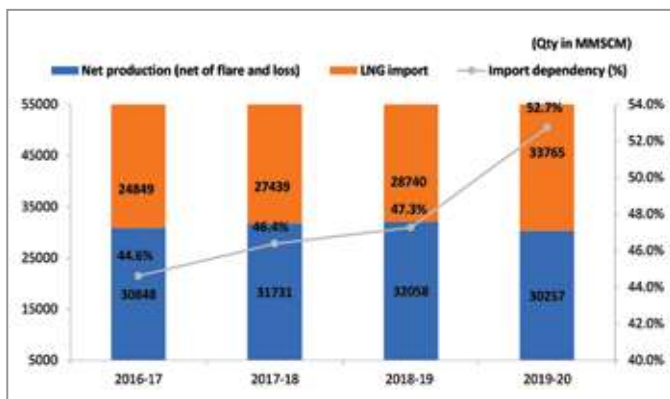


Table 3.6 : PNG data as on 01.10.2020

| Sl. no. | State (s) / Union Territory | Geographical Area (including NOCs/others) (GA) | Entity Name | PNG connections (Nos) | | |
|--------------------|---|--|--|-----------------------|--------------|------------|
| | | | | Domestic | Commercial | Industrial |
| 1 | Andhra Pradesh | Kakinada | Bhagyanagar Gas Limited | 47,492 | 109 | 2 |
| | | East Godavari District (EAAA) | Godavari Gas Private Limited | 28,704 | 4 | 0 |
| | | West Godavari District | Godavari Gas Private Limited | 28,322 | 11 | 1 |
| | | Vijaywada | Bhagyanagar Gas Limited | 27,529 | 17 | 0 |
| | | Krishna District (EAAA) | Megha Engineering & Infrastructure Limited | 8,367 | 75 | 14 |
| | | Total | 140,414 | 216 | 17 | |
| 2 | Andhra Pradesh, Karnataka & Tamil Nadu | Chittoor, Kolar and Vellore Districts | AGP City Gas Private Limited | 0 | 0 | 1 |
| | | Total | 0 | 0 | 1 | |
| 3 | Assam | Upper Assam | Assam Gas Company Limited | 35,289 | 1,147 | 404 |
| | | Total | 35,289 | 1,147 | 404 | |
| 4 | Bihar | Patna District | GAIL (India) Limited | 16,196 | 8 | 0 |
| | | Total | 16,196 | 8 | 0 | |
| 5 | Chandigarh (UT), Haryana, Punjab & Himachal Pradesh | Chandigarh | Indian-Oil Adani Gas Private Limited | 111,074 | 32 | 6 |
| | | Total | 111,074 | 32 | 6 | |
| 6 | Dadra & Nagar Haveli | UT of Dadra & Nagar Haveli | Gujarat Gas Limited | 5,551 | 48 | 41 |
| | | Total | 5,551 | 48 | 41 | |
| 7 | Daman & Diu (UT) | UT of Daman | Indian-Oil Adani Gas Private Limited | 3,537 | 24 | 24 |
| | | Total | 3,537 | 24 | 24 | |
| 8 | Goa | North Goa District | Goa Natural Gas Private Limited | 3,927 | 0 | 2 |
| | | Total | 3,927 | 0 | 2 | |
| 9 | Gujarat | Surat, Bharuch, Ankleshwar | Gujarat Gas Limited | 665,478 | 9,164 | 986 |
| | | Ahmedabad City and Daskroi Area | Adani Gas Limited | 391,331 | 3,406 | 845 |
| | | Rajkot | Gujarat Gas Limited | 240,376 | 1,377 | 966 |
| | | Gandhinagar Mehsana Sabarkantha | Sabarmati Gas Limited | 189,565 | 841 | 340 |
| | | Vadodara | Vadodara Gas Limited | 159,755 | 2,585 | 2 |
| | | Gandhinagar | Gujarat Gas Limited | 122,803 | 523 | 26 |
| | | Valsad | Gujarat Gas Limited | 105,806 | 326 | 675 |
| | | Navsari | Gujarat Gas Limited | 102,178 | 247 | 51 |
| | | Nadiad | Gujarat Gas Limited | 63,254 | 366 | 18 |
| | | Anand District (EAAA) | Gujarat Gas Limited | 36,785 | 236 | 13 |
| | | Hazira | Gujarat Gas Limited | 35,679 | 121 | 16 |
| | | Anand area including Kanjari & Vadtal Villages (in Kheda District) | Charotar Gas Sahakari Mandali Limited | 32,189 | 663 | 129 |
| | | Bhavnagar | Gujarat Gas Limited | 32,125 | 252 | 58 |
| | | Surendranagar | Gujarat Gas Limited | 24,773 | 208 | 359 |
| | | Banaskantha District | IRM Energy Private Limited | 20,203 | 83 | 10 |
| | | Jamnagar | Gujarat Gas Limited | 18,628 | 139 | 83 |
| | | Panchmahal District | Gujarat Gas Limited | 15,056 | 83 | 79 |
| | | Patan District | Sabarmati Gas Limited | 9,502 | 14 | 5 |
| | | Amreli District | Gujarat Gas Limited | 4,019 | 16 | 1 |
| | | Dahod District | Gujarat Gas Limited | 2,560 | 6 | 12 |
| Kutch (West) | Gujarat Gas Limited | 1,051 | 20 | 0 | | |
| Dahej Vagra Taluka | Gujarat Gas Limited | 781 | 12 | 23 | | |
| Vadodara | Adani Gas Limited | 616 | 1 | 88 | | |
| | | Total | 2,274,513 | 20,689 | 4,785 | |

Table 3.6 : Continued

| Sl. no. | State (s) / Union Territory | Geographical Area (including NOCs/others) (GA) | Entity Name | PNG connections (Nos) | | |
|---------|-------------------------------------|--|--|-----------------------|--------------|-------------|
| | | | | Domestic | Commercial | Industrial |
| 10 | Haryana | Faridabad | Adani Gas Limited | 58,355 | 157 | 347 |
| | | Sonapat | GAIL Gas Limited | 23,370 | 39 | 137 |
| | | Gurugram | Haryana City Gas Distribution Limited | 21,224 | 135 | 136 |
| | | Panipat District | Indian-Oil Adani Gas Private Limited | 16,939 | 6 | 18 |
| | | Rewari District | Indraprastha Gas Limited | 7,690 | 9 | 54 |
| | | Karnal District | Indraprastha Gas Limited | 5,904 | 0 | 0 |
| | | Yamunanagar District | Bharat Petroleum Corporation Limited | 5,618 | 0 | 0 |
| | | Ambala & Kurukshetra Districts | HPOIL Gas Private Limited | 2,897 | 0 | 0 |
| | | Kaithal District | Indraprastha Gas Limited | 2,460 | 0 | 0 |
| | | Nuh and Palwal Distircts | Adani Gas Limited | 1,474 | 2 | 32 |
| | | Rohtak District | Bharat Petroleum Corporation Limited | 591 | 0 | 0 |
| | | Jhajjar District | Haryana City Gas (KCE) Private Limited | 24 | 0 | 0 |
| | | Gurugram | Indraprastha Gas Limited | 10290 | 19 | 2 |
| | | | Total | 156836 | 367 | 726 |
| 11 | Jharkhand | Ranchi District | GAIL (India) Limited | 8,602 | 0 | 0 |
| | | East Singhbhum District | GAIL (India) Limited | 6,530 | 0 | 0 |
| | | Giridih & Dhanbad Districts | GAIL Gas Limited | 2,154 | 0 | 0 |
| | | | Total | 17,286 | 0 | 0 |
| 12 | Karnataka | Bengaluru Rural and Urban Districts | GAIL Gas Limited | 157,557 | 186 | 118 |
| | | Tumkur District | Megha Engineering & Infrastructure Limited | 13,576 | 78 | 29 |
| | | Belgaum District | Megha Engineering & Infrastructure Limited | 9,937 | 51 | 18 |
| | | Dharwad District | Indian-Oil Adani Gas Private Limited | 8,805 | 1 | 0 |
| | | Dakshina Kannada District* | GAIL Gas Limited | 2,225 | 0 | 0 |
| | | Ramanagara District | Maharashtra Natural Gas Limited | 0 | 0 | 1 |
| | | | Total | 192,100 | 316 | 166 |
| 13 | Kerala | Ernakulam District | Indian-Oil Adani Gas Private Limited | 41,831 | 9 | 8 |
| | | Alapuzzha, Kollam and Thiruvananthapuram Districts | AGP City Gas Private Limited | 0 | 0 | 1 |
| | | | Total | 41,831 | 9 | 9 |
| 14 | Madhya Pradesh | Indore (including Ujjain City) | Aavantika Gas Limited | 55,701 | 92 | 216 |
| | | Gwalior | Aavantika Gas Limited | 21,023 | 42 | 5 |
| | | Dewas | GAIL Gas Limited | 11,864 | 28 | 40 |
| | | Dhar District | Naveriya Gas Private Limited | 390 | 9 | 0 |
| | | | Total | 85763 | 154 | 236 |
| 15 | Maharashtra | Mumbai & Greater Mumbai | Mahanagar Gas Limited | 899,706 | 3084 | 16 |
| | | Thane urban and adjoining Municipalities | Mahanagar Gas Limited | 572,769 | 886 | 59 |
| | | Pune City including Pimpri - Chichwad & adjoining contigeneous areas Hinjewadi, Chakan, Talegaon | Maharashtra Natural Gas Limited | 279,965 | 365 | 219 |
| | | Raigarh District (EAAA) | Mahanagar Gas Limited | 26,505 | 0 | 1 |
| | | Ratnagiri District | Unison Enviro Private Limited | 780 | 1 | 18 |
| | | Pune District (EAAA) | Torrent Gas Pune Limited | 423 | 0 | 2 |
| | | Palghar District & Thane Rural | Gujarat Gas Limited | 262 | 9 | 16 |
| | | Kolhapur District | HPOIL Gas Private Limited | 218 | 0 | 0 |
| | | | Total | 1,780,628 | 4,345 | 331 |
| 16 | National Capital Territory of Delhi | National Capital Territory of Delhi | Indraprastha Gas Limited | 945309 | 2437 | 1427 |
| | | | Total | 945309 | 2437 | 1427 |

Table 3.6 : Continued

| Sl. no. | State (s) / Union Territory | Geographical Area (including NOCs/others) (GA) | Entity Name | PNG connections (Nos) | | |
|---|-----------------------------|--|--|-----------------------|---------------|------------|
| | | | | Domestic | Commercial | Industrial |
| 17 | Odisha | Khordha District | GAIL (India) Limited | 7,766 | 0 | 0 |
| | | Cuttack District | GAIL (India) Limited | 3,882 | 0 | 0 |
| | | Total | | 11,648 | 0 | 0 |
| 18 | Punjab | Rupnagar District | Bharat Petroleum Corporation Limited | 4,500 | 0 | 0 |
| | | Amritsar District | Gujarat Gas Limited | 2,114 | 14 | 0 |
| | | Fatehgarh Sahib District | IRM Energy Private Limited | 1,266 | 11 | 24 |
| | | Bhatinda District | Gujarat Gas Limited | 187 | 0 | 0 |
| | | Total | | 8,067 | 25 | 24 |
| 19 | Rajasthan | Kota | Rajasthan State Gas Limited | 11,712 | 17 | 15 |
| | | Ajmer, Pali and Rajsamand Districts | Indraprastha Gas Limited | 554 | 0 | 0 |
| | | Bhiwadi (in Alwar District) | Haryana City Gas Distribution (Bhiwadi) Ltd. | 226 | 0 | 39 |
| | | Total | | 12,492 | 17 | 54 |
| 20 | Telangana | Hyderabad | Bhagyanagar Gas Limited | 89,221 | 17 | 38 |
| | | | Total | 89,221 | 17 | 38 |
| 21 | Tripura | Agartala | Tripura Natural Gas Company Ltd. | 41,903 | 442 | 60 |
| | | West Tripura (EAAA) District | Tripura Natural Gas Company Ltd. | 4,555 | 0 | 0 |
| | | Total | | 46,458 | 442 | 60 |
| 22 | Uttar Pradesh | Gautam Budh Nagar District | Indraprastha Gas Limited | 236848 | 592 | 803 |
| | | Ghaziabad & Hapur Districts | Indraprastha Gas Limited | 220289 | 286 | 344 |
| | | Kanpur | Central UP Gas Limited | 64,371 | 193 | 63 |
| | | Agra | Green Gas Limited | 54,618 | 61 | 17 |
| | | Lucknow | Green Gas Limited | 50,144 | 57 | 11 |
| | | Meerut | GAIL Gas Limited | 44,131 | 41 | 57 |
| | | Allahabad | Indian-Oil Adani Gas Private Limited | 35,437 | 21 | 2 |
| | | Bareilly | Central UP Gas Limited | 26,881 | 118 | 18 |
| | | Varanasi District | GAIL (India) Limited | 20,608 | 24 | 0 |
| | | Meerut District (EAAA), Muzaffarnagar & Shamli Districts | Indraprastha Gas Limited | 10650 | 3 | 0 |
| | | Moradabad | Torrent Gas Moradabad Limited | 8,263 | 12 | 71 |
| | | Saharanpur District | Bharat Petroleum Corporation Limited | 6,672 | 0 | 0 |
| | | Khurja | Adani Gas Limited | 6,067 | 4 | 229 |
| | | Mathura | Sanwariya Gas Limited | 4,553 | 39 | 76 |
| Kanpur (EAAA) District, Fatehpur and Hamirpur Districts | Indraprastha Gas Limited | 1,002 | 0 | 0 | | |
| | | Total | 716367 | 1369 | 1900 | |
| 23 | Uttar Pradesh & Rajasthan | Firozabad (Taj Trapezium Zone) | GAIL Gas Limited | 16,307 | 1 | 341 |
| | | | Total | 16,307 | 1 | 341 |
| 24 | Uttarakhand | Haridwar District | Haridwar Natrural Gas Private Limited | 13,000 | 0 | 0 |
| | | Udham Singh Nagar District | Indian-Oil Adani Gas Private Limited | 9,401 | 26 | 28 |
| | | Dehradun District | GAIL Gas Limited | 3,580 | 0 | 0 |
| | | Total | | 25,981 | 26 | 28 |
| | | Grand Total | 6,814,177 | 31,788 | 10,436 | |

Sources : PNGRB

Table 3.7: CNG sales in India

| (Sales in TMT) | | | | | | | | |
|--|--|-------------------------------------|-------------|-------------|-------------|-------------|--------------|------------------|
| State (s) / Union Territory | Company name | No. of companies as on (01.10.2020) | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| Andhra Pradesh* | Bhagyanagar Gas Limited, Godavari Gas Private Limited, Megha Engineering & Infrastructure Limited | 3 | 29 | 32 | 31 | 21 | 11 | 4 |
| Assam | Assam Gas Company Limited | 1 | | | | 0.02 | | 0.02 |
| Bihar | GAIL (India) Limited | 1 | | | | 2 | 1 | 1 |
| Chandigarh, Haryana, Punjab & Himachal Pradesh | Indian Oil-Adani Gas Pvt. Ltd. | 1 | 0 | 5 | 15 | 21 | 11 | 4 |
| Dadra & Nagar Haveli** | Gujarat Gas Limited | 1 | | | | 3 | 1 | 1 |
| Daman and Diu | Indian Oil-Adani Gas Pvt. Ltd. | 1 | | 1 | 2 | 2 | 1 | 0.33 |
| Delhi NCT*** | Indraprastha Gas Ltd . | 1 | 804 | 1016 | 1144 | 1033 | 527 | 301 |
| Goa | Goa Natural Gas Private Limited | 1 | | | | 0.03 | 0.001 | 0.01 |
| Gujarat ** | Adani Gas Limited , Vadodara Gas Limited , Charotar Gas Sahakari Mandali Limited, Gujarat Gas Limited, Hindustan Petroleum Corporation Limited, IRM Energy Private Limited, Sabarmati Gas Limited | 7 | 546 | 612 | 662 | 745 | 367 | 252 |
| Gujarat & UT of Daman and Diu | IRM Energy Private Limited | 1 | | | | 0.07 | | 0.36 |
| Haryana | Adani Gas Limited, GAIL Gas Limited, Haryana City Gas Distribution Limited, HPOIL Gas Private Limited, IndianOil-Adani Gas Private Limited, Indraprastha Gas Limited, Hinustan Petroleum Corporation Limited, Haryana City Gas (KCE) Private Limited | 8 | 109 | 144 | 179 | 197 | 95 | 62 |
| Haryana & Punjab | Gujarat Gas Limited | 1 | | | | | | 0.2 |
| Jharkhand | GAIL (India) Limited | 1 | | | | 0.34 | 0.01 | 0.3 |
| Karnataka | GAIL Gas Limited, IndianOil-Adani Gas Private Limited, Megha Engineering & Infrastructure Limited | 3 | 0 | 0 | 0.3 | 1 | 0.6 | 1 |
| Kerala | Indian Oil-Adani Gas Pvt. Ltd. | 1 | | 0 | 1 | 6 | 3 | 1 |
| Madhya Pradesh | Think Gas Bhopal Private Limited, Aavantika Gas Limited, GAIL Gas Limited, Indian Oil Corporation Limited, Naveriya Gas Private Limited | 5 | 22 | 25 | 31 | 34 | 17 | 7.3 |
| Madhya Pradesh & Rajasthan | Gujarat Gas Limited | 1 | | | | | | 0.04 |
| Maharashtra | Gujarat Gas Limited, HPOIL Gas Private Limited, Mahanagar Gas Limited, Maharashtra Natural Gas Limited, Mahesh Gas Limited, Unison Enviro Private Limited | 6 | 593 | 630 | 702 | 738 | 371 | 154 |
| Maharashtra & Gujarat | Maharashtra Natural Gas Limited | 1 | | | | | | 0.2 |
| Odisha | GAIL (India) Ltd. | 1 | | 0 | 1 | 3 | 2 | 1 |
| Punjab | Gujarat State Petronet Limited, IRM Energy Private Limited, Think Gas Ludhiana Private Limited, Torrent Gas Private Limited, Bharat Gas Resources Limited | 5 | | | 1 | 7 | 2 | 4 |
| Rajasthan | Rajasthan State Gas Limited, Torrent Gas Private Limited, Dholpur CGD Private Limited, Adani Gas Ltd. | 4 | 4 | 5 | 7 | 9 | 6 | 5 |
| Telangana* | Bhagyanagar Gas Limited, Torrent Gas Private Limited | 2 | | | | 13 | 7 | 3 |
| Tripura | Tripura Natural Gas Company Limited | 1 | 12 | 13 | 15 | 16 | 8 | 8 |
| 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. | 10 | 245 | 153 | 282 | 392 | 195 | 118 |
| Uttar Pradesh & Uttarakhand | Hindustan Petroleum Corporation Limited | 1 | | | | | | 118 |
| Uttar Pradesh & Madhya Pradesh | Adani Gas Limited | 1 | | | | 0.001 | | 0.090 |
| Uttarakhand | IndianOil-Adani Gas Private Limited, Haridwar Natural Gas Private Limited | 2 | | | 0.1 | 1 | 0.2 | 1 |
| West Bengal | Great Eastern Energy Corporation Ltd, IndianOil-Adani Gas Private Limited. | 2 | 2 | 2 | 3 | 2 | 1 | 1 |
| Total | | | 2365 | 2338 | 3076 | 3247 | 1626 | 1047 |

Source : CGD companies

Notes: From the FY 2019-20 entries for *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. Remaining entries of the NCR GAs are added into respective State.

Table 3.8: CNG stations as on 01.10.2020

| State/Union Territory | Geographical Area/ CGD Networks | Authorized CGD Entity | CNG Stations |
|--|--|--|--------------|
| Andhra Pradesh | Kakinada | Bhagyanagar Gas Limited | 10 |
| | East Godavari District (EAAA) | Godavari Gas Private Limited | 13 |
| | West Godavari District | Godavari Gas Private Limited | 11 |
| | Vijaywada | Bhagyanagar Gas Limited | 23 |
| | Krishna District (EAAA) | Megha Engineering & Infrastructure Limited | 12 |
| Andhra Pradesh Total | | | 69 |
| Assam | Upper Assam | Assam Gas Company Limited | 1 |
| Assam Total | | | 1 |
| Bihar | Patna District | GAIL (India) Limited | 8 |
| | Aurangabad, Kaimur & Rohtas Districts | Indian Oil Corporation Limited | 1 |
| Bihar Total | | | 9 |
| Chandigarh (UT), Haryana, Punjab & Himachal Pradesh | Chandigarh | Indian-Oil Adani Gas Private Limited | 13 |
| Chandigarh (UT), Haryana, Punjab & Himachal Pradesh Total | | | 13 |
| Dadra & Nagar Haveli (UT) | UT of Dadra & Nagar Haveli | Gujarat Gas Limited | 7 |
| Dadra & Nagar Haveli (UT) Total | | | 7 |
| Daman & Diu (UT) | UT of Daman | Indian-Oil Adani Gas Private Limited | 4 |
| Daman & Diu (UT) Total | | | 4 |
| Daman and Diu & Gujarat | Diu & Gir Somnath Districts | IRM Energy Private Limited | 8 |
| Daman and Diu & Gujarat Total | | | 8 |
| Goa | North Goa District | Goa Natural Gas Private Limited | 2 |
| Goa Total | | | 2 |
| Gujarat | Surat, Bharuch, Ankleshwar | Gujarat Gas Limited | 101 |
| | Ahmedabad City and Daskroi Area | Adani Gas Limited | 65 |
| | Rajkot | Gujarat Gas Limited | 62 |
| | Gandhinagar Mehsana Sabarkantha | Sabarmati Gas Limited | 96 |
| | Vadodara | Vadodara Gas Limited | 19 |
| | Gandhinagar | Gujarat Gas Limited | 14 |
| | Valsad | Gujarat Gas Limited | 25 |
| | Navsari | Gujarat Gas Limited | 23 |
| | Nadiad | Gujarat Gas Limited | 25 |
| | Anand District (EAAA) | Gujarat Gas Limited | 24 |
| | Hazira | Gujarat Gas Limited | 1 |
| | Anand area including Kanjari & Vadtal Villages (in Kheda District) | Charotar Gas Sahakari Mandali Limited | 6 |
| | Bhavnagar | Gujarat Gas Limited | 21 |
| | Surendranagar | Gujarat Gas Limited | 18 |
| | Banaskantha District | IRM Energy Private Limited | 26 |
| | Jamnagar | Gujarat Gas Limited | 18 |
| | Panchmahal District | Gujarat Gas Limited | 24 |
| | Patan District | Sabarmati Gas Limited | 18 |
| | Amreli District | Gujarat Gas Limited | 13 |
| | Dahod District | Gujarat Gas Limited | 9 |
| | Kutch (West) | Gujarat Gas Limited | 12 |
| | Dahej Vagra Taluka | Gujarat Gas Limited | 4 |
| | Vadodara | Adani Gas Limited | 6 |
| Ahmedabad City (Only for CNG) | Hindustan Petroleum Corporation Limited | 22 | |
| Junagadh District | Torrent Gas Private Limited | 9 | |
| Ahmedabad District (EAAA) | Gujarat Gas Limited | 8 | |
| Kheda District (EAAA) & Mahisagar District | Adani Gas Limited | 6 | |

Table 3.8 : Continued

| State/Union Territory | Geographical Area/ CGD Networks | Authorized CGD Entity | CNG Stations |
|---|---|--|--------------|
| | Surendranagar District (EAAA) & Morbi District (EAAA) | Adani Gas Limited | 3 |
| | Narmada (Rajpipla) District | Gujarat Gas Limited | 3 |
| | Porbandar District | Adani Gas Limited | 3 |
| | Barwala & Ranpur Talukas | Adani Gas Limited | 2 |
| | Navsari District (EAAA), Surat District (EAAA), Tapi District (EAAA) & the Dangs District | Adani Gas Limited | 2 |
| Gujarat Total | | | 688 |
| Haryana | Faridabad | Adani Gas Limited | 17 |
| | Sonipat | GAIL Gas Limited | 16 |
| | Gurugram | Haryana City Gas Distribution Limited | 26 |
| | Panipat District | Indian-Oil Adani Gas Private Limited | 8 |
| | Rewari District | Indraprastha Gas Limited | 12 |
| | Karnal District | Indraprastha Gas Limited | 7 |
| | Yamunanagar District | Bharat Petroleum Corporation Limited | 4 |
| | Ambala & Kurukshetra Districts | HPOIL Gas Private Limited | 3 |
| | Kaithal District | Indraprastha Gas Limited | 2 |
| | Nuh and Palwal Districts | Adani Gas Limited | 5 |
| | Rohtak District | Bharat Petroleum Corporation Limited | 1 |
| | Jhajjar District | Haryana City Gas (KCE) Private Limited | 2 |
| | Sonipat District (EAAA) & Jind District | Hindustan Petroleum Corporation Limited | 6 |
| | Bhiwani, Charkhi Dadri & Mahendragarh Districts | Adani Gas Limited | 4 |
| Hisar District | HCG (KCE) Private Limited | 1 | |
| Gurugram | Indraprastha Gas Limited | 7 | |
| Haryana Total | | | 121 |
| Haryana & Himachal Pradesh | Panchkula District (EAAA), Sirmaur, Shimla & Solan (EAAA) Districts | Indian-Oil Adani Gas Private Limited | 1 |
| Haryana & Himachal Pradesh Total | | | 1 |
| Haryana & Punjab | Sirsa, Fatehabad and Mansa (Punjab) Districts | Gujarat Gas Limited | 3 |
| Haryana & Punjab Total | | | 3 |
| Jharkhand | Ranchi District | GAIL (India) Limited | 4 |
| | East Singhbhum District | GAIL (India) Limited | 4 |
| | Bokaro, Hazaribagh & Ramgarh Districts | Indian Oil Corporation Limited | 5 |
| Jharkhand Total | | | 13 |
| Karnataka | Bengaluru Rural and Urban Districts | GAIL Gas Limited | 23 |
| | Belgaum District | Megha Engineering & Infrastructure Limited | 2 |
| | Dharwad District | Indian-Oil Adani Gas Private Limited | 2 |
| | Dakshina Kannada District* | GAIL Gas Limited | 3 |
| | Ramanagara District | Maharashtra Natural Gas Limited | 4 |
| Karnataka Total | | | 34 |
| Kerala | Ernakulam District | Indian-Oil Adani Gas Private Limited | 8 |
| Kerala Total | | | 8 |
| Madhya Pradesh | Indore (including Ujjain City) | Aavantika Gas Limited | 39 |
| | Gwalior | Aavantika Gas Limited | 15 |
| | Dewas | GAIL Gas Limited | 3 |
| | Dhar District | Naveriya Gas Private Limited | 2 |
| | Bhopal & Rajgarh Districts | Think Gas Bhopal Private Limited | 5 |
| | Gwalior (EAAA) District and Sheopur District | Rajasthan State Gas Limited | 2 |
| | Rewa District | Indian Oil Corporation Limited | 1 |
| | Ujjain (EAAA) District, Dewas (EAAA) District and Indore (EAAA) District | Gujarat Gas Limited | 1 |
| Madhya Pradesh Total | | | 68 |

Table 3.8 : Continued

| State/Union Territory | Geographical Area/ CGD Networks | Authorized CGD Entity | CNG Stations |
|---|--|--|--------------|
| Madhya Pradesh and Rajasthan | Jhabua, Banswara, Ratlam and Dungarpur Districts | Gujarat Gas Limited | 2 |
| Madhya Pradesh and Rajasthan Total | | | 2 |
| Madhya Pradesh and Uttar Pradesh | Jhansi (EAAA) District, Bhind, Jalaun, Lalitpur and Datia Districts | Adani Gas Limited | 2 |
| Madhya Pradesh and Uttar Pradesh Total | | | 2 |
| Maharashtra | Mumbai & Greater Mumbai | Mahanagar Gas Limited | 140 |
| | Thane urban and adjoining Municipalities | Mahanagar Gas Limited | 105 |
| | Pune City including Pimpri - Chichwad & adjoining contiguous areas - Hinjewadi, Chakan, Talegaon | Maharashtra Natural Gas Limited | 85 |
| | Raigarh District (EAAA) | Mahanagar Gas Limited | 15 |
| | Ratnagiri District | Unison Enviro Private Limited | 12 |
| | Pune District (EAAA) | Torrent Gas Pune Limited | 15 |
| | Palghar District & Thane Rural | Gujarat Gas Limited | 13 |
| | Kolhapur District | HPOIL Gas Private Limited | 4 |
| | Sindhudurg District | Maharashtra Natural Gas Limited | 2 |
| | Latur & Osmanabad Districts | Unison Enviro Private Limited | 1 |
| Maharashtra Total | | | 392 |
| Maharashtra & Gujarat | Valsad (EAAA), Dhule & Nashik Districts | Maharashtra Natural Gas Limited | 7 |
| Maharashtra & Gujarat Total | | | 7 |
| National Capital Territory of Delhi (UT) | National Capital Territory of Delhi | Indraprastha Gas Limited | 419 |
| National Capital Territory of Delhi (UT) Total | | | 419 |
| Odisha | Khordha District | GAIL (India) Limited | 9 |
| | Cuttack District | GAIL (India) Limited | 6 |
| | Sundargarh & Jharsuguda Districts | GAIL Gas Limited | 2 |
| | Ganjam, Nayagarh & Puri Districts | GAIL Gas Limited | 2 |
| Odisha Total | | | 19 |
| Punjab | Rupnagar District | Bharat Petroleum Corporation Limited | 6 |
| | Amritsar District | Gujarat Gas Limited | 10 |
| | Fatehgarh Sahib District | IRM Energy Private Limited | 5 |
| | Bhatinda District | Gujarat Gas Limited | 2 |
| | SAS Nagar District (EAAA), Patiala & Sangrur Districts | Torrent Gas Private Limited | 11 |
| | Jalandhar District (EAAA), Kapurthala & SBS Nagar Districts | Think Gas Ludhiana Private Limited | 9 |
| | Ludhiana District (EAAA), Barnala & Moga Districts | Think Gas Ludhiana Private Limited | 7 |
| | Jalandhar | Jay Madhok Energy Private Limited led Consortium | 3 |
| | Ludhiana | Jay Madhok Energy Private Limited led Consortium | 3 |
| Hoshiarpur and Gurdaspur Districts | Gujarat Gas Limited | 3 | |
| Punjab Total | | | 59 |
| Rajasthan | Kota | Rajasthan State Gas Limited | 8 |
| | Kota District (EAAA), Baran & Chittorgarh (Only Rawatbhata Taluka) Districts | Torrent Gas Private Limited | 8 |
| | Bhilwara & Bundi Districts | Adani Gas Limited | 4 |
| | Jalore and Sirohi Districts | Gujarat Gas Limited | 4 |
| | Chittorgarh (Other than Rawatbhata Taluka) & Udaipur Districts* | Adani Gas Limited | 3 |
| | Dholpur District | Dholpur CGD Private Limited | 3 |
| | CNG (DBS) NOC | Rajasthan State Gas Limited | 2 |
| Rajasthan Total | | | 32 |
| Telangana | Hyderabad | Bhayanagar Gas Limited | 62 |
| | Medak, Siddipet & Sangareddy Districts | Torrent Gas Private Limited | 11 |
| Telangana Total | | | 73 |

Table 3.8 : Continued

| State/Union Territory | Geographical Area/ CGD Networks | Authorized CGD Entity | CNG Stations | |
|--|--|--|------------------|------------|
| Tripura | Agartala | Tripura Natural Gas Company Limited | 5 | |
| | West Tripura (EAAA) District | Tripura Natural Gas Company Limited | 2 | |
| | Gomati District | Tripura Natural Gas Company Limited | 3 | |
| Tripura Total | | | 10 | |
| Uttar Pradesh | Gautam Budh Nagar District | Indraprastha Gas Limited | 49 | |
| | Ghaziabad & Hapur Districts | Indraprastha Gas Limited | 51 | |
| | Kanpur | Central UP Gas Limited | 30 | |
| | Agra | Green Gas Limited | 23 | |
| | Lucknow | Green Gas Limited | 34 | |
| | Meerut | GAIL Gas Limited | 17 | |
| | Allahabad | Indian-Oil Adani Gas Private Limited | 7 | |
| | Bareilly | Central UP Gas Limited | 13 | |
| | Varanasi District | GAIL (India) Limited | 10 | |
| | Meerut District (EAAA), Muzaffarnagar & Shamli Districts | Indraprastha Gas Limited | 8 | |
| | Moradabad | Torrent Gas Moradabad Limited | 5 | |
| | Saharanpur District | Bharat Petroleum Corporation Limited | 5 | |
| | Khurja | Adani Gas Limited | 4 | |
| | Mathura | Sanwariya Gas Limited | 11 | |
| | Kanpur (EAAA) District, Fatehpur and Hamirpur Districts | Indraprastha Gas Limited | 4 | |
| | Auraiya, Kanpur Dehat & Etawah Districts | Torrent Gas Private Limited | 12 | |
| | Moradabad (EAAA) District | Torrent Gas Private Limited | 10 | |
| | Jhansi | Central UP Gas Limited | 4 | |
| | Allahabad District (EAAA), Bhadohi & Kaushambi Districts | Indian-Oil Adani Gas Private Limited | 4 | |
| | Gonda and Barabanki Districts | Torrent Gas Private Limited | 4 | |
| | Bagpat District | Bagpat Green Energy Private Limited | 3 | |
| | Azamgarh, Mau and Ballia Districts | Torrent Gas Private Limited | 3 | |
| | Basti and Ambedkarnagar Districts | Torrent Gas Private Limited | 2 | |
| | Bulandshahr (part) District | Indian-Oil Adani Gas Private Limited | 1 | |
| | Bulandshahr District (EAAA), Aligarh & Hathras Districts | Indian-Oil Adani Gas Private Limited | 1 | |
| | Unnao (EAAA) District | Green Gas Limited | 1 | |
| | Bareilly (EAAA) District, Pilibhit and Rampur Districts | Hindustan Petroleum Corporation Limited | 1 | |
| | Jaunpur and Ghazipur Districts | Indian-Oil Adani Gas Private Limited | 1 | |
| | Shahjahanpur and Budaun Districts | Hindustan Petroleum Corporation Limited | 1 | |
| | Gorakhpur, Sant Kabir Nagar & Kushinagar Districts | Torrent Gas Private Limited | 10 | |
| | Uttar Pradesh Total | | | 329 |
| | Uttar Pradesh & Rajasthan | Firozabad (Taj Trapezium Zone) | GAIL Gas Limited | 23 |
| Uttar Pradesh & Rajasthan Total | | | 23 | |
| Uttar Pradesh and Uttrakhand | Bijnor and Nainital Districts | Hindustan Petroleum Corporation Limited | 1 | |
| Uttar Pradesh and Uttrakhand Total | | | 1 | |
| Uttrakhand | Haridwar District | Haridwar Natrural Gas Private Limited | 1 | |
| | Udham Singh Nagar District | Indian-Oil Adani Gas Private Limited | 3 | |
| | Dehradun District | GAIL Gas Limited | 2 | |
| Uttrakhand Total | | | 6 | |
| West Bengal | Burdwan District | Indian-Oil Adani Gas Private Limited | 4 | |
| | Assansol, Raniganj, Kultora, Durgapur | Great Eastern Energy Corporation Limited | 7 | |
| West Bengal Total | | | 11 | |
| Grand Total | | | 2,434 | |

Sources : PNGRB and GEECL

Table 3.9 : LNG terminals (Operational)

| Location | Promoters | Capacity as on 01.10.2020 | Capacity utilisation (Cumulative) in % April-September 2020 |
|-----------------------|------------------------------|---------------------------|--|
| Dahej | Petronet LNG Ltd (PLL) | 17.5 MMTPA | 94.4 |
| Hazira | Shell Energy India Pvt. Ltd. | 5 MMTPA | 96.5 |
| Dabhol | Konkan LNG Limited | *5 MMTPA | 25.6 |
| Kochi | Petronet LNG Ltd (PLL) | 5 MMTPA | 15.5 |
| Ennore | Indian Oil LNG Pvt Ltd | 5 MMTPA | 10.8 |
| Mundra | GSPC LNG Limited | 5 MMTPA | 35.2 |
| Total Capacity | | 42.5 MMTPA | |

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

Table 3.10 : Import of Liquefied Natural Gas (LNG)

| LNG import quantity/value | | | |
|---------------------------|------|--------|-----------------|
| Financial year | MMT | MMSCM | Value (Mn. USD) |
| 2016-17 | 18.8 | 24,849 | 6,128 |
| 2017-18 | 20.7 | 27,439 | 8,051 |
| 2018-19 | 21.7 | 28,740 | 10,253 |
| 2019-20 | 25.6 | 33,886 | 9,489 |
| Apr-Sep 2019 | 12.4 | 16,417 | 4,728 |
| Apr-Sep 2020 (P) | 12.0 | 15,798 | 3,106 |

Source: LNG importing companies & DGCIS

Table 3.11 : Domestic natural gas price and gas price ceiling

| Period | Domestic natural gas price in US\$/ MMBTU (GCV basis)* | Gas price ceiling in US\$/MMBTU (GCV basis)** |
|-----------------------------|---|---|
| November 2014 - March 2015 | 5.05 | - |
| April 2015 - September 2015 | 4.66 | - |
| October 2015 - March 2016 | 3.82 | - |
| April 2016 - September 2016 | 3.06 | 6.61 |
| October 2016 - March 2017 | 2.5 | 5.3 |
| April 2017 - September 2017 | 2.48 | 5.56 |
| October 2017 - March 2018 | 2.89 | 6.3 |
| April 2018 - September 2018 | 3.06 | 6.78 |
| October 2018 - March 2019 | 3.36 | 7.67 |
| April 2019 - September 2019 | 3.69 | 9.32 |
| October 2019 - March 2020 | 3.23 | 8.43 |
| April 2020 - September 2020 | 2.39 | 5.61 |
| October 2020 - March 2021 | 1.79 | 4.06 |

Note: * As per the "New Domestic Natural Gas Pricing Guidelines, 2014" issued by Ministry of Petroleum & Natural Gas dated October 25, 2014.

** As per the notification issued by Ministry of Petroleum and Natural Gas dated 21.03.2016 on marketing including pricing freedom for the gas to be produced from discoveries in Deepwater, Ultra Deepwater and High Pressure-High Temperature areas.



Chapter 4

Refining & Production

Map of Refineries in India



Simplified block flow diagram of a typical refinery

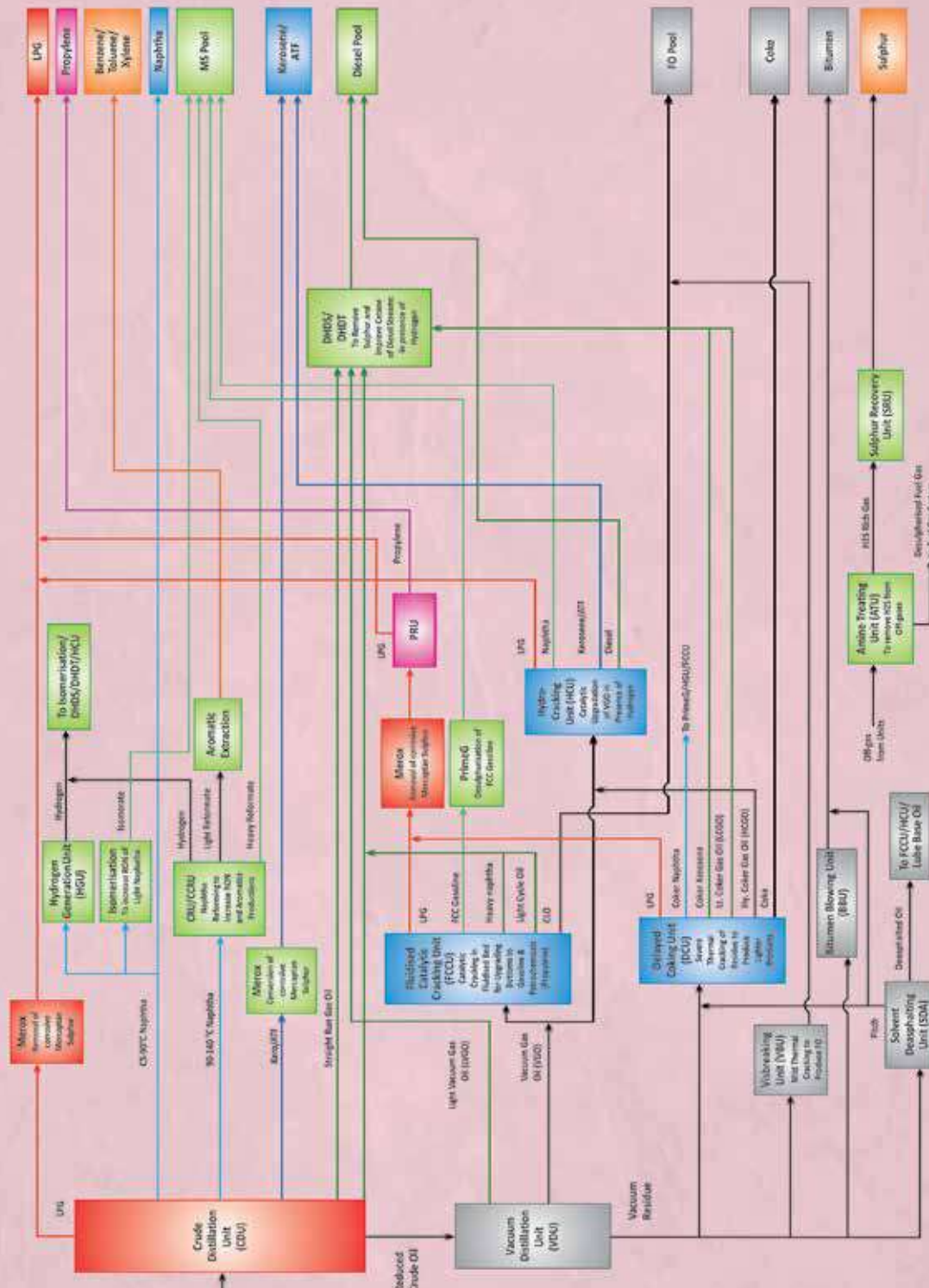


Table 4.1 : Refineries: Installed capacity and crude oil processing

| Sl. no. | Refinery | Installed capacity (MMTPA) | | | | Crude Oil Processing (MMT) | | | | | |
|---------|--------------------|----------------------------|--------------|--------------|--------------|----------------------------|--------------|--------------|--------------|--------------|------------------|
| | | 01.04.2017 | 01.04.2018 | 01.04.2019 | 01.04.2020 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| 1 | Barauni | 6.0 | 6.0 | 6.0 | 6.0 | 6.5 | 5.8 | 6.7 | 6.5 | 3.2 | 2.2 |
| 2 | Koyali | 13.7 | 13.7 | 13.7 | 13.7 | 14.0 | 13.8 | 13.5 | 13.1 | 5.6 | 5.2 |
| 3 | Haldia | 7.5 | 7.5 | 7.5 | 8.0 | 7.7 | 7.7 | 8.0 | 6.5 | 3.9 | 2.7 |
| 4 | Mathura | 8.0 | 8.0 | 8.0 | 8.0 | 9.2 | 9.2 | 9.7 | 8.9 | 5.2 | 4.0 |
| 5 | Panipat | 15.0 | 15.0 | 15.0 | 15.0 | 15.6 | 15.7 | 15.3 | 15.0 | 7.1 | 5.7 |
| 6 | Guwahati | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | 1.0 | 0.9 | 0.9 | 0.5 | 0.3 |
| 7 | Digboi | 0.65 | 0.65 | 0.65 | 0.65 | 0.5 | 0.7 | 0.7 | 0.7 | 0.3 | 0.3 |
| 8 | Bongaigaon | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.5 | 2.0 | 1.2 | 1.2 |
| 9 | Paradip | 15.0 | 15.0 | 15.0 | 15.0 | 8.2 | 12.7 | 14.6 | 15.8 | 7.8 | 5.2 |
| | IOCL total | 69.2 | 69.2 | 69.2 | 69.7 | 65.2 | 69.0 | 71.8 | 69.4 | 34.8 | 26.9 |
| 10 | Mumbai | 7.5 | 7.5 | 7.5 | 7.5 | 8.5 | 8.6 | 8.7 | 8.1 | 3.8 | 3.7 |
| 11 | Visakh | 8.3 | 8.3 | 8.3 | 8.3 | 9.3 | 9.6 | 9.8 | 9.1 | 4.6 | 4.3 |
| 12 | HMEL-Bathinda | 9.0 | 11.3 | 11.3 | 11.3 | 10.5 | 8.8 | 12.5 | 12.2 | 5.9 | 5.1 |
| | HPCL total | 24.8 | 27.1 | 27.1 | 27.1 | 28.3 | 27.1 | 30.9 | 29.4 | 14.3 | 13.2 |
| 13 | Mumbai | 12.0 | 12.0 | 12.0 | 12.0 | 13.5 | 14.1 | 14.8 | 15.0 | 7.0 | 5.5 |
| 14 | Kochi | 12.4 | 15.5 | 15.5 | 15.5 | 11.8 | 14.1 | 16.1 | 16.5 | 8.2 | 5.2 |
| 15 | BORL-Bina | 6.0 | 6.0 | 7.8 | 7.8 | 6.4 | 6.7 | 5.7 | 7.9 | 3.8 | 2.5 |
| | BPCL total | 30.4 | 33.5 | 35.3 | 35.3 | 31.7 | 34.9 | 36.5 | 39.4 | 19.0 | 13.2 |
| 16 | Manali | 10.5 | 10.5 | 10.5 | 10.5 | 9.8 | 10.3 | 10.3 | 10.2 | 5.2 | 3.4 |
| 17 | CBR | 1.0 | 1.0 | 1.0 | 1.0 | 0.5 | 0.5 | 0.4 | 0.0 | 0.0 | 0.0 |
| | CPCL total | 11.5 | 11.5 | 11.5 | 11.5 | 10.3 | 10.8 | 10.7 | 10.2 | 5.2 | 3.4 |
| 18 | Numaligarh | 3.0 | 3.0 | 3.0 | 3.0 | 2.7 | 2.8 | 2.9 | 2.4 | 1.4 | 1.3 |
| 19 | Tatipaka | 0.07 | 0.07 | 0.07 | 0.07 | 0.09 | 0.08 | 0.07 | 0.09 | 0.04 | 0.04 |
| 20 | MRPL-Mangalore | 15.0 | 15.0 | 15.0 | 15.0 | 16.0 | 16.1 | 16.2 | 14.0 | 6.0 | 4.3 |
| | ONGC total | 15.1 | 15.1 | 15.1 | 15.1 | 16.1 | 16.2 | 16.3 | 14.0 | 6.1 | 4.4 |
| 21 | RIL-Jamnagar (DTA) | 33.0 | 33.0 | 33.0 | 33.0 | 32.8 | 33.2 | 31.8 | 33.0 | 15.4 | 16.8 |
| 22 | RIL-Jamnagar (SEZ) | 27.0 | 35.2 | 35.2 | 35.2 | 37.4 | 37.3 | 37.4 | 35.9 | 19.1 | 12.2 |
| 23 | NEL*-Vadinar | 20.0 | 20.0 | 20.0 | 20.0 | 20.9 | 20.7 | 18.9 | 20.6 | 10.4 | 8.9 |
| | All India | 234.0 | 247.6 | 249.4 | 249.9 | 245.4 | 251.9 | 257.2 | 254.4 | 125.7 | 100.2 |

Source: Oil companies; *Nayara Energy Limited (formerly Essar Oil Limited)
MMTPA: Million Metric Tonne Per Annum, MMT: Million Metric Tonne

Table 4.2 : High Sulphur (HS) & Low Sulphur (LS) crude oil processing

| (Million metric tonne) | | | | | | | |
|------------------------|---|--------------|--------------|--------------|--------------|--------------|------------------|
| Sl. no. | Type of crude | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| 1 | HS crude | 177.4 | 188.4 | 194.2 | 192.4 | 93.1 | 73.0 |
| 2 | LS crude | 67.9 | 63.6 | 63.0 | 62.0 | 32.7 | 27.2 |
| | Total crude | 245.4 | 251.9 | 257.2 | 254.4 | 125.7 | 100.2 |
| | Share of HS crude in total crude processing | 72.3% | 74.8% | 75.5% | 75.6% | 74.0% | 72.9% |

Source: Oil companies

Table 4.3 : Imported crude & indigenous crude oil processing

| (Million metric tonne) | | | | | | | |
|------------------------|---|--------------|--------------|--------------|--------------|--------------|------------------|
| Sl. no. | Indigenous/ Imported crude | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| 1 | Imported crude | 211.8 | 219.1 | 225.5 | 225.1 | 110.7 | 86.2 |
| 2 | Indigenous crude | 33.5 | 32.8 | 31.7 | 29.3 | 15.0 | 13.9 |
| | Total crude | 245.4 | 251.9 | 257.2 | 254.4 | 125.7 | 100.2 |
| | Share of imported crude in total crude processing | 86.3% | 87.0% | 87.7% | 88.5% | 88.1% | 86.1% |

Source: Oil companies

Table 4.4 : Production of petroleum products

| (Million metric tonne) | | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|------------------|
| Products | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| A) From crude oil/refineries | | | | | | |
| Light ends | 75.0 | 83.7 | 85.1 | 87.4 | 41.6 | 38.5 |
| of which: LPG | 9.2 | 10.2 | 10.7 | 10.9 | 5.1 | 4.7 |
| MS | 36.6 | 37.8 | 38.0 | 38.6 | 19.2 | 15.9 |
| Naphtha | 18.6 | 18.8 | 18.4 | 19.4 | 8.7 | 8.5 |
| Others | 10.7 | 17.0 | 18.0 | 18.5 | 8.6 | 9.4 |
| Middle distillates | 127.9 | 131.2 | 136.3 | 135.5 | 67.0 | 52.4 |
| of which: SKO | 5.9 | 4.2 | 4.0 | 3.2 | 1.6 | 1.2 |
| ATF | 13.8 | 14.6 | 15.5 | 15.2 | 7.4 | 2.7 |
| HSD | 102.1 | 108.0 | 110.5 | 111.1 | 54.8 | 45.7 |
| LDO | 0.6 | 0.6 | 0.7 | 0.6 | 0.3 | 0.3 |
| Others | 5.4 | 3.7 | 5.7 | 5.5 | 2.8 | 2.6 |
| Heavy ends | 36.3 | 34.8 | 36.0 | 35.3 | 17.1 | 14.3 |
| of which: Furnace Oil | 11.8 | 9.8 | 9.5 | 8.9 | 4.7 | 4.3 |
| LSHS | 0.3 | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 |
| Lube Oil | 1.0 | 1.0 | 0.9 | 0.9 | 0.5 | 0.4 |
| Bitumen | 5.2 | 5.3 | 5.6 | 4.9 | 2.3 | 1.6 |
| RPC/Petcoke | 12.9 | 13.9 | 13.7 | 14.6 | 6.8 | 5.8 |
| Others | 5.2 | 4.3 | 5.9 | 5.5 | 2.7 | 2.0 |
| Sub total (A) | 239.2 | 249.7 | 257.4 | 258.2 | 125.8 | 105.2 |
| B) From natural gas / fractionators | | | | | | |
| Sub total (B) | 4.3 | 4.6 | 4.9 | 4.8 | 2.4 | 2.1 |
| of which: LPG | 2.1 | 2.2 | 2.1 | 2.0 | 1.0 | 1.0 |
| Naphtha | 1.2 | 1.2 | 1.2 | 1.2 | 0.6 | 0.5 |
| SKO | 0.03 | 0.05 | 0.07 | 0.05 | 0.04 | 0.02 |
| HSD | 0.01 | 0.01 | 0.04 | 0.06 | 0.03 | 0.03 |
| Others | 1.0 | 1.1 | 1.5 | 1.5 | 0.8 | 0.6 |
| Total production (A + B) | 243.5 | 254.3 | 262.4 | 262.9 | 128.1 | 107.3 |

Source: Oil companies

Table 4.5 : Production of petroleum products : All sources

| (Million metric tonne) | | | | | | |
|------------------------|--------------|--------------|--------------|--------------|--------------|------------------|
| Major products | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| HSD | 102.1 | 108.1 | 110.6 | 111.1 | 54.9 | 45.7 |
| MS | 36.6 | 37.8 | 38.0 | 38.6 | 19.2 | 15.9 |
| Naphtha | 19.7 | 20.0 | 19.6 | 20.6 | 9.3 | 9.0 |
| FO | 11.8 | 9.8 | 9.5 | 8.9 | 4.7 | 4.3 |
| ATF | 13.8 | 14.7 | 15.5 | 15.2 | 7.4 | 2.7 |
| LPG | 11.3 | 12.4 | 12.8 | 12.8 | 6.1 | 5.7 |
| SKO | 6.0 | 4.3 | 4.1 | 3.2 | 1.7 | 1.3 |
| Bitumen | 5.2 | 5.3 | 5.6 | 4.9 | 2.3 | 1.6 |
| LSHS | 0.3 | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 |
| Lubes | 1.0 | 1.0 | 0.9 | 0.9 | 0.5 | 0.4 |
| LDO | 0.6 | 0.6 | 0.7 | 0.6 | 0.3 | 0.3 |
| RPC/Petcoke | 12.9 | 13.9 | 13.7 | 14.6 | 6.8 | 5.8 |
| Others [#] | 22.3 | 26.2 | 31.0 | 31.0 | 14.9 | 14.4 |
| Total | 243.5 | 254.3 | 262.4 | 262.9 | 128.1 | 107.3 |

Source: Oil companies

[#] Others include products like Propylene, Solvents (Hexane, Benzene, Toluene, Xylene and Specialty solvents), Reformate, Mineral Turpentine Oil, Carbon Black Feed Stock, Waxes, Sulphur etc.

Table 4.6 : Production vis a vis consumption of petroleum products

| (Million metric tonne) | | | |
|------------------------|--------------------------|---|---------------------------|
| Year | Consumption [§] | Production from refineries & other sources [*] | Surplus (+) / Deficit (-) |
| | (A) | (B) | (B)-(A) |
| 1997-98 | 84.3 | 64.7 | -19.6 |
| 1998-99 | 90.6 | 68.4 | -22.2 |
| 1999-00 | 97.1 | 82.9 | -14.2 |
| 2000-01 | 100.1 | 99.6 | -0.5 |
| 2001-02 | 100.4 | 104.3 | 3.9 |
| 2002-03 | 104.1 | 108.7 | 4.5 |
| 2003-04 | 107.8 | 117.6 | 9.9 |
| 2004-05 | 111.6 | 123.3 | 11.6 |
| 2005-06 | 113.2 | 124.6 | 11.4 |
| 2006-07 | 120.7 | 140.6 | 19.9 |
| 2007-08 | 128.9 | 150.4 | 21.5 |
| 2008-09 | 133.6 | 157.9 | 24.3 |
| 2009-10 | 137.8 | 185.5 | 47.7 |
| 2010-11 | 141.0 | 196.2 | 55.2 |
| 2011-12 | 148.1 | 204.5 | 56.3 |
| 2012-13 | 157.1 | 218.2 | 61.2 |
| 2013-14 | 158.4 | 220.7 | 62.3 |
| 2014-15 | 165.5 | 221.1 | 55.6 |
| 2015-16 | 184.7 | 231.9 | 47.2 |
| 2016-17 | 194.6 | 243.5 | 48.9 |
| 2017-18 | 206.2 | 254.3 | 48.1 |
| 2018-19 | 213.2 | 262.4 | 49.1 |
| 2019-20 | 214.1 | 262.9 | 48.8 |
| Apr-Sep 2019 | 106.5 | 128.1 | 21.6 |
| Apr-Sep 2020 (P) | 86.4 | 107.3 | 20.9 |

Note: § includes direct imports by private parties

*Fractionators and gas processing plants

Table 4.7 : Gross Refining Margins (GRM) of refineries

| | | (\$/bbl) | | | | | | |
|---------------------------|----------------|-------------|-------------|-------------|-------------|-------------|--------------|------------------|
| Company | Refinery | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| PSU refineries | | | | | | | | |
| IOCL | Barauni | 2.93 | 6.52 | 6.60 | 3.86 | (1.24) | 1.75 | 0.05 |
| | Koyali | 6.80 | 7.55 | 9.44 | 4.87 | 1.90 | 2.32 | 1.53 |
| | Haldia | 3.96 | 6.80 | 6.86 | 5.36 | (2.44) | 2.21 | 2.16 |
| | Mathura | 3.30 | 7.01 | 7.09 | 4.65 | (1.02) | 2.12 | 2.51 |
| | Panipat | 4.15 | 7.95 | 7.74 | 4.66 | (0.25) | 2.42 | 0.18 |
| | Guwahati** | 15.88 | 22.14 | 21.88 | 16.35 | 14.22 | 17.06 | 28.19 |
| | Digboi** | 16.17 | 24.49 | 24.86 | 22.74 | 17.52 | 20.55 | 24.63 |
| | Bongaigaon** | 11.09 | 20.15 | 20.62 | 16.94 | 10.49 | 16.77 | 24.28 |
| | Paradip# | (0.65) | 4.22 | 7.02 | 4.46 | (1.80) | 1.57 | 4.23 |
| | Average | 5.06 | 7.77 | 8.49 | 5.41 | 0.08 | 2.96 | 3.46 |
| BPCL | Kochi | 6.87 | 5.16 | 6.44 | 4.27 | 2.17 | 2.68 | 3.89 |
| | Mumbai | 6.37 | 5.36 | 7.26 | 4.92 | 2.88 | 3.58 | 2.54 |
| | Average | 6.59 | 5.26 | 6.85 | 4.58 | 2.50 | 3.10 | 3.19 |
| HPCL | Mumbai | 8.09 | 6.95 | 8.35 | 5.79 | 3.63 | 3.33 | 3.26 |
| | Visakh | 5.46 | 5.51 | 6.55 | 4.31 | (1.30) | 0.67 | 2.00 |
| | Average | 6.68 | 6.20 | 7.40 | 5.01 | 1.02 | 1.87 | 2.58 |
| CPCL | Chennai | 5.27 | 6.05 | 6.42 | 3.70 | (1.18) | 2.03 | 9.70 |
| MRPL | Mangalore | 5.20 | 7.75 | 7.54 | 4.06 | (0.23) | 0.23 | 1.55 |
| NRL | Numaligarh** | 23.68 | 28.56 | 31.92 | 28.11 | 24.55 | 25.58 | 32.67 |
| JV refineries | | | | | | | | |
| BORL | Bina | 11.70 | 11.80 | 11.70 | 9.80 | 5.60 | 6.20 | 7.50 |
| Private refineries | | | | | | | | |
| RIL | Jamnagar | 10.80 | 11.00 | 11.60 | 9.20 | 8.90 | 8.80 | 6.10 |
| NEL® | Vadinar | 10.81 | 9.14 | 8.95 | 6.97 | 5.88 | * | * |
| Singapore | | 7.52 | 5.83 | 7.23 | 4.88 | 3.25 | 5.00 | (0.44) |

(P) - Provisional * Not available

** GRM of North East refineries are including excise duty benefit. For GRM excluding excise duty benefit, refer table 4.8; #Commissioned in February, 2016.

As per U.S. Energy Information Administration (EIA), Gross Refining margin is the difference between the revenue from the sale of petroleum products and the cost of the raw materials used to produce the products.

®Nayara Energy Limited (formerly Essar Oil Limited)

Source: Indian refineries - published results/ information provided by oil companies, Singapore - Reuters.

Table 4.8 : GRM of North East refineries excluding excise duty benefit

| | | (\$/bbl) | | | | | | |
|---------|------------|----------|---------|---------|---------|---------|--------------|------------------|
| Company | Refinery | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| IOCL | Guwahati | 1.26 | 1.12 | 3.70 | 0.63 | (3.34) | (0.24) | 2.40 |
| | Digboi | 4.16 | 7.73 | 8.27 | 8.84 | 3.35 | 6.83 | 0.54 |
| | Bongaigaon | 0.08 | 6.03 | 6.22 | 4.21 | (1.84) | 2.25 | 0.18 |
| NRL | Numaligarh | 8.06 | 8.50 | 11.43 | 11.80 | 7.99 | 9.63 | 1.79 |

Source: Information provided by oil companies

Table 4.9 : Distillate yield of PSU refineries

| (Distillate %) | | | | | | | |
|-----------------------------|------------|-------------|-------------|-------------|-------------|--------------|------------------|
| Company | Refinery | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| IOCL | Barauni | 85.3 | 89.0 | 87.9 | 86.9 | 82.6 | 87.2 |
| | Koyali | 81.0 | 82.5 | 81.0 | 79.5 | 80.0 | 72.0 |
| | Haldia | 66.7 | 66.9 | 69.9 | 69.0 | 69.8 | 73.9 |
| | Mathura | 73.6 | 75.4 | 76.1 | 75.6 | 75.8 | 71.2 |
| | Panipat | 84.1 | 84.9 | 82.8 | 84.8 | 85.2 | 78.6 |
| | Guwahati | 83.5 | 82.7 | 81.0 | 83.5 | 83.8 | 75.5 |
| | Digboi | 75.3 | 77.9 | 75.8 | 72.5 | 70.7 | 67.9 |
| | Bongaigaon | 83.8 | 84.3 | 84.8 | 80.8 | 87.2 | 85.2 |
| | Paradip | 75.3 | 79.4 | 80.8 | 80.7 | 80.6 | 78.4 |
| CPCL | Manali | 71.6 | 72.3 | 75.3 | 77.6 | 77.5 | 77.2 |
| | CBR | 78.2 | 79.1 | 77.3 | - | - | - |
| HPCL | Mumbai | 77.6 | 77.4 | 77.6 | 77.0 | 75.1 | 77.6 |
| | Visakh | 74.0 | 74.5 | 74.5 | 72.1 | 71.1 | 75.4 |
| BPCL | Mumbai | 86.1 | 84.3 | 82.2 | 84.9 | 85.6 | 84.1 |
| | Kochi | 85.2 | 83.9 | 82.5 | 84.2 | 84.9 | 83.4 |
| NRL | Numaligarh | 90.5 | 86.7 | 87.1 | 83.0 | 85.0 | 85.2 |
| MRPL | Mangalore | 77.3 | 76.5 | 76.8 | 76.7 | 74.0 | 78.8 |
| PSU oil cos. average | | 79.3 | 79.7 | 79.6 | 80.0 | 79.6 | 78.3 |

Source : CHT

Table 4.10 : Fuel & Loss

| (Million metric tonne) | | | | | | | | | | | | | | | | | | | | |
|------------------------|---------|-------------------|----------------------------|-------------|------|----------------------------|-------------|------|----------------------------|-------------|------|----------------------------|-------------|------|----------------------------|-------------|------|----------------------------|-------------|---------|
| Sl. no. | Company | Refinery | 2016-17 | | | 2017-18 | | | 2018-19 | | | 2019-20 | | | Apr-Sep 2019 | | | Apr-Sep 2020 (P) | | |
| | | | Crude T'put + other inputs | Fuel & Loss | | Crude T'put + other inputs | Fuel & Loss | | Crude T'put + other inputs | Fuel & Loss | | Crude T'put + other inputs | Fuel & Loss | | Crude T'put + other inputs | Fuel & Loss | | Crude T'put + other inputs | Fuel & Loss | |
| | | | | Qty | % | | Qty | % | | Qty | % | | Qty | % | | Qty | % | | Qty | % |
| 1 | | Barauni | 6.6 | 0.6 | 9.2 | 6.0 | 0.5 | 9.2 | 6.9 | 0.6 | 9.0 | 6.7 | 0.6 | 8.8 | 3.3 | 0.3 | 8.7 | 2.4 | 0.3 | 11.0 |
| 2 | | Koyali | 14.6 | 1.3 | 9.0 | 14.5 | 1.2 | 8.6 | 14.2 | 1.3 | 9.0 | 13.9 | 1.3 | 9.3 | 5.9 | 0.6 | 10.1 | 5.6 | 0.6 | 10.7 |
| 3 | | Haldia | 7.7 | 0.7 | 8.8 | 7.8 | 0.7 | 8.4 | 8.1 | 0.7 | 8.3 | 6.6 | 0.6 | 9.6 | 4.0 | 0.4 | 8.8 | 2.8 | 0.3 | 12.1 |
| 4 | | Mathura | 9.7 | 0.7 | 7.5 | 9.8 | 0.7 | 7.0 | 10.2 | 0.7 | 6.6 | 9.5 | 0.6 | 6.7 | 5.5 | 0.4 | 6.6 | 4.2 | 0.3 | 7.2 |
| 5 | | Panipat | 17.2 | 1.5 | 8.4 | 17.3 | 1.4 | 8.1 | 17.3 | 1.4 | 7.9 | 16.7 | 1.4 | 8.3 | 7.9 | 0.7 | 8.3 | 6.4 | 0.7 | 10.3 |
| 6 | IOCL | Guwahati | 1.2 | 0.1 | 9.4 | 1.3 | 0.1 | 10.2 | 1.2 | 0.1 | 9.5 | 1.3 | 0.1 | 9.7 | 0.7 | 0.1 | 9.9 | 0.4 | 0.1 | 11.9 |
| 7 | | Digboi | 0.6 | 0.1 | 11.7 | 0.7 | 0.1 | 10.3 | 0.8 | 0.1 | 10.0 | 0.7 | 0.1 | 11.0 | 0.4 | 0.0 | 11.4 | 0.4 | 0.04 | 11.3 |
| 8 | | Bongaigaon | 2.5 | 0.2 | 8.3 | 2.4 | 0.2 | 8.7 | 2.6 | 0.2 | 8.2 | 2.1 | 0.2 | 8.5 | 1.3 | 0.1 | 8.2 | 1.2 | 0.1 | 9.5 |
| 9 | | Paradip | 8.3 | 1.3 | 15.9 | 12.7 | 1.4 | 10.9 | 14.6 | 1.4 | 9.8 | 15.8 | 1.5 | 9.6 | 7.8 | 0.7 | 9.5 | 5.2 | 0.6 | 12.2 |
| | | IOCL Total | 68.4 | 6.5 | | 72.6 | 6.4 | | 75.7 | 6.4 | | 73.4 | 6.4 | | 36.5 | 3.2 | | 28.6 | 3.0 | |
| 10 | | Mumbai | 8.5 | 0.6 | 7.2 | 8.6 | 0.6 | 7.2 | 8.8 | 0.6 | 7.0 | 8.1 | 0.4 | 5.1 | 3.9 | 0.2 | 5.0 | 3.8 | 0.3 | 8.0 |
| 11 | | Visakh | 9.3 | 0.7 | 7.3 | 9.6 | 0.7 | 7.1 | 9.8 | 0.7 | 7.3 | 9.1 | 0.7 | 7.5 | 4.6 | 0.3 | 7.1 | 4.3 | 0.3 | 8.0 |
| 12 | HPCL | HMEL-Bathinda | 10.6 | 0.7 | 6.3 | 8.9 | 0.6 | 6.2 | 12.6 | 0.7 | 5.8 | 12.3 | 0.7 | 5.7 | 5.9 | 0.3 | 5.6 | 5.2 | 0.3 | 6.2 |
| | | HPCL Total | 28.4 | 2.0 | | 27.2 | 1.9 | | 31.2 | 2.1 | | 29.5 | 1.8 | | 14.4 | 0.9 | | 13.3 | 1.0 | |
| 13 | | Mumbai | 13.6 | 0.6 | 4.4 | 14.3 | 0.7 | 4.6 | 14.8 | 0.6 | 4.0 | 15.1 | 0.6 | 4.2 | 7.0 | 0.3 | 4.3 | 5.5 | 0.2 | 4.4 |
| 14 | | Kochi | 12.0 | 0.7 | 6.0 | 14.5 | 1.1 | 7.7 | 16.4 | 1.3 | 7.8 | 17.2 | 1.4 | 8.3 | 8.5 | 0.7 | 8.5 | 5.5 | 0.5 | 9.0 |
| 15 | BPCL | BORL-Bina | 6.4 | 0.6 | 8.8 | 6.7 | 0.7 | 9.7 | 5.7 | 0.6 | 10.2 | 7.9 | 0.8 | 9.9 | 3.8 | 0.4 | 9.7 | 2.5 | 0.3 | 13.3 |
| 16 | | Numaligarh | 3.0 | 0.3 | 9.8 | 3.1 | 0.3 | 10.1 | 3.2 | 0.3 | 9.5 | 2.7 | 0.3 | 10.0 | 1.5 | 0.1 | 9.6 | 1.4 | 0.1 | 10.3 |
| | | BPCL Total | 34.9 | 2.2 | | 38.7 | 2.7 | | 40.1 | 2.7 | | 42.8 | 3.1 | | 20.8 | 1.5 | | 14.9 | 1.2 | |
| 17 | | Manali | 9.8 | 0.9 | 9.3 | 10.4 | 1.0 | 9.7 | 10.3 | 1.1 | 10.3 | 10.3 | 1.0 | 10.0 | 5.3 | 0.5 | 10.1 | 3.5 | 0.4 | 11.9 |
| 18 | CPCL | CBR | 0.6 | 0.03 | 4.6 | 0.5 | 0.0 | 5.0 | 0.4 | 0.02 | 5.1 | 0.0 | 0.0 | 52.5 | 0.0 | 0.0 | 52.5 | 0.0 | 0.0 | #DIV/0! |
| | | CPCL Total | 10.4 | 0.9 | | 10.9 | 1.0 | | 10.8 | 1.1 | | 10.3 | 1.0 | | 5.3 | 0.5 | | 3.5 | 0.4 | |
| 19 | | Tatipaka | 0.1 | 0.003 | 3.7 | 0.1 | 0.004 | 5.3 | 0.07 | 0.003 | 5.1 | 0.1 | 0.007 | 7.8 | 0.04 | 0.003 | 6.4 | 0.04 | 0.002 | 4.2 |
| 20 | ONGC | MRPL-Mangalore | 16.3 | 1.6 | 10.1 | 16.4 | 1.7 | 10.2 | 16.5 | 1.7 | 10.2 | 14.1 | 1.5 | 10.6 | 6.1 | 0.6 | 10.4 | 4.4 | 0.6 | 13.1 |
| | | ONGC Total | 16.3 | 1.6 | | 16.4 | 1.7 | | 16.6 | 1.7 | | 14.2 | 1.5 | | 6.2 | 0.6 | | 4.4 | 0.6 | |
| 21 | | Jamnagar (DTA) | 35.9 | 2.5 | 6.9 | 36.4 | 2.7 | 7.4 | 37.0 | 2.8 | 7.5 | 40.1 | 3.8 | 9.5 | 18.7 | 1.7 | 8.9 | 20.2 | 2.0 | 9.8 |
| 22 | RIL | Jamnagar (SEZ) | 44.8 | 3.3 | 7.5 | 47.8 | 3.7 | 7.8 | 48.9 | 3.6 | 7.4 | 52.1 | 4.6 | 8.9 | 26.1 | 2.4 | 9.2 | 22.2 | 2.2 | 10.0 |
| 23 | NEL** | Vadinar | 21.3 | 1.2 | 5.5 | 21.0 | 1.2 | 5.7 | 19.2 | 1.1 | 6.0 | 21.1 | 1.2 | 5.7 | 10.6 | 0.6 | 5.8 | 9.1 | 0.5 | 5.9 |
| | | Total | 260.4 | 20.2 | | 271.0 | 21.3 | | 279.6 | 21.6 | | 283.5 | 23.5 | | 138.6 | 11.4 | | 116.2 | 10.9 | |

*Nayara Energy Limited (formerly Essar Oil Limited) Source: Oil companies

Table 4.11 : Specific energy consumption of PSU refineries

| (MBTU/Bbl/NRGG) | | | | | | | |
|--------------------|------------|-------------|-------------|--------------|-------------|--------------|------------------|
| Company | Refinery | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| IOCL | Barauni | 80.7 | 77.7 | 77.9 | 75.7 | 79.6 | 82.4 |
| | Koyali | 75.2 | 72.4 | 75.3 | 77.0 | 83.1 | 85.0 |
| | Haldia | 83.0 | 80.8 | 76.6 | 90.8 | 79.0 | 98.7 |
| | Mathura | 72.2 | 68.3 | 63.9 | 66.4 | 65.7 | 64.1 |
| | Panipat | 64.9 | 63.2 | 64.1 | 64.4 | 64.6 | 74.3 |
| | Guwahati | 113.8 | 108.0 | 112.3 | 120.3 | 114.2 | 138.8 |
| | Digboi | 114.3 | 105.5 | 101.8 | 104.5 | 110.8 | 113.0 |
| | Bongaigaon | 90.2 | 91.7 | 88.6 | 96.9 | 89.3 | 100.4 |
| | Paradip | 117.8 | 72.8 | 66.8 | 64.1 | 65.1 | 78.5 |
| CPCL | Manali | 92.5 | 88.6 | 83.0 | 81.4 | 83.3 | 92.4 |
| | CBR | 117.8 | 123.7 | 118.1 | - | - | - |
| HPCL | Mumbai | 85.7 | 84.4 | 82.8 | 84.5 | 86.5 | 94.7 |
| | Visakh | 78.1 | 77.3 | 77.3 | 84.1 | 81.3 | 81.0 |
| BPCL | Mumbai | 70.6 | 66.7 | 64.7 | 62.5 | 63.9 | 68.0 |
| | Kochi | 85.8 | 79.2 | 71.6 | 68.5 | 70.5 | 79.6 |
| NRL | Numaligarh | 72.3 | 64.7 | 65.9 | 65.0 | 67.5 | 66.7 |
| MRPL | Mangalore | 79.6 | 76.7 | 74.2 | 75.3 | 77.2 | 89.0 |
| PSU average | | 81.2 | 75.1 | 72.66 | 72.8 | 73.6 | 81.6 |

(P): Provisional

MBN values are as per New MBN methodology with normalisation for grid power import and BS-IV/VI production from 2015-16 onwards.

Table 4.12 : Import / export of crude oil and petroleum products

| Import / export | Crude oil & petroleum products | 2016-17 | | | 2017-18 | | | 2018-19 | | | 2019-20 | | | Apr-Sep 2019 | | | Apr-Sep 2020 (P) | | |
|---|--------------------------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|---------------|------------------|----------------|--------------|
| | | Quantity | Value | | Quantity | Value | | Quantity | Value | | Quantity | Value | | Quantity | Value | | Quantity | Value | |
| | | Million tonne | US\$ (Billion) | Rs. (Crores) | Million tonne | US\$ (Billion) | Rs. (Crores) | Million tonne | US\$ (Billion) | Rs. (Crores) | Million tonne | US\$ (Billion) | Rs. (Crores) | Million tonne | US\$ (Billion) | Rs. (Crores) | Million tonne | US\$ (Billion) | Rs. (Crores) |
| I M P O R T* | Crude oil | 213.9 | 70.2 | 470159 | 220.4 | 87.8 | 566450 | 226.5 | 111.9 | 783183 | 227.0 | 101.4 | 717001 | 111.5 | 52.6 | 366984 | 89.2 | 22.5 | 168294 |
| | of which, PSU/JVs | 128.3 | 44.0 | 294050 | 133.0 | 54.3 | 350612 | 142.9 | 71.9 | 504524 | 141.4 | 64.7 | 458073 | 68.8 | 33.2 | 231469 | 53.5 | 13.8 | 103104 |
| | Private | 85.6 | 26.2 | 176109 | 87.4 | 33.5 | 215839 | 83.6 | 40.0 | 278659 | 85.5 | 36.7 | 258928 | 42.6 | 19.4 | 135515 | 35.7 | 8.7 | 65190 |
| | Products | | | | | | | | | | | | | | | | | | |
| | LPG | 11.1 | 4.8 | 32124 | 11.4 | 5.8 | 37875 | 13.2 | 7.2 | 49939 | 14.8 | 7.1 | 50347 | 6.9 | 3.1 | 21601 | 7.9 | 2.8 | 20990 |
| | Petrol | 0.5 | 0.2 | 1617 | 0.2 | 0.1 | 581 | 0.7 | 0.4 | 3104 | 2.1 | 1.4 | 9610 | 1.3 | 0.8 | 5692 | 0.2 | 0.1 | 557 |
| | Naphtha | 2.8 | 1.2 | 8374 | 2.2 | 1.3 | 8161 | 2.1 | 1.4 | 9665 | 1.7 | 0.9 | 6678 | 1.0 | 0.5 | 3839 | 0.7 | 0.2 | 1795 |
| | Aviation Turbine Fuel | 0.3 | 0.2 | 1109 | 0.3 | 0.2 | 1159 | 0.3 | 0.2 | 1392 | 0.1 | 0.04 | 309 | 0.1 | 0.04 | 309 | 0.00 | 0.00 | 0.00 |
| | Kerosene | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 |
| | Diesel | 1.0 | 0.4 | 2959 | 1.4 | 0.7 | 4269 | 0.6 | 0.4 | 2486 | 2.8 | 1.6 | 11619 | 1.1 | 0.6 | 4474 | 0.3 | 0.1 | 851 |
| | Lubes/LOBS | 2.1 | 1.3 | 8625 | 2.5 | 1.9 | 12075 | 2.5 | 1.9 | 13349 | 2.7 | 1.7 | 11869 | 1.3 | 0.9 | 6361 | 1.0 | 0.6 | 4249 |
| | Fuel Oil | 0.9 | 0.3 | 1848 | 1.2 | 0.5 | 3231 | 1.4 | 0.7 | 4782 | 4.6 | 1.6 | 11791 | 1.2 | 0.5 | 3771 | 3.5 | 0.9 | 6640 |
| | Bitumen | 1.0 | 0.2 | 1638 | 1.0 | 0.3 | 1902 | 0.9 | 0.3 | 2149 | 1.6 | 0.5 | 3634 | 0.6 | 0.2 | 1349 | 0.8 | 0.2 | 1321 |
| | Petcoke | 14.4 | 1.2 | 7929 | 12.8 | 1.7 | 11100 | 7.9 | 1.5 | 10350 | 10.7 | 1.4 | 9713 | 6.0 | 0.9 | 6058 | 5.7 | 0.5 | 3673 |
| Others** | 2.2 | 0.8 | 5342 | 2.6 | 1.2 | 8020 | 3.9 | 2.4 | 16449 | 2.7 | 1.4 | 10172 | 1.5 | 0.8 | 5826 | 1.2 | 0.4 | 3346 | |
| Total product import | 36.3 | 10.6 | 71566 | 35.5 | 13.6 | 88374 | 33.3 | 16.3 | 113665 | 43.8 | 17.7 | 125742 | 21.0 | 8.5 | 59280 | 21.3 | 5.8 | 43422 | |
| of which, PSU/JVs | 12.5 | 5.5 | 36691 | 12.8 | 6.5 | 42305 | 14.6 | 8.1 | 56178 | 20.0 | 10.2 | 72699 | 9.4 | 4.6 | 32394 | 8.4 | 3.0 | 22419 | |
| Private | 23.7 | 5.2 | 34875 | 22.7 | 7.1 | 46069 | 18.8 | 8.3 | 57487 | 23.8 | 7.5 | 53042 | 11.6 | 3.8 | 26886 | 12.8 | 2.8 | 21003 | |
| Total import (crude oil + product) | 250.2 | 80.8 | 541725 | 255.9 | 101.4 | 654824 | 259.8 | 128.3 | 896848 | 270.7 | 119.1 | 842743 | 132.4 | 61.0 | 426263 | 110.5 | 28.2 | 211715 | |
| E X P O R T | Products | | | | | | | | | | | | | | | | | | |
| | LPG | 0.3 | 0.2 | 1168 | 0.4 | 0.2 | 1501 | 0.4 | 0.3 | 1976 | 0.5 | 0.3 | 1970 | 0.2 | 0.1 | 892 | 0.2 | 0.1 | 700 |
| | Petrol | 15.4 | 7.9 | 52920 | 14.0 | 8.5 | 54580 | 12.9 | 8.6 | 60419 | 12.7 | 7.7 | 54512 | 6.4 | 4.1 | 29015 | 5.9 | 2.0 | 15073 |
| | Naphtha | 8.7 | 3.7 | 24616 | 9.0 | 4.5 | 29075 | 7.0 | 4.1 | 28893 | 8.9 | 4.4 | 31509 | 4.0 | 2.0 | 14255 | 3.2 | 0.9 | 6832 |
| | Aviation Turbine Fuel | 7.3 | 3.3 | 22294 | 7.2 | 3.9 | 25348 | 7.4 | 4.9 | 34030 | 6.9 | 4.0 | 28458 | 3.4 | 2.1 | 14682 | 1.6 | 0.4 | 3226 |
| | Kerosene | 0.02 | 0.01 | 54 | 0.02 | 0.01 | 68 | 0.02 | 0.01 | 98 | 0.2 | 0.1 | 560 | 0.01 | 0.01 | 56 | 0.0 | 0.0 | 10 |
| | Diesel | 27.30 | 11.9 | 79857 | 29.7 | 15.4 | 99454 | 27.8 | 17.6 | 123519 | 31.7 | 17.5 | 123919 | 14.6 | 8.6 | 60400 | 15.8 | 4.8 | 35821 |
| | LDO | 0.2 | 0.1 | 399 | 0.02 | 0.01 | 37 | 0.1 | 0.05 | 364 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 |
| | Lubes/LOBS | 0.01 | 0.02 | 104 | 0.01 | 0.02 | 118 | 0.01 | 0.02 | 106 | 0.01 | 0.01 | 96 | 0.004 | 0.01 | 46 | 0.01 | 0.01 | 52 |
| | Fuel Oil | 2.2 | 0.6 | 3930 | 2.5 | 0.8 | 5291 | 2.2 | 0.9 | 6537 | 1.5 | 0.5 | 3811 | 1.0 | 0.4 | 2534 | 0.6 | 0.1 | 829 |
| | Bitumen | 0.04 | 0.01 | 37 | 0.1 | 0.02 | 119 | 0.02 | 0.01 | 72 | 0.03 | 0.01 | 89 | 0.02 | 0.01 | 51 | 0.002 | 0.001 | 7 |
| | Petcoke / CBFS | 0.7 | 0.1 | 804 | 0.6 | 0.1 | 687 | 1.1 | 0.5 | 3255 | 0.5 | 0.2 | 1096 | 0.4 | 0.2 | 1087 | 0.6 | 0.04 | 279 |
| | Others*** | 3.3 | 1.3 | 8710 | 3.4 | 1.4 | 9110 | 2.1 | 1.2 | 8429 | 2.9 | 1.1 | 7998 | 1.4 | 0.5 | 3720 | 1.5 | 0.5 | 3571 |
| | Total product export | 65.5 | 29.0 | 194893 | 66.8 | 34.9 | 225388 | 61.1 | 38.2 | 267697 | 65.7 | 35.8 | 254018 | 31.5 | 18.1 | 126737 | 29.5 | 8.9 | 66400 |
| of which, PSU/JVs | 12.6 | 5.2 | 35102 | 15.0 | 7.4 | 48100 | 13.4 | 8.1 | 56415 | 14.2 | 7.5 | 53276 | 6.2 | 3.4 | 23667 | 5.3 | 1.5 | 11175 | |
| Private | 53.0 | 23.8 | 159791 | 51.8 | 27.5 | 177288 | 47.7 | 30.2 | 211282 | 51.5 | 28.4 | 200742 | 25.3 | 14.7 | 103070 | 24.3 | 7.4 | 55225 | |
| Net import | 184.7 | 51.8 | 346832 | 189.1 | 66.5 | 429436 | 198.8 | 90.0 | 629152 | 205.1 | 83.2 | 588725 | 101.0 | 42.9 | 299526 | 81.0 | 19.3 | 145315 | |
| Net product export | 29.2 | 18.4 | 123327 | 31.4 | 21.3 | 137014 | 27.7 | 21.9 | 154031 | 21.9 | 18.2 | 128276 | 10.5 | 9.6 | 67458 | 8.2 | 3.2 | 22978 | |

Source: Oil companies & DGCIS, (P) : Provisional

Note:

*Import does not include LNG imports

**Other imports include Paraffin Wax, Petroleum Jelly, Aviation Gas, MTBE, Reformate etc.

***Other exports include VGO, Benzene, Hexane, MTO, Sulphur etc.

"Others" in exports include RIL-SEZ exports of "Others" with unspecified heavy ends.

- Crude oil imports decreased by 20% during April to September 2019 as compared to April to September 2020.
- Imports made due to deficit in production viz. LPG and Lubes/LOBS accounted for 41.8% share of total POL products import during April to September 2020 as compared to 39.3% during April to September 2019.
- Imports of naphtha and FO were done for commercial and technical considerations and accounted for 19.7% share of total POL products import during April to September 2020 as compared to 10.4% during April to September 2019.
- Decrease of 6.3% was recorded in POL products export during April to September 2020 as compared to during April to September 2019 mainly due to decrease in exports of all products except high-speed diesel (HSD), lubes and petcoke/CBFS.

Table 4.13 : Exchange rates of Indian rupee (₹)

| Year | US dollar (\$) | British pound (£) | Euro (€) | Japanese yen (¥) |
|--|----------------|-------------------|----------|------------------|
| Indian rupee (₹) / foreign currency | | | | |
| 2002-03 | 48.41 | 74.84 | 48.07 | 0.40 |
| 2003-04 | 45.92 | 77.74 | 54.01 | 0.41 |
| 2004-05 | 44.95 | 82.95 | 56.55 | 0.42 |
| 2005-06 | 44.28 | 79.02 | 53.88 | 0.39 |
| 2006-07 | 45.29 | 85.72 | 58.11 | 0.39 |
| 2007-08 | 40.24 | 80.80 | 56.99 | 0.35 |
| 2008-09 | 45.91 | 78.45 | 65.14 | 0.46 |
| 2009-10 | 47.42 | 75.88 | 67.08 | 0.51 |
| 2010-11 | 45.58 | 70.88 | 60.21 | 0.53 |
| 2011-12 | 47.95 | 76.40 | 65.90 | 0.61 |
| 2012-13 | 54.45 | 86.02 | 70.06 | 0.66 |
| 2013-14 | 60.50 | 96.23 | 81.14 | 0.60 |
| 2014-15 | 61.15 | 98.56 | 77.47 | 0.56 |
| 2015-16 | 65.46 | 98.76 | 72.31 | 0.55 |
| 2016-17 | 67.09 | 87.71 | 73.61 | 0.62 |
| 2017-18 | 64.45 | 85.47 | 75.42 | 0.58 |
| 2018-19 | 69.89 | 91.74 | 80.93 | 0.63 |
| 2019-20 | 70.88 | 90.15 | 78.80 | 0.65 |
| 2020-21 (upto 31.10.2020) | 74.84 | 95.23 | 85.56 | 0.70 |
| 2020 : Month wise | | | | |
| January | 71.31 | 93.29 | 79.22 | 0.65 |
| February | 71.49 | 92.75 | 78.07 | 0.65 |
| March | 74.35 | 92.02 | 82.34 | 0.69 |
| April | 76.24 | 94.63 | 82.75 | 0.71 |
| May | 75.66 | 93.02 | 82.48 | 0.71 |
| June | 75.73 | 94.88 | 85.25 | 0.70 |
| July | 74.99 | 94.93 | 85.93 | 0.70 |
| August | 74.67 | 98.08 | 88.34 | 0.70 |
| September | 73.48 | 95.31 | 86.66 | 0.70 |
| October | 73.46 | 95.41 | 86.51 | 0.70 |

Source: Reserve Bank of India (RBI)/ Financial Benchmark India Private Limited (FBIL) website.

Note: The rates are average for the period.



Chapter 5

Major Pipelines in India

Map of Pipeline Network in India



Note: Pipelines shown are indicative only.

Table 5.1 : Natural Gas Pipelines in the Country - 30.09.2020

| S. N. | Network/Region | Entity | Length (Kms) | Authorized capacity/ Declared capacity (mmscmd) | Pipeline size | Pipeline Status | Average flow 2019-20 (mmscmd) | % Capacity utilisation 2019-20 | Average flow Apr-Sep 2020 (P) (mmscmd) | % Capacity utilisation Apr-Sep 2020 (P) |
|-------|---|--------|--------------|---|---|--------------------|-------------------------------|--------------------------------|--|---|
| 1 | Assam Regional Network | AGCL | 104.7 | 2,428 | 800 mm/500 mm/400 mm/ 350 mm | Operational | 1.06 | 43.71 | 0.89 | 36.78 |
| 2 | Cauvery Basin Network | GAIL | 240.3 | 4,330 | 18"/ 12"/8"/ 6"/4"/3"/2" | Operational | 2.72 | 63 | 1.89 | 44 |
| 3 | Hazira-Vijaipur-Jagdishpur -GREP (Gas Rehabilitation and Expansion Project)-Dahej-Vijaipur HVJ/VDPL | GAIL | 4222 | 57,300 | 42"/36"/30"/18"/ 16"/14"/12"/10"/ 8"/6"/4"/2" | Operational | 69.03 | 62 | 65.34 | 59 |
| 4 | Dahej-Vijaipur (DVPL)-Vijaipur-Dadri (GREP) Upgradation DVPL 2 & VDPL | GAIL | 1280 | 54,000 | 48"/ 16"/12" | Operational | | | | |
| 5 | Dahej-Uran-Panvel-Dhabhol | GAIL | 815 | 19,900 | 30"/24"/18"/ 12"/6"/4" | Operational | 16.5 | 83 | 13.2 | 66 |
| 6 | KG Basin Network | GAIL | 877.9 | 16,000 | 18"/16"/14"/ 12"/8"/6"/4"/2" | Operational | 4.56 | 29 | 4.02 | 25 |
| 7 | Gujarat Regional Network | GAIL | 608.8 | 8,310 | 24"/18"/14"/ 12"/8"/6"/5"/2"/1" | Operational | 2.4 | 29 | 3.23 | 39 |
| 8 | Agartala Regional Network | GAIL | 55.4 | 2,000 | 12"/10"/8" | Operational | 0.94 | 47 | 0.89 | 45 |
| 9 | Mumbai Regional Network | GAIL | 128.7 | 7,034 | 26"/20"/18"/ 12"/4" | Operational | 2.77 | 39 | 2.8 | 40 |
| 10 | Dukli - Maharajganj | GAIL | 5.2 | 0,260 | 4" | Operational | 0.06 | 23 | 0.05 | 19 |
| 11 | Chainsa-Jhajjar-Hissar | GAIL | 455 | 35,000 | 36"/18"/16"/ 12"/10"/8"/4" | Under Construction | 1.09 | 3 | 0.65 | 2 |
| 12 | Dadri-Bawana-Nangal | GAIL | 921 | 31,000 | 36"/30"/ 18"/10"/8" | Under Construction | 7.35 | 24 | 5.09 | 16 |
| 13 | Kochi-Kootanad-Bangalore-Mangalore | GAIL | 1104 | 16,000 | 30"/ 24"/ 18"/ 8"/ 4" | Under Construction | 3.02 | 19 | 2.8 | 18 |
| 14 | Dabhol-Bangalore | GAIL | 1414 | 16,000 | 36"/30"/24"/ 18"/10"/8" | Under Construction | 0.65 | 4 | 1.53 | 10 |
| 15 | Jagdishpur-Haldia-Bokaro Dhamra-Paradip- Barauni-Guwahati | GAIL | 3546 | 23,000 | 36"/30"/24"/ 18"/12"/8"/ 6"/4" | Under Construction | 0.014 | 0.06 | 0.039 | 0.17 |
| 16 | Hazira-Ankleshwar (HAPi) | GGL | 73.2 | 4,200 | 18" | Operational | 1.02 | 24.29 | 0.9 | 21.43 |
| 17 | Mehsana - Bhatinda | GIGL | 2052 | 80,110 | 36"/24"/18"/12" | Under Construction | 1.72 | * | 2.34 | * |
| 18 | Bhatinda - Jammu - Srinagar | GIGL | 725 | 42,420 | 24"/18"/16"/ 12"/8"/6" | Under Construction | 0.005 | * | 0.005 | * |
| 19 | Mallavaram - Bhopal - Bhilwara - Vijaipur | GITL | 2042 | 78,250 | 42"/36"/30"/ 24"/18"/12" | Under Construction | 0.0139 | * | 0.079 | * |
| 20 | High Pressure Gujarat Gas Grid | GSPL | 2207 | 31,000 | 36"/30"/24"/ 20"/18"/12"/ 8"/6"/4" | Operational | 37.88 | * | 36.52 | * |
| 21 | Low Pressure Gujarat Gas Grid | GSPL | 57.6 | 12,000 | 36"/30"/ 24"/12" | Operational | | | | |
| 22 | Dadri-Panipat | IOCL | 132 | 20,000 | 30" | Operational | 5.2 | 56 | 4.9 | 53 |
| 23 | Ennore-Tuticorin | IOCL | 1421 | 84,700 | 28"/24"/16"/ 12"/10" | Under Construction | 1.4 | 12 | 1.8 | 15 |
| 24 | Uran-Trombay | ONGC | 24 | 6,000 | 20" | Operational | 2.92 | 48.6 | 2.66 | 44.3 |
| 25 | Kakinada-Hyderabad-Uran-Ahmedabad (East West Pipeline) | PIL | 1460 | 85,000 | 30"/28"/24"/ 20"/8" | Operational | 18.27 | 21.49 | 12.11 | 14.25 |
| 26 | Shahdol-Phulpur | RGPL | 312 | 3,500 | 16" | Operational | 0.86 | 24.57 | 0.85 | 24.17 |
| | Total | | 26284 | | | | | | | |

Note: * Information Not Available
Source: PNGRB and Pipeline entities

Table 5.2 : Existing major crude oil pipelines in India

| Type of Pipeline -Onshore/ Offshore | Name of the pipeline | Owner | Length (KM) | Capacity (MMT) | Throughput (MMT) | Percentage utilisation during |
|--|---|------------------------|--------------|----------------|------------------|-------------------------------|
| | | | 01.10.2020 | 01.10.2020 | Apr-Sep 2020 (P) | Apr-Sep 2020 (P) |
| Onshore | CTF (Central Tank Farm) Kalol to CTF Nawagam - New (New line commissioned in Aug'2010) | ONGC | 63 | 3.1 | 0.5 | 34.19 |
| Onshore | Nawagam-Koyali (18" line) New | | 80 | 5.4 | 1.7 | 64.71 |
| Onshore | Nawagam-Koyali (14" line) (Old) | | 78 | 3.3 | 0.0 | 0.00 |
| Onshore | MHN-NGM (Mehsana-Nawagam) trunk line - New (New crude oil trunk line commissioned. Under operation since Dec'2010) | | 77 | 2.3 | 1.0 | 89.00 |
| Onshore | CTF (Central Tank Farm), Ankleshwar to Koyali oil pipeline (AKCL- Ankleshwar Koyali Crude Line) | | 95 | 2.2 | 0.4 | 35.64 |
| Onshore | CTF (Central Tank Farm), Ankleshwar to CPF (Central Processing Facility), Gandhar | | 44 | 0.4 | 0.0 | 0.00 |
| Onshore | CPF (Central Processing Facility), Gandhar to Saraswani 'T' point | | 57 | 1.8 | 0.3 | 35.80 |
| Onshore | Akholjuni- Koyali oil pipe line (Commissioned in July 2010). Akholjuni to Laxmipura T' point | | 66 | 0.5 | 0.1 | 48.65 |
| Onshore | Lakwa-Moran oil line (New) | | 15 | 1.5 | 0.2 | 29.51 |
| Onshore | Lakwa-Moran oil line (Old) | | 18 | 1.5 | 0.0 | 0.00 |
| Onshore | Geleki-Jorhat oil line | | 49 | 1.5 | 0.0 | 0.00 |
| Onshore | Geleki-Jorhat oil line (New) | | 48 | 1.5 | 0.2 | 20.63 |
| Onshore | Borholla- Jorhat oil line | | 43 | 0.6 | 0.0 | 0.00 |
| Onshore | Borholla- Jorhat new TPL (New) | | 43 | 0.6 | 0.1 | 37.51 |
| Onshore | NRM (Narimanam) to CPCL (Chennai Petroleum Corporation Limited) | | 5 | 0.7 | 0.2 | 53.92 |
| Onshore | KSP-WGGS to TPK Refinery (Kesnapalli-West-Group Gathering Station to Tatipaka) | | 14 | 0.1 | 0.03 | 82.95 |
| Onshore | GMAA EPT (Gopavaram Early Production Terminal) to S. Yanam Unloading Terminal (3.5 Km long and 4"). New line commissioned on 28.07.10 | | 4 | 0.1 | 0.01 | 21.81 |
| Offshore | Mumbai High - Uran - Trunk (MUT) 30" pipeline | | 204 | 15.6 | 4.0 | 50.77 |
| Offshore | Heera - Uran - Trunk (HUT) 24" pipeline | | 81 | 11.5 | 1.7 | 29.93 |
| Offshore | Bombay-Uran Trunk (BUT) 30" pipeline | | 203 | 6.4 | 0.1 | 2.26 |
| | | Sub total ONGC | 1283 | 60.6 | 10.6 | 35.0 |
| Onshore | Salaya-Mathura pipeline (SMPL) | IOCL | 2646 | 25.0 | 10.2 | 81.86 |
| Onshore | Paradip-Haldia-Barauni pipeline (PHBPL) | | 1355 | 15.2 | 6.1 | 80.84 |
| Onshore | Mundra-Panipat pipeline | | 1194 | 8.4 | 2.4 | 57.93 |
| Offshore | Salaya-Mathura Pipeline (Offshore segment) | | 14 | - | 0.0 | |
| Offshore | Paradip-Haldia-Barauni Pipeline (Offshore segment) | | 92 | - | 0.0 | |
| | | Sub total IOCL | 5301 | 48.6 | 18.8 | 77.4 |
| Onshore | Duliajan-Digboi-Bongaigaon-Barauni pipeline | OIL | 1193 | 9.0 | 2.9 | 65.37 |
| Onshore | Mangla-Bhogat pipeline | CAIRN | 660 | 8.7 | 3.0 | 68.13 |
| Offshore | Bhogat Marine | CAIRN | 28 | 2.0 | 0.2 | 21.30 |
| | | Sub total CAIRN | 688 | 10.7 | 3.2 | 59.4 |
| Onshore | Mundra- Bathinda pipeline | HMPL | 1017 | 11.3 | 5.1 | 90.88 |
| Onshore | Vadinar-Bina pipeline | BORL | 937 | 7.8 | 2.5 | 64.54 |
| | Total Crude pipelines | | 10419 | 147.9 | 43.2 | 58.4 |

Source: Oil companies (P): Provisional

Note: Pipeline utilization is calculated using formula = (Throughput in MMT *100) / (Annual capacity in MMTPA x 0.5)

Table 5.3 : Existing major POL pipelines in India

| Type of Pipeline | Name of the pipeline | Owner | Length (KM) | Capacity (MMT) | Throughput (MMT) | Percentage utilisation during | |
|-------------------------------------|---|-----------------------|-----------------------|----------------|------------------|-------------------------------|-------------|
| | | | 01.10.2020 | 01.10.2020 | Apr-Sep 2020 (P) | Apr-Sep 2020 (P) | |
| Petroleum Products Pipelines | | | | | | | |
| Onshore | Barauni - Kanpur pipeline | IOCL | 1227 | 3.5 | 1.2 | 67.7 | |
| Onshore | Guwahati -Siliguri pipeline | | 435 | 1.4 | 0.8 | 111.6 | |
| Onshore | Haldia-Barauni pipeline | | 526 | 1.3 | 0.6 | 103.0 | |
| Onshore | Haldia-Mourigram-Rajbandh pipeline | | 277 | 1.4 | 0.6 | 85.0 | |
| Onshore | Koyali-Ahmedabad pipeline | | 79 | 1.1 | 0.2 | 33.8 | |
| Onshore | Koyali-Sanganer pipeline (Incl. JPNPL) | | 1644 | 5.0 | 1.9 | 75.6 | |
| Onshore | Koyali-Ratlam pipeline | | 265 | 2.0 | 0.4 | 42.6 | |
| Onshore | Koyali-Dahej pipeline | | 197 | 2.6 | 0.2 | 18.8 | |
| Onshore | Mathura-Tundla pipeline | | 56 | 1.2 | 0.2 | 30.0 | |
| Onshore | Mathura-Bharatpur pipeline | | 21 | | 0.1 | | |
| Onshore | Mathura-Delhi pipeline | | 147 | 3.7 | 0.7 | 40.4 | |
| Onshore | Panipat-Amabala-Jalandhar (Including Kurukshetra-Roorkee-Najibabad branch line) | | 495 | 3.5 | 1.1 | 63.5 | |
| Onshore | Panipat-Delhi (Including Sonapat-Meerut branch line) pipeline | | 189 | 3.0 | 0.3 | 18.9 | |
| Onshore | Panipat Bijwasan ATF pipeline | | 111 | | | | |
| Onshore | Panipat-Bathinda pipeline | | 219 | 1.5 | 0.5 | 71.7 | |
| Onshore | Panipat-Rewari pipeline | | 155 | 2.1 | 0.6 | 55.2 | |
| Onshore | Chennai-Trichy-Madurai pipeline | | 683 | 2.3 | 1.1 | 97.2 | |
| Onshore | Chennai - Meenambakkam ATF pipeline | | 95 | 0.2 | 0.0 | 46.7 | |
| Onshore | Chennai-Bengaluru pipeline | | 290 | 2.5 | 0.7 | 56.4 | |
| Onshore | Devangonhi - Devanhalli pipeline | | 36 | 0.7 | 0.1 | 28.8 | |
| Onshore | Paradip Raipur Ranchi pipeline(PRRPL) | | 1073 | 5.0 | 1.6 | 62.1 | |
| Onshore | Kolkata ATF pipeline | | 27 | 0.2 | 0.02 | 15.0 | |
| | | | Sub total IOCL | 8247 | 44.0 | 13.0 | 58.9 |
| Onshore | Mumbai-Manmad-Bijwasan pipeline (MMBPL) | | BPCL | 1389 | 6.0 | 3.0 | 100.5 |
| Onshore | Bina-Kota pipeline (BKPL) | | | 259 | 4.4 | 1.4 | 62.0 |
| Onshore | ATF P/L Mumbai Refinery (MR)-Santacruz | | | 15 | 1.4 | 0.1 | 13.5 |
| Onshore | ATF P/L Kochi Refinery (KR)-Kochi Airport | | | 34 | 0.6 | 0.05 | 15.6 |
| Onshore | Kota - Jobner branch pipeline(1) | 211 | | 1.7 | | | |
| Onshore | Mumbai Refinery- Wadilube Pipeline | 12 | | 1.3 | 0.1 | 17.5 | |
| Onshore | Cochin-Coimbatore-Karur (CCK) pipeline (2) | 293 | | 3.3 | 1.4 | 83.8 | |
| | | Sub total BPCL | | 2213 | 18.7 | 6.0 | 64.3 |
| Onshore | Mumbai-Pune-Solapur pipeline | HPCL | 508 | 4.3 | 1.4 | 64.3 | |
| Onshore | Vizag-Vijaywada-Secunderabad pipeline | | 572 | 7.7 | 1.9 | 49.3 | |
| Onshore | Mundra-Delhi pipeline (1) | | 1054 | 6.9 | 3.0 | 86.9 | |
| Onshore | Ramanmandi-Bahadurgarh pipeline (2) | | 243 | 7.1 | 2.5 | 68.9 | |
| Onshore | Ramanmandi-Bathinda pipeline | | 30 | 2.1 | 0.4 | 42.4 | |
| Onshore | Awa-Salawas pipeline | | 93 | | | | |
| Onshore | Bahadurgarh-Tikrikalan pipeline | | 14 | | | | |
| Onshore | Rewari- Kanpur Pipeline | | 443 | | | | |
| Onshore | ATF pipeline from Mumbai Refinery to Mumbai Airport | | 20 | 1.1 | 0.1 | 11.5 | |
| Onshore | Black Oil Pipeline (BOPL) | | 22 | 1.5 | 0.04 | 5.0 | |

| Type of Pipeline | Name of the pipeline | Owner | Length (KM) | Capacity (MMT) | Throughput (MMT) | Percentage utilisation during |
|----------------------|---|-----------------------|--------------|----------------|------------------|-------------------------------|
| | | | 01.10.2020 | 01.10.2020 | Apr-Sep 2020 (P) | Apr-Sep 2020 (P) |
| Onshore | Lube Oil Pipeline : Trombay to Wadibundar (3) | HPCL | 17 | 1.0 | 0.2 | 41.0 |
| Onshore | Palanpur-Vadodara Pipeline | | 235 | 4.5 | | |
| | | Sub total HPCL | 3250 | 31.7 | 7.8 | 49.3 |
| Onshore | Mangalore-Hassan-Bengaluru (MHB) pipeline (1) | Petronet MHB | 363 | 5.6 | 0.7 | 25.1 |
| Onshore | Numaligarh-Siliguri pipeline | OIL | 654 | 1.7 | 0.8 | 91.3 |
| | Total Petroleum product pipelines (w/o LPG pipelines) | | 14727 | 101.7 | 28.3 | 55.6 |
| LPG Pipelines | | | | | | |
| Onshore | Panipat-Jalandhar pipeline | IOCL | 280 | 0.7 | 0.2 | 70.3 |
| Onshore | Paradip Haldia Durgapur pipeline (1) | | 873 | 1.3 | 0.6 | 93.5 |
| | | Sub total IOCL | 1153 | 2.0 | 0.8 | 85.3 |
| Onshore/ offshore | Mumbai-Uran pipeline | BPCL | 28 | 0.8 | 0.3 | 73.0 |
| Onshore | Jamnagar-Loni pipeline | GAIL | 1414 | 2.5 | 1.2 | 92.1 |
| Onshore | Vizag-Secunderabad pipeline | | 618 | 1.3 | 0.5 | 78.3 |
| | | Sub total GAIL | 2032 | 3.8 | 1.7 | 87.3 |
| Onshore | Mangalore-Hassan-Mysore-Bangalore LPG | HPCL | 356 | 1.9 | 0.5 | 53.0 |
| Onshore | Uran-Chakan-Shikrapur LPG Pipeline (4) | | 169 | 1.0 | 0.4 | 72.1 |
| | | Sub total HPCL | 525 | 2.9 | 0.9 | 59.5 |
| | Total LPG pipelines | | 3738 | 9.5 | 3.7 | 77.1 |
| | Total POL pipelines | | 18465 | 111.3 | 32.0 | 57.4 |

Source: Oil Companies (P): Provisional

Note:

Pipeline utilization is calculated using formula = (Throughput in MMT *100) / (Annual capacity in MMTPA x 0.5)

IOCL

(1) PHDPL - Durgapur to Banka commissioned on 3.7.2020 (Length = 193.629 Km)

BPCL

(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) Petronet CCK was merged with BPCL w.e.f 1st June 2018

HPCL

(1) Thruput of Mundra-Delhi pipeline ncludes thruputs of branchlines viz. Awa Salawas Pipeline, Rewari Kanpur pipeline, Palanpur-Vadodara Pipeline and reverse pumping (1.66 MMT) from Bahadurgarh to Rewari.

(2) Thruput of Ramanmandi Bahadurgarh pipeline is including thruput of branchlines viz. Bahadurgarh-TikriKalan Pipeline & Rewari-Kanpur pipeline.

(3) Lube Oil pipeline and ATF pipeline from Mumbai Refinery to Mazgaon Terminal and Mumbai Airport are speciality product pipelines.

(4) Thruput of UCSPL includes both HPCL & BPCL volumes.

Petronet MHB

(1) Petronet MHB JV- ONGC & HPCL 26% each, Petronet- 12%, Public- 36%.



Chapter 6

Sales

Table 6.1 : Consumption of petroleum products

| (Million metric tonnes) | | | | | | | | | | | | | |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------|
| Products | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| LPG | 13.1 | 14.3 | 15.3 | 15.6 | 16.3 | 18.0 | 19.6 | 21.6 | 23.3 | 24.9 | 26.3 | 12.5 | 13.3 |
| MS | 12.8 | 14.2 | 15.0 | 15.7 | 17.1 | 19.1 | 21.8 | 23.8 | 26.2 | 28.3 | 30.0 | 15.3 | 12.1 |
| Naphtha | 10.1 | 10.7 | 11.2 | 12.3 | 11.3 | 11.1 | 13.3 | 13.2 | 12.9 | 14.1 | 14.3 | 6.7 | 6.6 |
| ATF | 4.6 | 5.1 | 5.5 | 5.3 | 5.5 | 5.7 | 6.3 | 7.0 | 7.6 | 8.3 | 8.0 | 4.0 | 1.2 |
| SKO | 9.3 | 8.9 | 8.2 | 7.5 | 7.2 | 7.1 | 6.8 | 5.4 | 3.8 | 3.5 | 2.4 | 1.4 | 0.9 |
| HSD | 56.2 | 60.1 | 64.8 | 69.1 | 68.4 | 69.4 | 74.6 | 76.0 | 81.1 | 83.5 | 82.6 | 41.4 | 30.9 |
| LDO | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.3 | 0.3 |
| Lubes | 2.5 | 2.4 | 2.6 | 3.2 | 3.3 | 3.3 | 3.6 | 3.5 | 3.9 | 3.7 | 3.8 | 1.9 | 1.6 |
| FO/LSHS | 11.6 | 10.8 | 9.3 | 7.7 | 6.2 | 6.0 | 6.6 | 7.2 | 6.7 | 6.6 | 6.3 | 3.1 | 2.8 |
| Bitumen | 4.9 | 4.5 | 4.6 | 4.7 | 5.0 | 5.1 | 5.9 | 5.9 | 6.1 | 6.7 | 6.7 | 2.9 | 2.7 |
| Petcoke | 6.6 | 5.0 | 6.1 | 10.1 | 11.8 | 14.6 | 19.3 | 24.0 | 25.7 | 21.3 | 21.7 | 11.3 | 9.1 |
| Others* | 5.4 | 4.6 | 4.9 | 5.5 | 6.0 | 5.9 | 6.4 | 6.6 | 8.3 | 11.7 | 11.4 | 5.8 | 4.9 |
| All India | 137.8 | 141.0 | 148.1 | 157.1 | 158.4 | 165.5 | 184.7 | 194.6 | 206.2 | 213.2 | 214.1 | 106.5 | 86.4 |
| Growth (%) | 3.2 | 2.3 | 5.0 | 6.1 | 0.9 | 4.5 | 11.6 | 5.4 | 5.9 | 3.4 | 0.4 | 2.2 | -18.9 |

Note: *Others include sulphur, propylene, propane, reformat, butane, MTO (Mineral Turpentine oil) etc

Source: Oil Companies, Directorate General of Commercial Intelligence and Statistics (DGCIIS) & online SEZ data (included from 2017-18 onwards). (Oil company sales+Private imports+SEZ sales to DTA= Consumption)



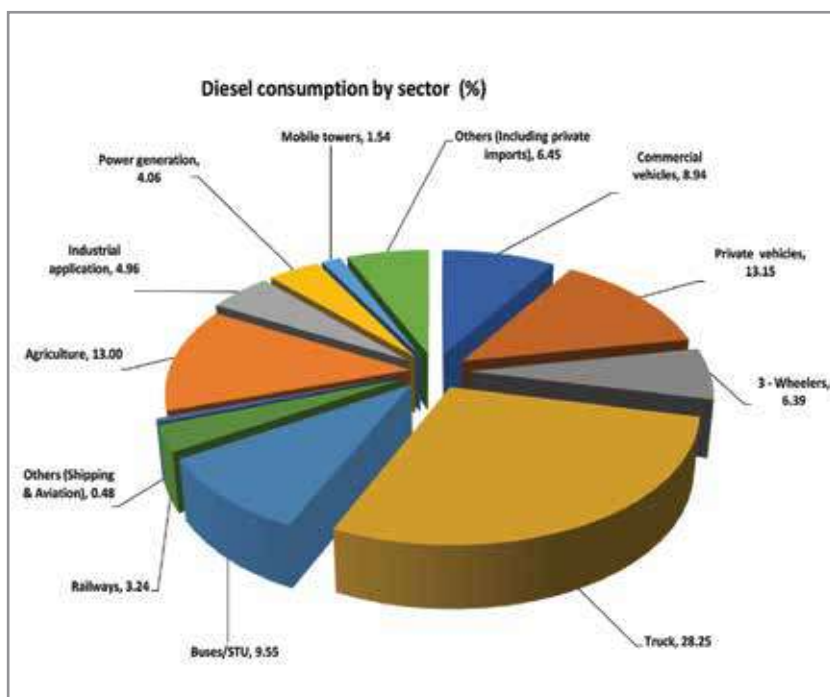
The consumption of petroleum products has gone up from 137.8 MMT in 2009-10 to 214.1 MMT in 2019-20. The compounded annual growth rate (CAGR) of total POL consumption in the last decade has been 4.5%. The CAGR of petcoke (12.7%) consumption has been highest among POL products in the last decade followed by MS (8.9%), LPG (7.2%), ATF (5.6%), lubes (4.2%), HSD (3.9%), naphtha (3.5%), LDO (3.2%) and bitumen (3.1%). CAGR of products grouped under "others" category has been 7.7%. FO/LSHS and SKO recorded contraction in consumption in the last decade with negative CAGR of -5.9% & -12.7% respectively. Half yearly consumption recorded a contraction of -18.9% with a volume of 86.4 MMT in 2020-21 as compared to 106.5 MMT during the same period in 2019-20.

Table 6.2 : Consumption growth of petroleum products

| (Growth in percentage) | | | | | | | | | | | | |
|------------------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|--------------|------------------|
| Products | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| LPG | 9.1 | 6.8 | 2.0 | 4.4 | 10.5 | 9.0 | 10.1 | 8.0 | 6.7 | 5.7 | 3.9 | 5.9 |
| MS | 10.7 | 5.6 | 5.0 | 8.8 | 11.4 | 14.5 | 8.8 | 10.1 | 8.1 | 6.0 | 9.1 | -20.8 |
| Naphtha | 5.3 | 5.1 | 9.5 | -8.0 | -2.0 | 19.8 | -0.2 | -2.7 | 9.6 | 1.0 | -1.6 | -1.4 |
| ATF | 9.8 | 9.0 | -4.8 | 4.4 | 4.0 | 9.4 | 11.8 | 9.1 | 8.7 | -3.6 | -3.6 | -69.9 |
| SKO | -4.0 | -7.8 | -8.8 | -4.5 | -1.1 | -3.7 | -20.9 | -28.8 | -10.0 | -30.7 | -22.4 | -33.0 |
| HSD | 6.8 | 7.8 | 6.7 | -1.0 | 1.5 | 7.5 | 1.8 | 6.6 | 3.0 | -1.1 | 1.1 | -25.3 |
| LDO | -0.4 | -8.9 | -4.0 | -3.1 | -5.4 | 11.5 | 10.3 | 16.7 | 14.2 | 5.0 | 15.9 | 6.4 |
| Lubes | -4.3 | 8.4 | 21.4 | 3.4 | 0.1 | 7.9 | -2.8 | 11.9 | -5.6 | 4.5 | 13.2 | -17.0 |
| FO/LSHS | -7.2 | -13.7 | -17.7 | -18.6 | -4.4 | 11.3 | 7.8 | -6.0 | -2.3 | -4.0 | -6.3 | -9.3 |
| Bitumen | -8.0 | 2.2 | 0.8 | 7.1 | 1.3 | 17.1 | 0.0 | 2.5 | 10.2 | 0.2 | 3.0 | -8.2 |
| Petcoke | -24.4 | 23.2 | 65.1 | 16.0 | 23.8 | 32.6 | 24.2 | 7.1 | -16.8 | 1.7 | 4.1 | -19.9 |
| Others | -15.4 | 7.8 | 11.9 | 8.1 | -1.4 | 8.2 | 3.8 | 26.5 | 40.6 | -3.1 | 3.0 | -15.0 |
| All India | 2.3 | 5.0 | 6.1 | 0.9 | 4.5 | 11.6 | 5.4 | 5.9 | 3.4 | 0.4 | 2.2 | -18.9 |

End-use analysis of HSD sales (as of 2012-13)

| SI. no. | End-use sectors | % of total sales * |
|---------|------------------------------------|--------------------|
| (I) | (II) | (III) |
| 1 | Transport, of which | 70.00 |
| a | Commercial vehicles | 8.94 |
| b | Private vehicles | 13.15 |
| c | 3 - Wheelers | 6.39 |
| d | Truck | 28.25 |
| e | Buses/STU | 9.55 |
| f | Railways | 3.24 |
| g | Others (Shipping & Aviation) | 0.48 |
| 2 | Agriculture | 13.00 |
| 3 | Industrial application | 4.96 |
| 4 | Power generation | 4.06 |
| 5 | Mobile towers | 1.54 |
| 6 | Others (Including private imports) | 6.45 |
| | Total | 100.0 |



* Figures include consumption through retail & direct imports. End use sector wise break up as per PPAC survey and direct sales as reported by oil companies for the year 2012-13.

Table 6.3 : State-wise sales of selected petroleum products : April - September 2020 (P)

(Figures in thousand metric tonnes)

| State/UT | LPG | | MS | | SKO | | HSD | | Total (All products)* | |
|--------------------------------------|----------------|-----------------------|----------------|-----------------------|--------------|-----------------------|----------------|-----------------------|-----------------------|-----------------------|
| | Sales | Per capita sales (Kg) | Sales | Per capita sales (Kg) | Sales | Per capita sales (Kg) | Sales | Per capita sales (Kg) | Total sales | Per capita sales (Kg) |
| Chandigarh | 19.7 | 37.3 | 36.0 | 68.3 | 0.0 | 0.0 | 48.3 | 91.6 | 125.6 | 238.2 |
| Delhi | 315.5 | 37.7 | 286.0 | 34.1 | 0.0 | 0.0 | 172.5 | 20.6 | 1126.8 | 134.5 |
| Haryana | 373.6 | 29.5 | 456.0 | 36.0 | 0.0 | 0.0 | 1940.9 | 153.1 | 4207.3 | 331.9 |
| Himachal Pradesh | 87.7 | 25.6 | 96.8 | 28.2 | 3.6 | 1.0 | 257.5 | 75.1 | 657.8 | 191.9 |
| Jammu and Kashmir | 95.2 | 15.5 | 124.5 | 20.3 | 26.4 | 4.3 | 250.7 | 40.9 | 570.7 | 93.1 |
| Ladakh | 3.9 | 26.8 | 6.7 | 46.5 | 39.6 | 272.9 | 42.4 | 291.8 | 106.8 | 735.2 |
| Punjab | 436.9 | 31.5 | 407.3 | 29.4 | 0.0 | 0.0 | 1250.4 | 90.3 | 2735.7 | 197.5 |
| Rajasthan | 653.9 | 19.1 | 721.0 | 21.0 | 1.0 | 0.0 | 1952.0 | 56.9 | 4123.5 | 120.2 |
| Uttar Pradesh | 1890.1 | 18.9 | 1444.5 | 14.5 | 22.0 | 0.2 | 4077.1 | 40.9 | 8089.2 | 81.1 |
| Uttarakhand | 141.3 | 27.9 | 120.2 | 23.8 | 1.3 | 0.3 | 264.5 | 52.3 | 645.5 | 127.6 |
| SUB TOTAL NORTH | 4017.9 | 21.8 | 3699.1 | 20.1 | 94.0 | 0.5 | 10256.1 | 55.7 | 22388.8 | 121.5 |
| Andaman & Nicobar Islands | 5.9 | 31.0 | 5.3 | 28.0 | 0.0 | 0.0 | 61.8 | 325.1 | 76.4 | 402.0 |
| Bihar | 864.1 | 16.6 | 384.0 | 7.4 | 83.2 | 1.6 | 958.7 | 18.5 | 2566.4 | 49.4 |
| Jharkhand | 224.1 | 13.6 | 223.9 | 13.6 | 35.3 | 2.1 | 764.6 | 46.4 | 1401.6 | 85.0 |
| Odisha | 360.6 | 17.2 | 332.1 | 15.8 | 85.8 | 4.1 | 1107.7 | 52.8 | 2658.3 | 126.7 |
| West Bengal | 1020.5 | 22.3 | 428.3 | 9.4 | 273.0 | 6.0 | 1217.3 | 26.7 | 3696.6 | 80.9 |
| SUB TOTAL EAST | 2475.3 | 18.3 | 1373.5 | 10.2 | 477.4 | 3.5 | 4110.0 | 30.4 | 10399.3 | 76.9 |
| Arunachal Pradesh | 11.0 | 15.9 | 18.8 | 27.2 | 4.6 | 6.7 | 60.9 | 88.1 | 102.5 | 148.3 |
| Assam | 258.5 | 16.6 | 165.7 | 10.6 | 60.2 | 3.9 | 339.9 | 21.8 | 1178.6 | 75.6 |
| Manipur | 23.7 | 17.4 | 25.0 | 18.3 | 4.7 | 3.4 | 41.9 | 30.8 | 98.4 | 72.3 |
| Meghalaya | 13.4 | 9.0 | 30.0 | 20.2 | 6.7 | 4.5 | 100.3 | 67.7 | 151.1 | 101.9 |
| Mizoram | 14.0 | 25.7 | 11.3 | 20.7 | 1.2 | 2.3 | 26.8 | 49.1 | 53.8 | 98.6 |
| Nagaland | 11.8 | 11.9 | 11.3 | 11.4 | 3.3 | 3.3 | 28.6 | 28.9 | 58.3 | 58.9 |
| Sikkim | 7.4 | 24.3 | 4.6 | 15.1 | 4.5 | 14.7 | 22.0 | 72.4 | 40.1 | 132.0 |
| Tripura | 30.8 | 16.8 | 22.9 | 12.5 | 9.8 | 5.3 | 32.9 | 17.9 | 99.4 | 54.1 |
| SUB TOTAL NORTH EAST | 370.6 | 16.3 | 289.4 | 12.7 | 95.0 | 4.2 | 653.3 | 28.7 | 1782.1 | 78.2 |
| Chhattisgarh | 180.4 | 14.1 | 259.3 | 20.3 | 23.5 | 1.8 | 694.1 | 54.4 | 1492.3 | 116.9 |
| Dadra & Nagar Haveli and Daman & Diu | 14.4 | 49.1 | 10.4 | 35.4 | 0.0 | 0.0 | 56.9 | 194.4 | 213.9 | 730.5 |
| Goa | 30.0 | 41.2 | 53.5 | 73.4 | 0.1 | 0.2 | 83.5 | 114.6 | 200.9 | 275.6 |
| Gujarat | 542.1 | 18.0 | 803.2 | 26.6 | 33.9 | 1.1 | 2095.1 | 69.4 | 9963.0 | 330.0 |
| Madhya Pradesh | 567.9 | 15.6 | 662.7 | 18.3 | 78.6 | 2.2 | 1499.2 | 41.3 | 3272.7 | 90.2 |
| Maharashtra | 1433.9 | 25.5 | 1224.5 | 21.8 | 13.6 | 0.2 | 3250.0 | 57.8 | 7429.8 | 132.2 |
| SUB TOTAL WEST | 2768.7 | 20.3 | 3013.6 | 22.1 | 149.9 | 1.1 | 7678.8 | 56.3 | 22572.6 | 165.4 |
| Andhra Pradesh | 615.0 | 24.9 | 583.5 | 23.6 | 0.0 | 0.0 | 1528.9 | 61.9 | 3225.8 | 130.7 |
| Karnataka | 865.2 | 28.3 | 929.2 | 30.4 | 20.9 | 0.7 | 2326.7 | 76.1 | 4790.8 | 156.7 |
| Kerala | 524.9 | 31.4 | 548.9 | 32.9 | 25.7 | 1.5 | 725.4 | 43.5 | 2215.2 | 132.7 |
| Lakshadweep | 0.4 | 12.6 | 0.0 | 0.0 | 0.3 | 9.3 | 9.2 | 284.0 | 9.9 | 308.6 |
| Puducherry | 22.6 | 36.2 | 42.7 | 68.7 | 0.0 | 0.0 | 81.2 | 130.5 | 164.5 | 264.3 |
| Tamil Nadu | 1086.9 | 30.1 | 1120.1 | 31.1 | 62.4 | 1.7 | 2085.7 | 57.8 | 5291.1 | 146.7 |
| Telangana | 486.8 | 27.6 | 518.2 | 29.4 | 1.7 | 0.1 | 1401.1 | 79.4 | 2709.2 | 153.6 |
| SUB TOTAL SOUTH | 3601.7 | 28.5 | 3742.7 | 29.6 | 111.1 | 0.9 | 8158.2 | 64.6 | 18406.6 | 145.7 |
| All India | 13234.2 | 21.9 | 12118.3 | 20.0 | 927.3 | 1.5 | 30856.4 | 51.0 | 75549.4 | 124.9 |

*Total (all product) sales includes other petroleum products such as naphtha, FO, ATF, lubricants, bitumen, etc.

State wise highest/lowest per capita Highest Lowest

Source: Oil companies

Note:

1-Per capita sales figures are based on provisional sales figures for the period April-September 2020

2-Population figures have been taken from Census of India, 2011

3-SKO includes both PDS & non PDS sales.

Table 6.4 : PDS SKO allocation

(Figures in thousand kilo litres)

| State/UT | 2016-17 | | 2017-18 | | 2018-19 | | 2019-20 | | Apr-Sep 2020 (P) | |
|-----------------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|
| | Alloc ⁿ | Sales | Alloc ⁿ | Sales | Alloc ⁿ | Sales | Alloc ⁿ | Sales | Alloc ⁿ | Sales |
| Chandigarh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Delhi | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Haryana | 66.3 | 35.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Himachal Pradesh | 18.1 | 17.9 | 14.5 | 14.4 | 14.5 | 14.3 | 11.4 | 10.8 | 5.0 | 3.8 |
| Jammu & Kashmir | 73.1 | 67.9 | 58.5 | 57.6 | 58.5 | 53.9 | 45.0 | 38.4 | 22.0 | 17.2 |
| Ladakh | | | | | | | 3.5 | 3.4 | 3.5 | 2.5 |
| Punjab | 74.3 | 62.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Rajasthan | 371.4 | 355.8 | 260.0 | 110.5 | 138.0 | 69.3 | 40.0 | 16.2 | 12.1 | 0.9 |
| Uttar Pradesh | 1168.2 | 1167.6 | 911.2 | 901.3 | 887.9 | 873.5 | 517.9 | 449.5 | 128.7 | 26.5 |
| Uttarakhand | 31.7 | 31.2 | 25.3 | 13.3 | 25.3 | 10.0 | 8.0 | 0.5 | 1.1 | 0.1 |
| SUB TOTAL NORTH | 1803.1 | 1738.5 | 1269.5 | 1097.0 | 1124.2 | 1021.0 | 625.8 | 518.8 | 172.4 | 51.0 |
| Andaman & Nicobar Islands | 5.2 | 4.9 | 4.1 | 4.0 | 4.1 | 3.8 | 1.9 | 1.5 | 0.0 | 0.0 |
| Bihar | 710.7 | 705.3 | 495.4 | 490.3 | 332.6 | 329.6 | 263.0 | 243.9 | 109.6 | 106.9 |
| Jharkhand | 219.7 | 219.0 | 186.8 | 176.3 | 186.8 | 150.3 | 135.2 | 107.2 | 49.7 | 45.3 |
| Odisha | 292.3 | 283.0 | 248.4 | 244.3 | 248.4 | 247.7 | 210.6 | 208.3 | 97.5 | 110.2 |
| West Bengal | 788.9 | 788.3 | 704.0 | 653.6 | 704.0 | 699.3 | 704.0 | 692.7 | 352.0 | 349.7 |
| SUB TOTAL EAST | 2016.8 | 2000.4 | 1638.8 | 1568.5 | 1476.0 | 1430.7 | 1314.8 | 1253.5 | 608.8 | 612.1 |
| Arunachal Pradesh | 9.3 | 9.1 | 7.9 | 7.7 | 7.9 | 7.2 | 6.4 | 5.2 | 2.6 | 2.0 |
| Assam | 289.2 | 287.8 | 245.9 | 245.0 | 245.9 | 242.6 | 181.9 | 176.9 | 78.6 | 76.8 |
| Manipur | 21.1 | 15.2 | 17.9 | 18.2 | 17.9 | 17.7 | 13.3 | 12.7 | 5.6 | 5.8 |
| Meghalaya | 22.9 | 22.7 | 19.4 | 19.4 | 19.4 | 19.3 | 19.3 | 18.9 | 9.5 | 8.5 |
| Mizoram | 6.0 | 6.0 | 4.8 | 4.8 | 4.8 | 4.8 | 3.6 | 3.6 | 1.6 | 1.6 |
| Nagaland | 15.1 | 9.0 | 12.2 | 9.5 | 10.3 | 9.8 | 9.3 | 8.9 | 4.4 | 4.2 |
| Sikkim | 4.3 | 4.3 | 3.5 | 3.4 | 3.5 | 3.4 | 2.6 | 2.5 | 1.1 | 1.0 |
| Tripura | 34.6 | 34.5 | 29.4 | 29.4 | 29.4 | 29.3 | 26.4 | 26.2 | 12.6 | 12.5 |
| SUB TOTAL NORTH EAST | 402.4 | 388.7 | 340.9 | 337.4 | 339.0 | 334.0 | 262.7 | 254.9 | 116.0 | 112.5 |
| Chhattisgarh | 135.4 | 121.7 | 115.1 | 92.7 | 115.1 | 91.5 | 82.4 | 69.1 | 31.3 | 30.1 |
| Dadra & Nagar Haveli | 1.7 | 1.7 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Daman & Diu | 0.8 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Goa | 4.6 | 2.6 | 2.3 | 1.4 | 2.1 | 1.4 | 0.8 | 0.6 | 0.2 | 0.2 |
| Gujarat | 493.0 | 492.7 | 344.5 | 338.2 | 249.7 | 248.7 | 138.8 | 120.8 | 42.0 | 41.4 |
| Madhya Pradesh | 442.4 | 427.2 | 345.0 | 336.9 | 336.2 | 325.9 | 260.7 | 238.5 | 110.4 | 100.9 |
| Maharashtra | 563.6 | 518.0 | 384.7 | 377.8 | 286.7 | 241.9 | 106.5 | 52.9 | 23.3 | 11.6 |
| SUB TOTAL WEST | 1641.4 | 1564.3 | 1192.0 | 1147.2 | 989.8 | 909.5 | 589.3 | 482.1 | 207.2 | 184.2 |
| Andhra Pradesh | 225.7 | 191.5 | 56.4 | 26.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Karnataka | 287.5 | 260.3 | 156.0 | 126.5 | 156.0 | 112.5 | 84.3 | 66.4 | 24.2 | 21.0 |
| Kerala | 88.3 | 88.3 | 58.7 | 58.7 | 55.6 | 55.6 | 41.7 | 41.7 | 18.5 | 18.5 |
| Lakshadweep | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.6 | 0.8 | 0.3 |
| Puducherry | 3.8 | 3.8 | 0.8 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Tamil Nadu | 307.6 | 307.6 | 204.5 | 204.9 | 193.8 | 193.8 | 145.3 | 145.3 | 64.6 | 64.6 |
| Telengana | 155.4 | 133.9 | 103.4 | 100.8 | 97.9 | 94.3 | 56.6 | 29.8 | 12.5 | 2.0 |
| SUB TOTAL SOUTH | 1069.3 | 986.4 | 580.6 | 519.0 | 504.1 | 456.9 | 328.7 | 283.8 | 120.6 | 106.4 |
| All India | 6933.0 | 6678.4 | 5021.8 | 4669.2 | 4433.0 | 4152.1 | 3121.3 | 2793.2 | 1225.0 | 1066.2 |

Allocⁿ= Allocation

Source: MoP&NG

• Delhi and Chandigarh have been declared kerosene-free from Q3, 2013-14 and Q1, 2016-17 respectively. Punjab and Haryana have been declared kerosene-free from Q1, 2017-18. PDS SKO allocation for Dadra & Nagar Haveli and Daman & Diu PDS SKO allocation has been reduced to "Zero" from Q2, 2017-18. PDS SKO allocation of Puducherry and Andhra Pradesh has been reduced to "Zero" wef 01.09.2017 and 01.10.2017 respectively. PDS SKO allocation for Andaman & Nicobar islands has been reduced to "Zero" effective from 01.09.2019.

• On an all India basis, the drop in allocation in the last five years (till 2019-20) has been 64.1% due to voluntary surrender of PDS SKO allocation by some of the states in addition to nil PDS SKO allocation to the above states. The allocation drop has been steepest in the Southern region (76.8%) followed by Northern region (73.6%), Western region (71.3%), Eastern region (45.2%) and North Eastern region (41.4%). Half yearly allocation in 2020-21 also decreased by 32.1% as compared with the same period in the year 2019-20.

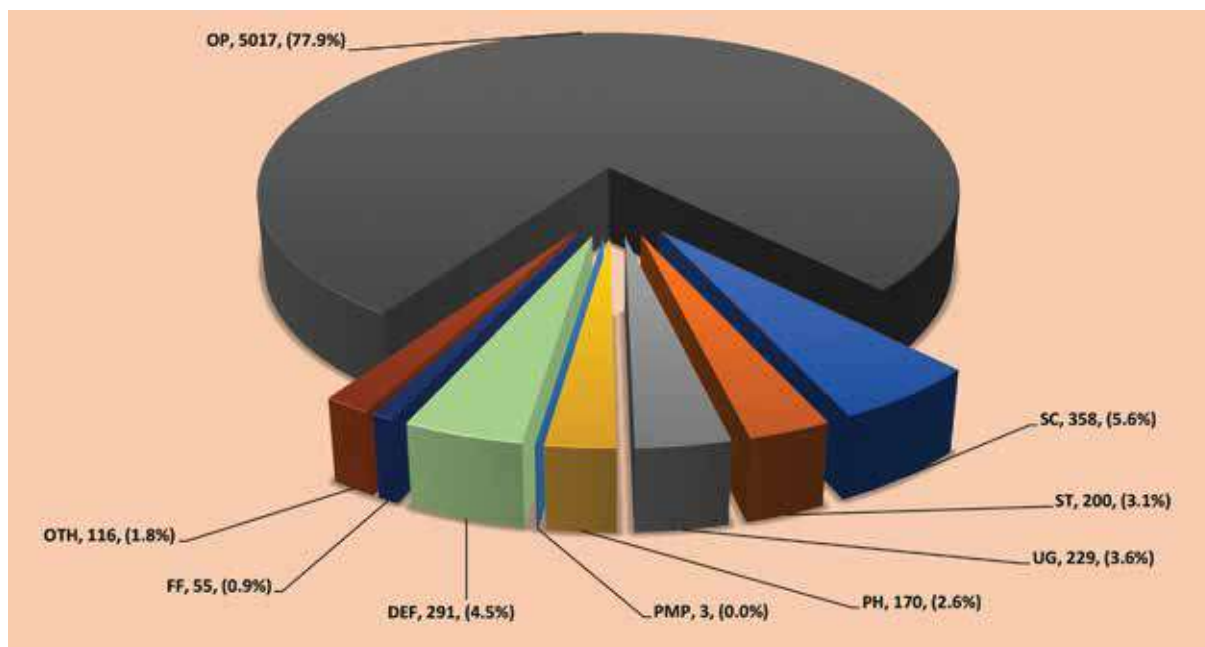
Table 6.5 : Oil industry retail outlets & SKO / LDO agencies

| State/UT | Number of Retail Outlets (as on) | | | | | Number of SKO / LDO agencies (as on) | | | | |
|--------------------------------------|----------------------------------|--------------|--------------|--------------|---------------|--------------------------------------|-------------|-------------|-------------|---------------|
| | 1.4.2017 | 1.4.2018 | 1.4.2019 | 1.4.2020 | 1.10.2020 (P) | 1.4.2017 | 1.4.2018 | 1.4.2019 | 1.4.2020 | 1.10.2020 (P) |
| Chandigarh | 41 | 41 | 42 | 42 | 44 | 12 | 12 | 12 | 12 | 12 |
| Delhi | 396 | 397 | 398 | 398 | 400 | 116 | 116 | 116 | 116 | 111 |
| Haryana | 2726 | 2862 | 2933 | 3060 | 3182 | 141 | 141 | 141 | 141 | 139 |
| Himachal Pradesh | 414 | 432 | 439 | 494 | 522 | 26 | 26 | 26 | 26 | 26 |
| Jammu and Kashmir | 491 | 500 | 504 | 530 | 538 | 45 | 45 | 45 | 45 | 45 |
| Ladakh | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 2 | 2 | 2 |
| Punjab | 3380 | 3427 | 3453 | 3551 | 3629 | 237 | 237 | 237 | 237 | 237 |
| Rajasthan | 4116 | 4476 | 4661 | 4967 | 5240 | 250 | 250 | 250 | 250 | 248 |
| Uttar Pradesh | 7069 | 7473 | 7762 | 8210 | 8635 | 696 | 696 | 695 | 691 | 675 |
| Uttarakhand | 570 | 590 | 601 | 629 | 651 | 73 | 73 | 73 | 73 | 69 |
| SUB TOTAL NORTH | 19206 | 20201 | 20796 | 21884 | 22845 | 1598 | 1598 | 1597 | 1593 | 1564 |
| Andaman & Nicobar Islands | 12 | 14 | 14 | 16 | 16 | 2 | 2 | 2 | 2 | 2 |
| Bihar | 2604 | 2695 | 2860 | 2968 | 3027 | 372 | 372 | 371 | 371 | 362 |
| Jharkhand | 1189 | 1207 | 1216 | 1358 | 1418 | 87 | 87 | 87 | 87 | 87 |
| Odisha | 1639 | 1681 | 1704 | 1894 | 1975 | 177 | 177 | 177 | 177 | 176 |
| West Bengal | 2299 | 2333 | 2363 | 2523 | 2622 | 458 | 458 | 458 | 457 | 455 |
| SUB TOTAL EAST | 7743 | 7930 | 8157 | 8759 | 9058 | 1096 | 1096 | 1095 | 1094 | 1082 |
| Arunachal Pradesh | 74 | 85 | 94 | 116 | 126 | 33 | 33 | 33 | 33 | 33 |
| Assam | 828 | 871 | 897 | 980 | 1015 | 359 | 359 | 359 | 359 | 359 |
| Manipur | 85 | 97 | 104 | 136 | 140 | 36 | 36 | 36 | 36 | 36 |
| Meghalaya | 198 | 203 | 208 | 225 | 227 | 35 | 35 | 35 | 35 | 35 |
| Mizoram | 37 | 41 | 43 | 45 | 45 | 19 | 19 | 19 | 19 | 19 |
| Nagaland | 70 | 73 | 79 | 94 | 97 | 19 | 19 | 19 | 19 | 19 |
| Sikkim | 50 | 51 | 51 | 55 | 55 | 12 | 12 | 12 | 12 | 12 |
| Tripura | 68 | 71 | 72 | 79 | 85 | 40 | 40 | 40 | 40 | 40 |
| SUB TOTAL NORTH EAST | 1410 | 1492 | 1548 | 1730 | 1790 | 553 | 553 | 553 | 553 | 553 |
| Chhattisgarh | 1176 | 1249 | 1280 | 1462 | 1584 | 108 | 108 | 108 | 108 | 108 |
| Dadra & Nagar Haveli and Daman & Diu | 63 | 63 | 62 | 61 | 61 | 7 | 7 | 7 | 7 | 7 |
| Goa | 115 | 116 | 118 | 118 | 119 | 22 | 22 | 22 | 22 | 22 |
| Gujarat | 3765 | 4025 | 4159 | 4575 | 4809 | 478 | 476 | 473 | 473 | 470 |
| Madhya Pradesh | 3528 | 3711 | 3832 | 4230 | 4447 | 284 | 284 | 284 | 284 | 284 |
| Maharashtra | 5684 | 5970 | 6148 | 6458 | 6647 | 767 | 767 | 767 | 766 | 752 |
| SUB TOTAL WEST | 14331 | 15134 | 15599 | 16904 | 17667 | 1666 | 1664 | 1661 | 1660 | 1643 |
| Andhra Pradesh | 3197 | 3336 | 3430 | 3721 | 3810 | 413 | 413 | 394 | 394 | 384 |
| Karnataka | 4027 | 4215 | 4385 | 4811 | 5024 | 323 | 318 | 315 | 315 | 311 |
| Kerala | 2048 | 2100 | 2140 | 2238 | 2283 | 237 | 237 | 237 | 237 | 234 |
| Lakshadweep | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Puducherry | 160 | 165 | 165 | 164 | 167 | 8 | 8 | 8 | 8 | 8 |
| Tamil Nadu | 5039 | 5387 | 5638 | 5804 | 5979 | 466 | 466 | 466 | 465 | 458 |
| Telangana | 2434 | 2625 | 2767 | 3078 | 3220 | 183 | 183 | 202 | 202 | 202 |
| SUB TOTAL SOUTH | 16905 | 17828 | 18525 | 19816 | 20483 | 1630 | 1625 | 1622 | 1621 | 1597 |
| All India | 59595 | 62585 | 64625 | 69093 | 71843 | 6543 | 6536 | 6528 | 6521 | 6439 |

Source: Oil companies (Includes dealers of private oil companies)

• On an all India basis the percentage growth in the number of retail outlets from 01.04.2017 to 01.10.2020 has been 20.6%. The region wise growth is highest for the North Eastern region (27.0%), followed by Western region (23.3%), Southern region (21.2%), Northern region (18.9%) and Eastern region (17.0%).

• As many states have become kerosene free in the last five years and due to voluntary surrender of PDS kerosene quota by some others there has been a decline in the number of kerosene dealers in the country.

Category wise SKO/LDO dealers (Total 6439) on 01.10.2020

Note:

(1) SC: Scheduled Caste; ST: Scheduled Tribe; UG: Unemployed Graduate; UEG: Unemployed Engineering Graduate.; PH: Physically Handicapped; DEF: Defence category; FF: Freedom Fighter; OSP: Outstanding Sports Persons; OBC: Other Backward Classes; PMP: Para Military/Police/Govt. Personnel; Others: Includes Social Worker Category, Dealerships given on compassionate grounds/ under discretionary quota, 2/3 wheeler outlets and Company Owned and Operated outlets, Operation Vijay.
 (2) SKO/LDO dealers are only PSU OMC dealers.

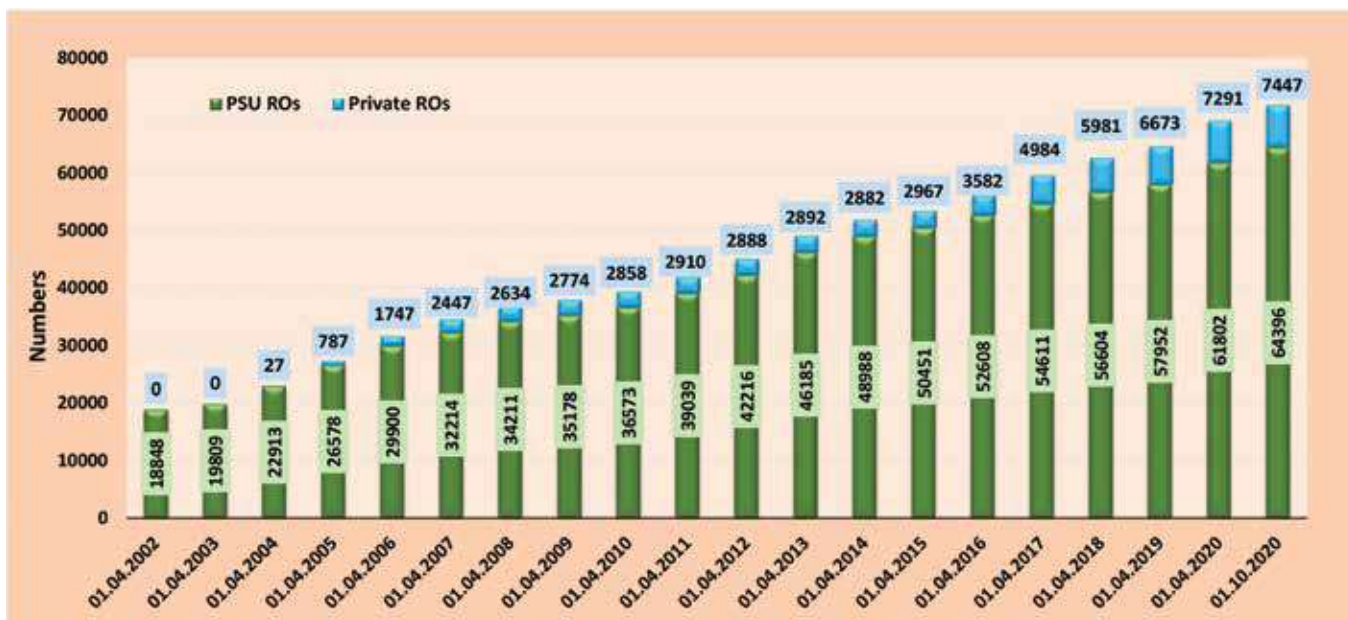
Table 6.6 : Industry marketing infrastructure as on 01.10.2020 (P)

| Particulars | IOCL | BPCL | HPCL | RIL/ RBML* | NEL | Shell | Others | Total |
|--|--------|--------|--------|---------------|-------|-------|--------|--------|
| POL terminal/depots (Nos.) [§] | 118 | 78 | 84 | 18 | 3 | - | 6 | 307 |
| Aviation fuel stations (Nos.) [@] | 119 | 61 | 44 | 31 | - | - | 1 | 256 |
| Retail Outlets (total) (Nos.) [^] | 30,079 | 17,138 | 17,171 | 1,406 | 5,822 | 219 | 8 | 71,843 |
| out of which Rural ROs (Nos.) | 9,045 | 3,678 | 4,106 | 127 | 1,929 | 38 | - | 18,923 |
| SKO/LDO agencies (Nos.) | 3,871 | 930 | 1,638 | - | - | - | - | 6,439 |
| LPG distributors (total) (Nos.) (PSUs only) | 12,532 | 6,151 | 6,153 | - | - | - | - | 24,836 |
| LPG bottling plants (Nos.) (PSUs only) [#] | 92 | 53 | 50 | - | - | - | 3 | 198 |
| LPG bottling capacity (TMTPA) (PSUs only) [§] | 10,086 | 4,710 | 5,642 | - | - | - | 173 | 20,611 |
| LPG active domestic consumers (Nos. crore) (PSUs only) | 13.4 | 7.3 | 7.8 | - | - | - | - | 28.5 |

[§](RIL= 5 terminals and 13 depots, Others=4 MRPL & 2 NRL); [@](Others=Shell/MRPL -1); [^](Others=MRPL-8); [#](Others=NRL-1, OIL-1, CPCL-1); [§](Others=NRL-30, OIL-23, CPCL-120); *RBML- Reliance BP Mobility Limited.

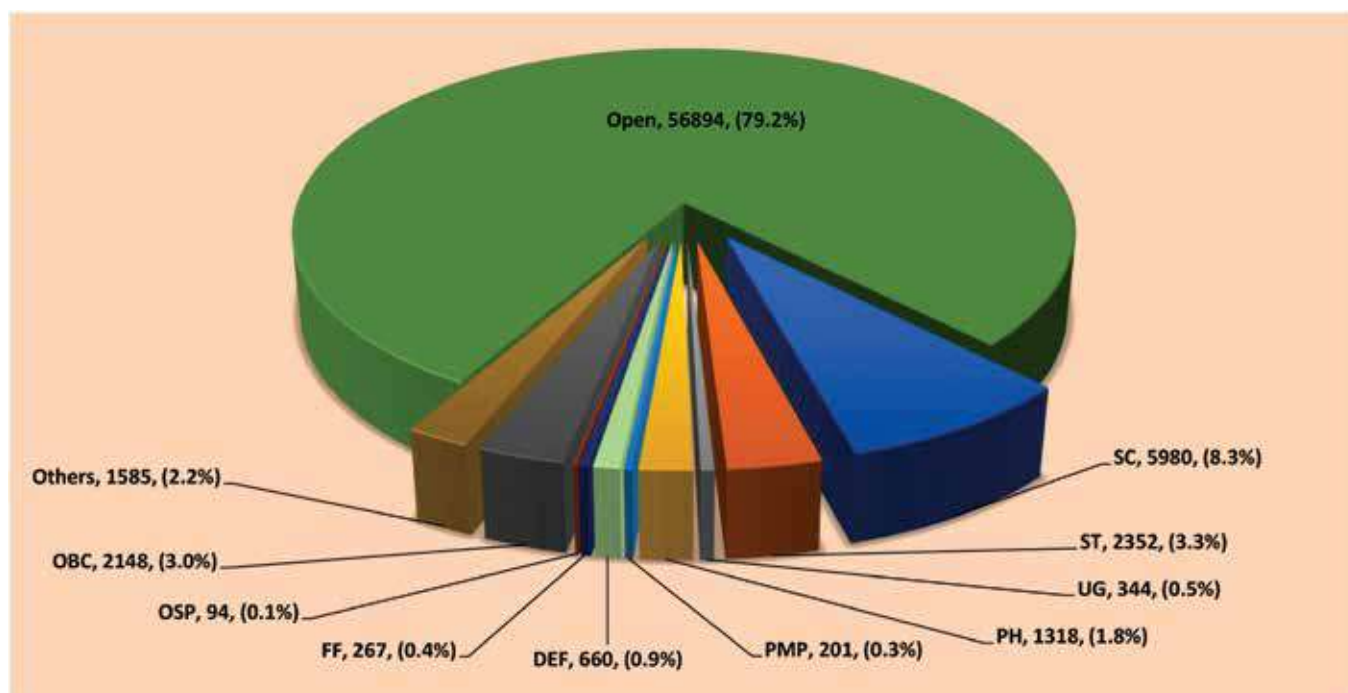
Source: Oil companies

All India number of retail outlets in PSU and private category



On 1.10.2020 the number of public sector oil company owned retail outlets was 64396 out of a total of 71843 outlets on all India basis, whereas the number of retail outlets owned by private oil companies was 7447. Participation by private sector in retail outlet business started in FY 2004 with 27 retail outlets. As on 01.10.2020 it accounted for 10.4% of the total market representation.

Category wise retail outlets (Total 71843) as on 01.10.2020



Note:

(1) SC: Scheduled Caste; ST: Scheduled Tribe; UG: Unemployed Graduate; UEG: Unemployed Engineering Graduate.; PH: Physically Handicapped; DEF: Defence Category; FF: Freedom Fighter; OSP: Outstanding Sports Persons; OBC: Other Backward Classes; PMP: Para Military/Police/Govt. Personnel; Others: Includes Social Worker Category, Dealerships given on compassionate grounds/ under discretionary quota, 2/3 wheeler outlets and Company Owned and Operated outlets, Operation Vijay.
 (2) Open category also includes private oil company retail outlets.

Table 6.7 : Break-up of consumption data (PSU and Private)

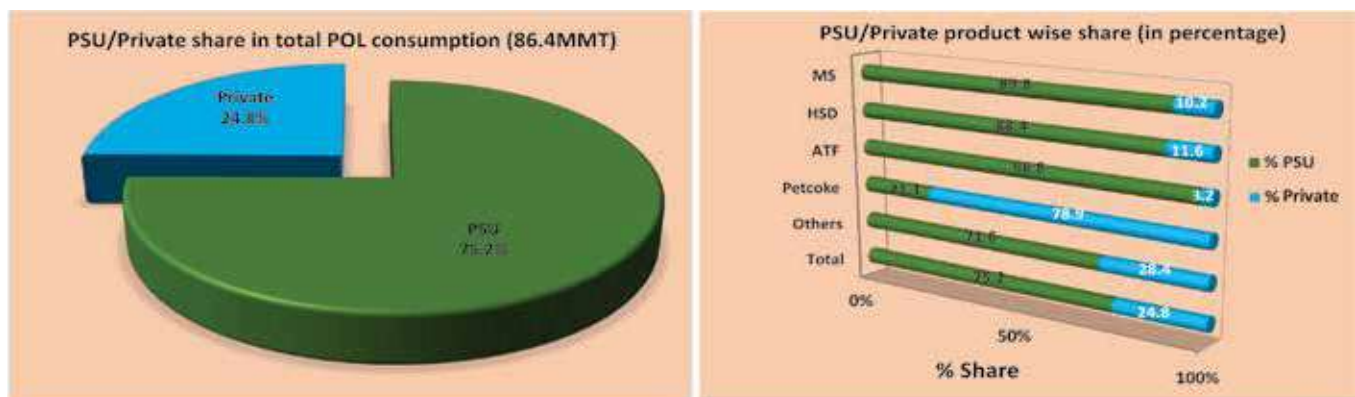
(Thousand metric tonne)

| Product | 2017-18 | | | 2018-19 | | | 2019-20 | | | Apr-Sep 2019 | | | Apr-Sep 2020 (P) | | |
|--------------|---------------|--------------|---------------|---------------|--------------|---------------|---------------|--------------|---------------|--------------|--------------|---------------|------------------|--------------|--------------|
| | PSU | Private | Total | PSU | Private | Total | PSU | Private | Total | PSU | Private | Total | PSU | Private | Total |
| LPG | 22977 | 364 | 23342 | 24591 | 316 | 24907 | 26126 | 204 | 26330 | 12396 | 137 | 12533 | 13234 | 44 | 13277 |
| MS | 24329 | 1846 | 26174 | 25959 | 2326 | 28284 | 27179 | 2797 | 29975 | 13919 | 1387 | 15305 | 10879 | 1239 | 12118 |
| Naphtha | 5207 | 7681 | 12889 | 5583 | 8548 | 14131 | 6479 | 7789 | 14268 | 2977 | 3692 | 6669 | 2693 | 3880 | 6574 |
| ATF | 6988 | 645 | 7633 | 7683 | 617 | 8300 | 7598 | 400 | 7999 | 3759 | 194 | 3953 | 1153 | 38 | 1191 |
| SKO | 3845 | 0 | 3845 | 3459 | 0 | 3459 | 2397 | 0 | 2397 | 1385 | 0 | 1385 | 929 | 0 | 929 |
| HSD | 74382 | 6692 | 81073 | 75775 | 7753 | 83528 | 73825 | 8777 | 82602 | 37108 | 4253 | 41361 | 27300 | 3597 | 30897 |
| LDO | 519 | 0 | 519 | 577 | 21 | 598 | 602 | 25 | 628 | 313 | 10 | 323 | 304 | 40 | 343 |
| Lubes | 1345 | 2539 | 3884 | 1313 | 2355 | 3668 | 1317 | 2517 | 3833 | 618 | 1276 | 1894 | 633 | 939 | 1572 |
| FO/LSHS | 5665 | 1056 | 6721 | 5596 | 968 | 6564 | 5172 | 1129 | 6302 | 2634 | 442 | 3076 | 2321 | 470 | 2791 |
| Bitumen | 4883 | 1202 | 6086 | 5683 | 1024 | 6708 | 4995 | 1725 | 6720 | 2303 | 620 | 2923 | 1853 | 829 | 2683 |
| PetCoke | 5176 | 20480 | 25657 | 5770 | 15576 | 21346 | 5634 | 16074 | 21708 | 2525 | 8797 | 11322 | 1909 | 7155 | 9064 |
| Others | 3422 | 4922 | 8343 | 4189 | 7534 | 11723 | 4381 | 6984 | 11365 | 2121 | 3680 | 5800 | 1743 | 3186 | 4929 |
| Total | 158739 | 47427 | 206166 | 166178 | 47038 | 213216 | 165704 | 48422 | 214127 | 82056 | 24488 | 106544 | 64950 | 21416 | 86366 |

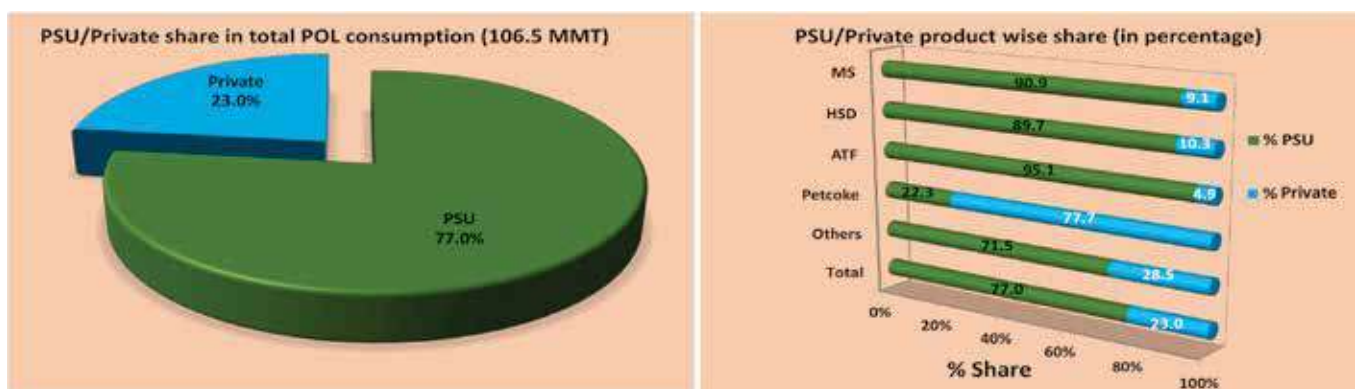
Source: Oil companies, Directorate General of Commercial Intelligence and Statistics (DGCIS) & SEZ data (included from FY 2017-18 onwards).
(Oil company sales+Private imports+SEZ sales to DTA=Consumption)

Note: Private consumption includes direct imports as well as marketing by private oil companies.

Apr-Sep 2020 (P)



Apr-Sep 2019



Note: In the above bar charts; others include all other products except MS, HSD, ATF & Petcoke.

- The share of the private sector in total consumption increased during April - September 2020 by 1.8% as compared to the same period last year.
- The share of the private sector during April - September 2020 increased in MS (1.2%), HSD (1.4%) and Petcoke (1.2%) compared to April - September 2019.
- This was mainly because of higher growth in consumption of MS, HSD and ATF in private sector as compared to growth in PSU.
- In the private sector the growth has been observed for LDO (300.5%), bitumen (33.8%), FO/LSHS (6.5%) and naphtha (5.1%).
- In respect of all other products (except MS, HSD, ATF & petcoke) including lubes, bitumen, LDO and naphtha, the private sector share has decreased by -0.1% during April - September 2020 as compared to April - September 2019.

Table 6.8 : Ethanol blending programme

| Sl.no. | State | (1st December 2018 to 30th November 2019) Ethanol Supply Year* | | (1st December 2019 to 30th September 2020) | |
|--------------------|--------------------------------------|---|--|---|--|
| | | Ethanol received by PSU OMCs under EBP program (Quantity Cr. Litrs) | Average percentage blending sales (EBP%)** | Ethanol received by PSU OMCs under EBP program (Quantity Cr. Litrs) | Average percentage blending sales (EBP%)** |
| 1 | Andhra Pradesh | 10.2 | 6.1% | 5.3 | 4.0% |
| 2 | ANDMAN & NIKOBAR | 0.0 | 0.0% | 0.0 | 0.0% |
| 3 | Arunachal Pradesh | 0.0 | 0.0% | 0.0 | 0.0% |
| 4 | Assam | 0.0 | 0.0% | 0.0 | 0.0% |
| 5 | Bihar | 6.8 | 6.6% | 6.9 | 8.2% |
| 6 | Chandigarh | 0.0 | 6.7% | 0.0 | 6.9% |
| 7 | Chhattisgarh | 3.3 | 3.8% | 4.1 | 6.7% |
| 8 | Dadar & Nagar Haveli and Daman & Diu | 0.0 | 7.2% | 0.0 | 3.4% |
| 10 | Delhi | 8.4 | 6.6% | 4.9 | 6.6% |
| 11 | Goa | 1.2 | 4.6% | 0.8 | 4.7% |
| 12 | Gujarat | 13.4 | 6.0% | 9.6 | 5.9% |
| 13 | Haryana | 12.4 | 8.5% | 10.2 | 9.5% |
| 14 | Himachal Pradesh | 0.1 | 4.8% | 0.3 | 7.7% |
| 15 | Jammu & Kashmir | 0.0 | 0.0% | 0.0 | 0.0% |
| 16 | Jharkand | 0.1 | 0.1% | 1.9 | 3.6% |
| 17 | Karnataka | 19.4 | 7.0% | 17.2 | 8.1% |
| 18 | Lakshadweep | 0.0 | 0.0% | 0.0 | 0.0% |
| 19 | Kerala | 0.0 | 0.2% | 0.0 | 0.1% |
| 20 | Ladakh | 0.0 | 0.0% | 0.0 | 0.0% |
| 21 | Madhya Pradesh | 9.3 | 5.1% | 8.8 | 6.3% |
| 22 | Maharashtra | 29.8 | 6.6% | 19.3 | 6.1% |
| 23 | Manipur | 0.0 | 0.0% | 0.0 | 0.0% |
| 24 | Meghalaya | 0.0 | 0.0% | 0.0 | 0.0% |
| 25 | Mizoram | 0.0 | 0.0% | 0.0 | 0.0% |
| 26 | Nagaland | 0.0 | 0.0% | 0.0 | 0.0% |
| 27 | Odisha | 0.0 | 0.1% | 0.2 | 0.3% |
| 28 | Pondicherry | 0.0 | 1.0% | 0.0 | 0.4% |
| 29 | Punjab | 10.4 | 7.7% | 10.0 | 9.1% |
| 30 | Rajasthan | 4.1 | 2.0% | 1.9 | 1.3% |
| 31 | Sikkim | 0.0 | 0.0% | 0.0 | 0.0% |
| 32 | Tamil Nadu | 7.5 | 2.1% | 2.9 | 1.1% |
| 33 | Telangana | 8.9 | 5.4% | 4.2 | 3.4% |
| 34 | Tripura | 0.0 | 0.0% | 0.0 | 0.0% |
| 35 | Uttar Pradesh | 38.7 | 8.9% | 32.3 | 9.6% |
| 36 | Uttrakhand | 2.5 | 8.3% | 1.9 | 9.6% |
| 37 | West Bengal | 2.3 | 1.8% | 1.2 | 1.2% |
| Grand Total | | 188.6 | 5.0% | 144.0 | 5.1% |

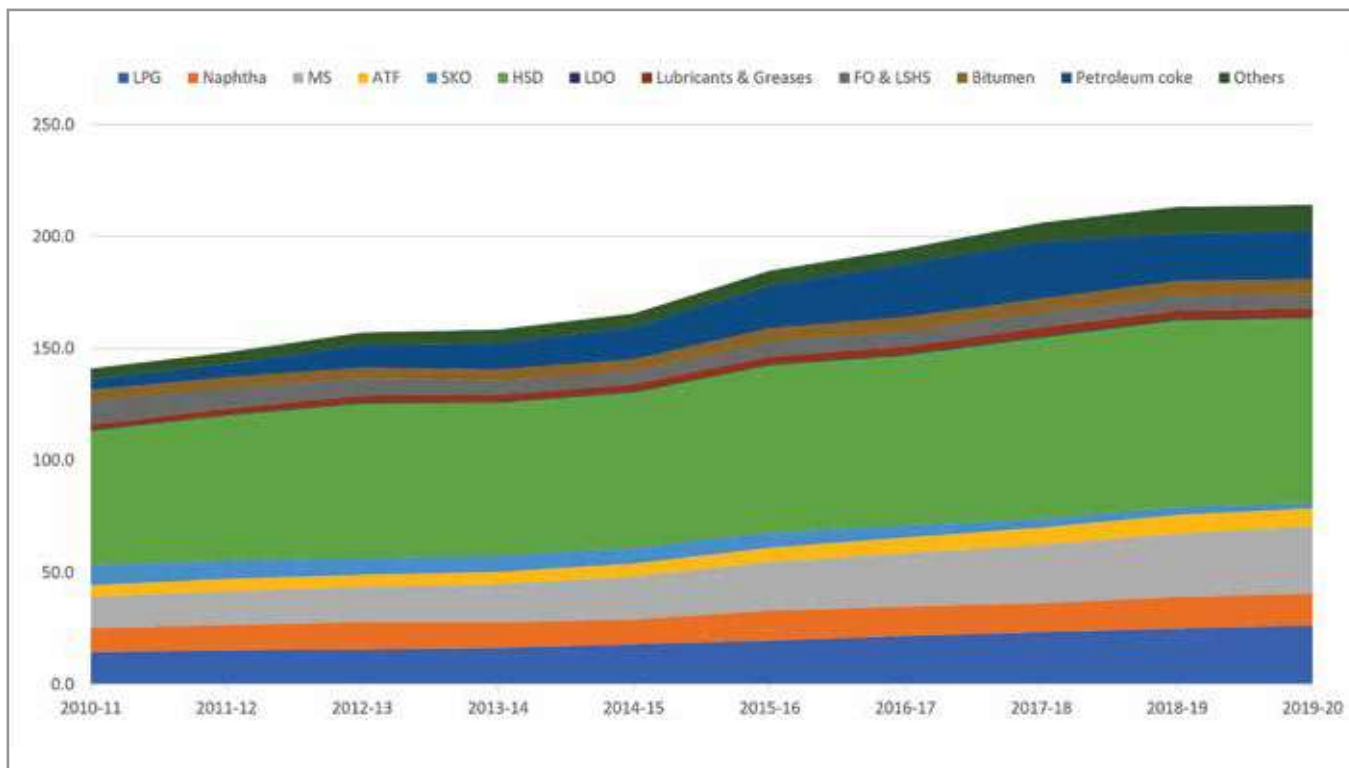
* Ethanol Supply Year : Ethanol supplies take place between 1st December of the present year to 30th November of the following year.

**EBP %age in all the States has been calculated based on the MS sale in the geographical limit of the respective State. In the States/UTs where receipt is zero but EBP %age has been calculated is due to the fact that sale of Ethanol blended MS which comes from nearby supply locations of other States contribute to the EBP %age in this State/UTs.

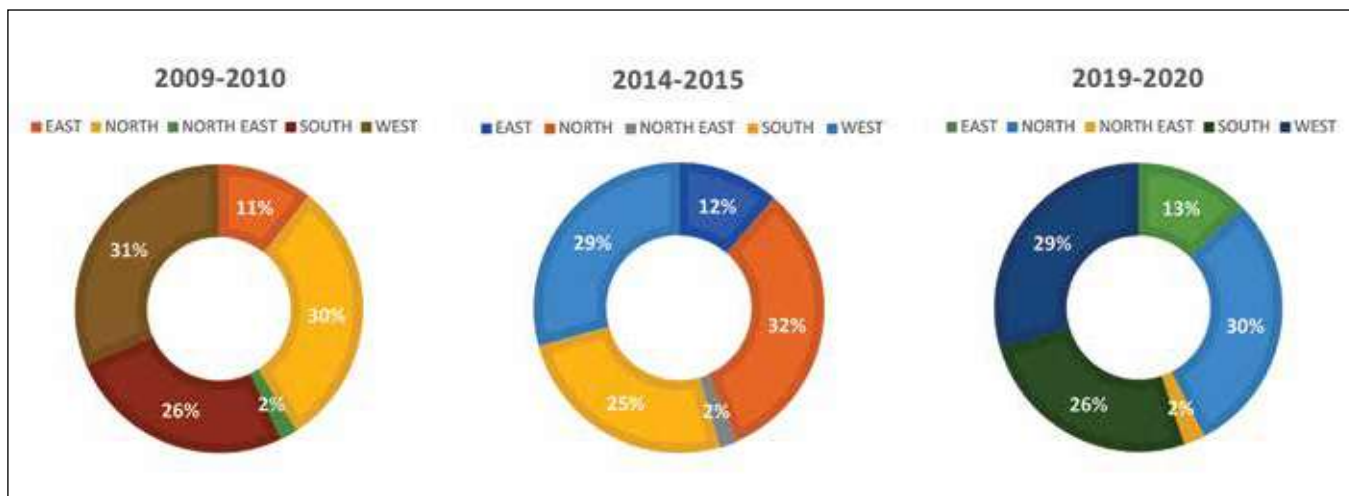
Note: With effect from 01.04.2019, EBP Programme has been extended to whole of India except UTs of Andaman & Nicobar Islands and Lakshadweep.

POL consumption by product

Million metric tonne



Distribution of total domestic POL sales in India





Chapter 7

LPG



Table 7.1 : LPG marketing at a glance

| Particulars | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
|--|-----------------------------------|--------------|--------------|--------------|--------------|--------------|------------------|
| | (Thousand metric tonne) | | | | | | |
| LPG production | 10568 | 11253 | 12364 | 12786 | 12823 | 6092 | 5655 |
| LPG consumption | 19623 | 21608 | 23342 | 24907 | 26330 | 12533 | 13277 |
| PSU sales | 19134 | 21179 | 22977 | 24591 | 26126 | 12396 | 13234 |
| of which: | | | | | | | |
| Domestic | 17182 | 18871 | 20352 | 21728 | 23076 | 10937 | 12414 |
| Non-Domestic | 1464 | 1776 | 2086 | 2364 | 2614 | 1235 | 636 |
| Bulk | 317 | 364 | 355 | 318 | 263 | 137 | 141 |
| Auto LPG | 171 | 167 | 184 | 180 | 172 | 87 | 43 |
| Imports | 8959 | 11097 | 11379 | 13235 | 14809 | 6908 | 7939 |
| of which: | | | | | | | |
| PSU imports | 8470 | 10668 | 11015 | 12919 | 14605 | 6771 | 7896 |
| Private imports | 489 | 429 | 364 | 316 | 204 | 137 | 44 |
| | (Lakh) | | | | | | |
| Enrolment (domestic) | 204.5 | 331.7 | 284.7 | 455.1 | 161.1 | 123.1 | 45.6 |
| As on | 1.4.2016 | 1.4.2017 | 1.4.2018 | 1.4.2019 | 1.4.2020 | 1.10.2019 | 1.10.2020 |
| LPG active domestic customers | 1,663 | 1,988 | 2,243 | 2,654 | 2,787 | 2,736 | 2,845 |
| PMUY beneficiaries | - | 200 | 356 | 719 | 802 | 803 | 801 |
| Non-domestic customers | 23.3 | 25.3 | 27.9 | 30.2 | 32.4 | 31.2 | 32.9 |
| | (Percent) | | | | | | |
| LPG coverage (Estimated) | 61.9 | 72.8 | 80.9 | 94.3 | 97.5 | 96.5 | 98.8 |
| | (Nos.) | | | | | | |
| LPG distributors | 17916 | 18786 | 20146 | 23737 | 24670 | 24127 | 24836 |
| of which: | | | | | | | |
| Shehri Vitrak | 7492 | 7677 | 7821 | 7908 | 7914 | 7918 | 7914 |
| Rurban Vitrak | 2852 | 3152 | 3463 | 3626 | 3671 | 3641 | 3687 |
| Gramin & Durgam Kshetriya Vitrak | 7572 | 7957 | 8862 | 12203 | 13085 | 12568 | 13235 |
| Auto LPG dispensing stations (ALDS) | 676 | 675 | 672 | 661 | 657 | 657 | 657 |
| | (Thousand metric tonne per annum) | | | | | | |
| Bottling capacity (rated) | 15172 | 16264 | 17395 | 18338 | 20292 | 18458 | 20611 |
| | (Thousand metric tonne) | | | | | | |
| Gross tankage | 869 | 878 | 912 | 929 | 978 | 1008 | 988 |

Source: Oil companies & Directorate General of Commercial Intelligence and Statistics (DGCIS)

Note:

1. Data in respect of enrolment, customers, distributors, ALDS and rated bottling capacity pertain to PSU OMCs only.
2. Gross tankage includes LPG tankage at LPG bottling plants owned by PSU oil companies, all refineries, fractionators and LPG import terminals.
3. MOPNG vide letter no. P-20019/2/2016-LPG dated 23 June 2016 had issued unified guidelines for selection of LPG distributors. In the said guidelines, LPG distributor categories have been redefined. The historical data on LPG distributors has been rearranged in line with the new classification for comparison.



Table 7.2: LPG coverage (estimated) as on 01.10.2020 (P)

| (Number in lakhs) | | | | |
|-----------------------------|-------------------------------|---------------------------------------|-------------------------------------|------------------|
| State/UT | No. of households Census 2011 | Estimated households as on 01.10.2020 | Active connections as on 01.10.2020 | LPG coverage (%) |
| Chandigarh | 2.35 | 2.74 | 2.80 | 102.2% |
| Delhi | 33.41 | 40.19 | 49.95 | 124.3% |
| Haryana | 47.18 | 56.18 | 70.51 | 125.5% |
| Himachal Pradesh | 14.77 | 16.59 | 20.05 | 120.8% |
| Jammu & Kashmir + Ladakh | 20.15 | 24.71 | 32.67 | 132.2% |
| Punjab | 54.10 | 61.30 | 87.08 | 142.0% |
| Rajasthan | 125.81 | 151.49 | 165.18 | 109.0% |
| Uttar Pradesh | 329.24 | 392.98 | 414.93 | 105.6% |
| Uttarakhand | 19.97 | 23.57 | 27.24 | 115.6% |
| Sub Total North | 646.98 | 769.75 | 870.40 | 113.1% |
| Arunachal Pradesh | 2.62 | 3.27 | 2.76 | 84.3% |
| Assam | 63.67 | 74.11 | 72.40 | 97.7% |
| Manipur | 5.07 | 5.98 | 5.74 | 96.1% |
| Meghalaya | 5.38 | 6.82 | 3.25 | 47.6% |
| Mizoram | 2.21 | 2.71 | 3.09 | 114.1% |
| Nagaland | 4.00 | 3.98 | 2.72 | 68.4% |
| Sikkim | 1.28 | 1.44 | 1.53 | 106.5% |
| Tripura | 8.43 | 9.62 | 7.47 | 77.6% |
| Sub Total North East | 92.66 | 107.92 | 98.96 | 91.7% |
| Andaman & Nicobar Islands | 0.93 | 0.99 | 1.14 | 114.8% |
| Bihar | 189.41 | 235.51 | 182.07 | 77.3% |
| Jharkhand | 61.82 | 75.09 | 56.94 | 75.8% |
| Odisha | 96.61 | 109.57 | 87.41 | 79.8% |
| West Bengal | 200.67 | 227.21 | 224.33 | 98.7% |
| Sub Total East | 549.44 | 648.38 | 551.89 | 85.1% |
| Chhattisgarh | 56.23 | 68.41 | 52.67 | 77.0% |
| Dadra & Nagar Haveli | 0.73 | 1.12 | 0.93 | 83.3% |
| Daman & Diu | 0.60 | 0.92 | 0.68 | 74.5% |
| Goa | 3.23 | 3.48 | 5.10 | 146.5% |
| Gujarat | 121.82 | 144.35 | 107.47 | 74.5% |
| Madhya Pradesh | 149.68 | 178.79 | 152.02 | 85.0% |
| Maharashtra | 238.31 | 274.85 | 282.06 | 102.6% |
| Sub Total West | 570.59 | 671.91 | 600.94 | 89.4% |
| Andhra Pradesh | 126.04 | 139.33 | 140.47 | 100.8% |
| Karnataka | 131.80 | 151.50 | 163.79 | 108.1% |
| Kerala | 77.16 | 80.79 | 89.58 | 110.9% |
| Lakshadweep | 0.11 | 0.11 | 0.10 | 86.5% |
| Puducherry | 3.01 | 3.82 | 3.75 | 98.0% |
| Tamil Nadu | 184.93 | 212.58 | 213.61 | 100.5% |
| Telangana | 84.21 | 93.08 | 111.80 | 120.1% |
| Sub Total South | 607.26 | 681.21 | 723.08 | 106.1% |
| All India | 2466.93 | 2879.18 | 2845.28 | 98.8% |

Source: PSU OMCs (IOCL, BPCL and HPCL)



Table 7.3: BPL households covered under PMUY Scheme as on 1.10.2020 (P)

| (Number in lakhs) | |
|-----------------------------|--------------------------|
| State/UT | Number of BPL households |
| Chandigarh | 0.00 |
| Delhi | 0.77 |
| Haryana | 7.30 |
| Himachal Pradesh | 1.36 |
| Jammu & Kashmir + Ladakh | 12.42 |
| Punjab | 12.23 |
| Rajasthan | 63.68 |
| Uttar Pradesh | 147.51 |
| Uttarakhand | 4.04 |
| Sub Total North | 249.31 |
| Arunachal Pradesh | 0.45 |
| Assam | 34.75 |
| Manipur | 1.56 |
| Meghalaya | 1.51 |
| Mizoram | 0.28 |
| Nagaland | 0.55 |
| Sikkim | 0.09 |
| Tripura | 2.72 |
| Sub Total North East | 41.90 |
| Andaman & Nicobar Islands | 0.13 |
| Bihar | 85.34 |
| Jharkhand | 32.60 |
| Odisha | 47.39 |
| West Bengal | 88.54 |
| Sub Total East | 253.98 |
| Chhattisgarh | 29.89 |
| Dadra & Nagar Haveli | 0.15 |
| Daman & Diu | 0.00 |
| Goa | 0.01 |
| Gujarat | 29.01 |
| Madhya Pradesh | 71.52 |
| Maharashtra | 44.23 |
| Sub Total West | 174.82 |
| Andhra Pradesh | 3.92 |
| Karnataka | 31.45 |
| Kerala | 2.56 |
| Lakshadweep | 0.00 |
| Puducherry | 0.14 |
| Tamil Nadu | 32.41 |
| Telangana | 10.71 |
| Sub Total South | 81.20 |
| All India | 801.21 |

Source: PSU OMCs (IOCL, BPCL and HPCL) "BPL households covered" refer to those households where subscription vouchers have been issued.

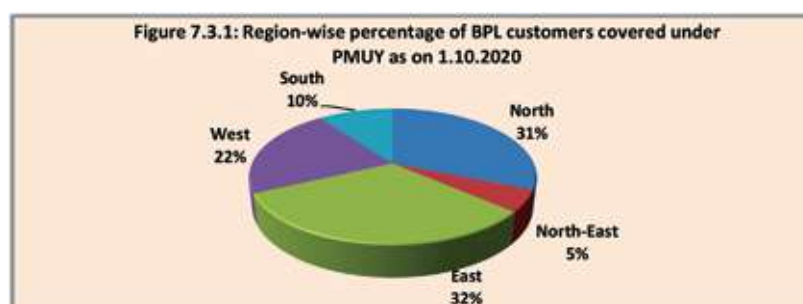


Table 7.4 : LPG domestic customers enrolment (14.2 kg/5 kg) by PSU OMCs

| State/UT | April 2020 - September 2020 (P) | | |
|-----------------------------|---------------------------------|---------------|--------------|
| | 14.2 Kg | 5 Kg | Total |
| Chandigarh | 0.03 | 0.0000 | 0.03 |
| Delhi | 0.42 | 0.0002 | 0.42 |
| Haryana | 1.28 | 0.0019 | 1.29 |
| Himachal Pradesh | 0.27 | 0.0011 | 0.28 |
| Jammu & Kashmir + Ladakh | 0.26 | 0.0017 | 0.26 |
| Punjab | 1.05 | 0.0029 | 1.05 |
| Rajasthan | 1.24 | 0.0041 | 1.24 |
| Uttar Pradesh | 8.80 | 0.0229 | 8.83 |
| Uttarakhand | 0.53 | 0.0014 | 0.53 |
| Sub Total North | 13.89 | 0.0362 | 13.93 |
| Arunachal Pradesh | 0.07 | 0.0002 | 0.07 |
| Assam | 1.20 | 0.0013 | 1.21 |
| Manipur | 0.21 | 0.0002 | 0.21 |
| Meghalaya | 0.07 | 0.0003 | 0.07 |
| Mizoram | 0.05 | 0.0000 | 0.05 |
| Nagaland | 0.07 | 0.0001 | 0.07 |
| Sikkim | 0.06 | 0.0001 | 0.06 |
| Tripura | 0.08 | 0.0001 | 0.08 |
| Sub Total North East | 1.81 | 0.0024 | 1.81 |
| Andaman & Nicobar Islands | 0.02 | 0.0000 | 0.02 |
| Bihar | 5.93 | 0.0117 | 5.94 |
| Jharkhand | 0.75 | 0.0015 | 0.75 |
| Odisha | 1.12 | 0.0050 | 1.13 |
| West Bengal | 3.64 | 0.0079 | 3.65 |
| Sub Total East | 11.46 | 0.0261 | 11.49 |
| Chhattisgarh | 0.63 | 0.0019 | 0.63 |
| Dadra & Nagar Haveli | 0.02 | 0.0000 | 0.02 |
| Daman & Diu | 0.00 | 0.0000 | 0.00 |
| Goa | 0.07 | 0.0001 | 0.07 |
| Gujarat | 1.68 | 0.0016 | 1.68 |
| Madhya Pradesh | 1.59 | 0.0081 | 1.59 |
| Maharashtra | 4.70 | 0.0048 | 4.70 |
| Sub Total West | 8.69 | 0.0165 | 8.71 |
| Andhra Pradesh | 1.77 | 0.0013 | 1.77 |
| Karnataka | 2.59 | 0.0061 | 2.60 |
| Kerala | 1.26 | 0.0012 | 1.26 |
| Lakshadweep | 0.01 | 0.0000 | 0.01 |
| Puducherry | 0.04 | 0.0002 | 0.04 |
| Tamil Nadu | 2.12 | 0.0079 | 2.13 |
| Telangana | 1.89 | 0.0011 | 1.89 |
| Sub Total South | 9.69 | 0.0179 | 9.71 |
| All India | 45.54 | 0.0990 | 45.64 |

Source: PSU OMCs (IOCL, BPCL and HPCL)



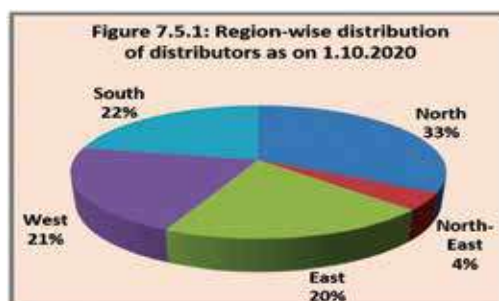
Table 7.5 : Number of LPG distributors as on 1.10.2020 (P) (New Scheme)

(Nos.)

| State/UT | Sheheri Vitrak | Rurban Vitrak | Gramin Vitrak | Durgam Kshetriya Vitrak | Total |
|-----------------------------|----------------|---------------|---------------|-------------------------|--------------|
| Chandigarh | 26 | 0 | 0 | 0 | 26 |
| Delhi | 322 | 0 | 0 | 0 | 322 |
| Haryana | 282 | 101 | 232 | 9 | 624 |
| Himachal Pradesh | 69 | 13 | 93 | 29 | 204 |
| Jammu & Kashmir + Ladakh | 131 | 42 | 75 | 39 | 287 |
| Punjab | 337 | 252 | 242 | 29 | 860 |
| Rajasthan | 437 | 162 | 627 | 151 | 1377 |
| Uttar Pradesh | 1004 | 705 | 2208 | 194 | 4111 |
| Uttarakhand | 113 | 107 | 60 | 34 | 314 |
| Sub Total North | 2721 | 1382 | 3537 | 485 | 8125 |
| Arunachal Pradesh | 5 | 6 | 30 | 42 | 83 |
| Assam | 127 | 104 | 292 | 49 | 572 |
| Manipur | 15 | 13 | 35 | 36 | 99 |
| Meghalaya | 22 | 9 | 18 | 13 | 62 |
| Mizoram | 11 | 6 | 24 | 18 | 59 |
| Nagaland | 15 | 11 | 16 | 40 | 82 |
| Sikkim | 9 | 1 | 11 | 3 | 24 |
| Tripura | 18 | 9 | 38 | 9 | 74 |
| Sub Total North-East | 222 | 159 | 464 | 210 | 1055 |
| Andaman & Nicobar Islands | 0 | 4 | 4 | 1 | 9 |
| Bihar | 240 | 252 | 1418 | 58 | 1968 |
| Jharkhand | 162 | 47 | 304 | 36 | 549 |
| Odisha | 173 | 97 | 546 | 132 | 948 |
| West Bengal | 398 | 161 | 854 | 59 | 1472 |
| Sub Total East | 973 | 561 | 3126 | 286 | 4946 |
| Chhattisgarh | 105 | 75 | 149 | 205 | 534 |
| Dadra & Nagar Haveli | 2 | 1 | 0 | 0 | 3 |
| Daman & Diu | 3 | 0 | 0 | 0 | 3 |
| Goa | 44 | 4 | 5 | 2 | 55 |
| Gujarat | 419 | 118 | 407 | 32 | 976 |
| Madhya Pradesh | 472 | 210 | 404 | 429 | 1515 |
| Maharashtra | 1008 | 190 | 799 | 197 | 2194 |
| Sub Total West | 2053 | 598 | 1764 | 865 | 5280 |
| Andhra Pradesh | 319 | 244 | 389 | 109 | 1061 |
| Karnataka | 533 | 140 | 496 | 78 | 1247 |
| Kerala | 226 | 130 | 304 | 20 | 680 |
| Lakshadweep | 1 | 0 | 0 | 0 | 1 |
| Puducherry | 15 | 10 | 3 | 0 | 28 |
| Tamil Nadu | 571 | 361 | 582 | 117 | 1631 |
| Telangana | 280 | 102 | 328 | 72 | 782 |
| Sub Total South | 1945 | 987 | 2102 | 396 | 5430 |
| All India | 7914 | 3687 | 10993 | 2242 | 24836 |

Source: PSU OMCs (IOCL, BPCL and HPCL)

Note: MOPNG vide letter no. P-20019/2/2016-LPG dated 23 June 2016 has issued unified guidelines for selection of LPG distributors. In the said guidelines, LPG distributor categories have been redefined as above.





Chapter 8

Prices & Taxes

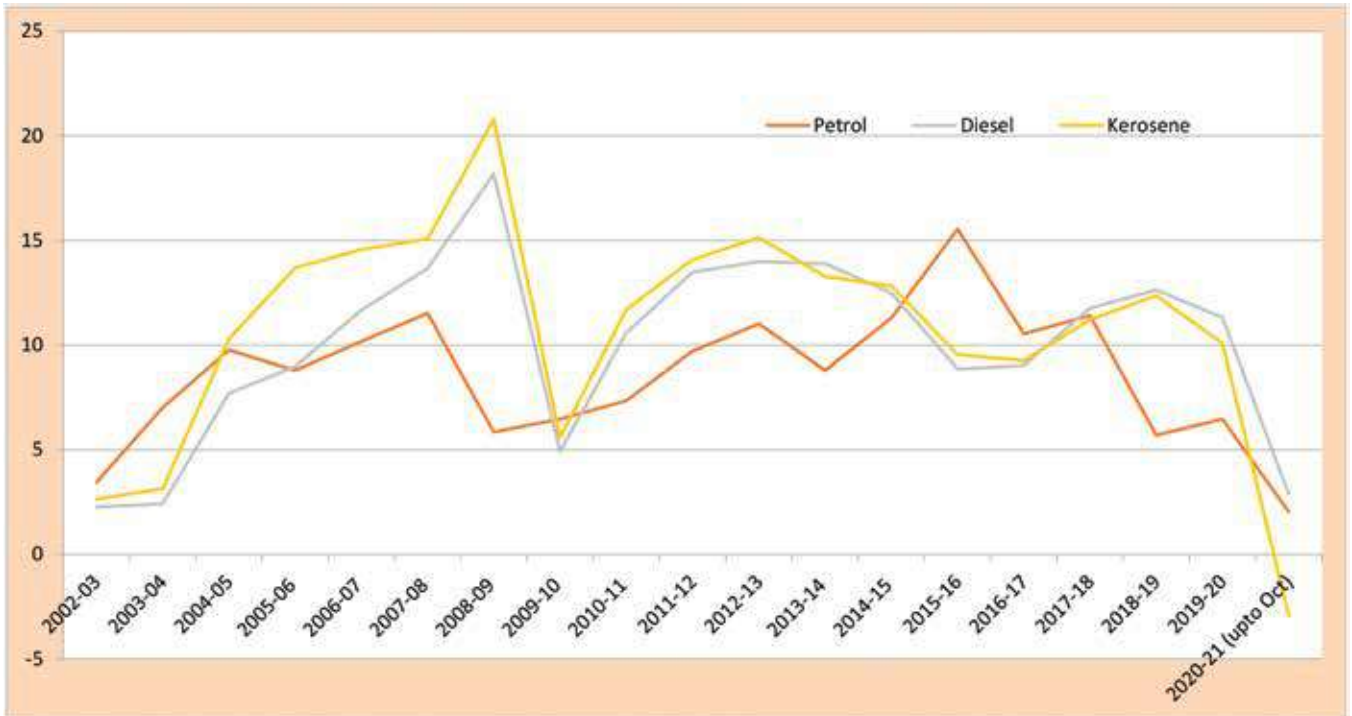
Table 8.1 : Price of crude oil & petroleum products in the international market

| Year | Indian basket (\$/bbl) |
|------------------------------|------------------------|
| 2002-03 | 26.60 |
| 2003-04 | 27.98 |
| 2004-05 | 39.21 |
| 2005-06 | 55.72 |
| 2006-07 | 62.46 |
| 2007-08 | 79.25 |
| 2008-09 | 83.57 |
| 2009-10 | 69.76 |
| 2010-11 | 85.09 |
| 2011-12 | 111.89 |
| 2012-13 | 107.97 |
| 2013-14 | 105.52 |
| 2014-15 | 84.16 |
| 2015-16 | 46.17 |
| 2016-17 | 47.56 |
| 2017-18 | 56.43 |
| 2018-19 | 69.88 |
| 2019-20 | 60.47 |
| 2020-21 (upto 31.10.2020) | 37.53 |
| 2020 : Month wise | |
| January | 64.31 |
| February | 54.63 |
| March | 33.36 |
| April | 19.90 |
| May | 30.60 |
| June | 40.63 |
| July | 43.35 |
| August | 44.19 |
| September | 41.35 |
| October | 40.66 |

Source: Platts

Note: The Indian basket of crude oil for the year 2019-20 & subsequent period is calculated based on a weightage of 75.50% for the price of sour grades of crude oil (average of Oman & Dubai) and 24.50% sweet grade of crude oil (Brent Dated). The percentages of 75.50 and 24.50 was based on the ratio of low sulphur and high sulphur crude oil processed (indigenous and imported) by all the Indian refineries (PSU and Pvt.) during the previous financial year i.e. 2018-19.

Trend in spreads of petroleum products vs Indian basket of crude oil



Trend in spreads of international benchmark crude oils

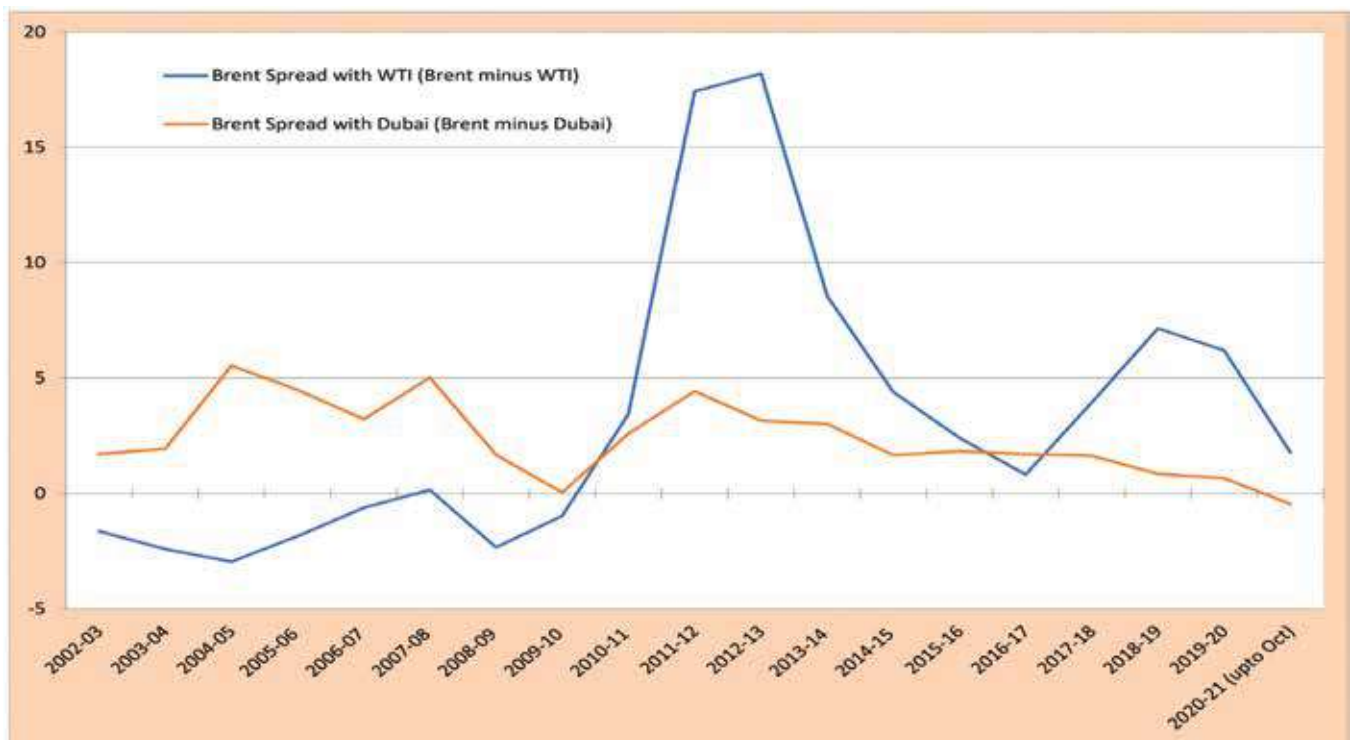


Table 8.2 : Price build-up of PDS kerosene at Mumbai

| Elements | Unit | Effective 1.11.2020 |
|---|----------------|------------------------|
| Price before taxes and dealers' commission | ₹/litre | 20.94 |
| Add : Dealers' commission | ₹/litre | 2.59 |
| Add : GST (incl GST on dealers' commission) | ₹/litre | 1.18 |
| Retail selling price | ₹/litre | 24.71 |

Table 8.3 : Price build-up of domestic LPG at Delhi

| Elements | Unit | Effective 1.11.2020 |
|---|---------------------------|------------------------|
| Price before taxes and distributors' commission | ₹/14.2 kg cylinder | 503.86 |
| Add : Distributors' commission | ₹/14.2 kg cylinder | 61.84 |
| Add : GST (including GST on Distributors' Commission) | ₹/14.2 kg cylinder | 28.30 |
| Retail selling price | ₹/14.2 kg cylinder | 594.00 |

Table 8.4 : Price build-up of petrol at Delhi

| Elements | Unit | Effective 1.11.2020 |
|--|----------------|------------------------|
| Price charged to dealers (excluding excise duty and VAT) | ₹/litre | 25.73 |
| Add : Excise duty | ₹/litre | 32.98 |
| Add : Dealers' commission (average) | ₹/litre | 3.64 |
| Add : VAT (including VAT on dealers' commission) | ₹/litre | 18.71 |
| Retail selling price | ₹/litre | 81.06 |

-As per IOCL.

Table 8.5 : Price build-up of diesel at Delhi

| Elements | Unit | Effective 1.11.2020 |
|--|----------------|------------------------|
| Price charged to dealers (excluding excise duty and VAT) | ₹/litre | 25.75 |
| Add : Excise duty | ₹/litre | 31.83 |
| Add : Dealers' commission (average) | ₹/litre | 2.52 |
| Add : VAT (including VAT on dealer's commission) | ₹/litre | 10.36 |
| Retail selling price | ₹/litre | 70.46 |

-As per IOCL.

Table 8.6 : Break up of Central excise duty on petrol & diesel as on 01.11.2020

| | ₹/litre | |
|---|--------------|--------------|
| Particulars | Petrol | Diesel |
| Basic duty | 2.98 | 4.83 |
| Additional excise duty (Road & Infrastructure Cess) | 18.00 | 18.00 |
| Special additional excise duty | 12.00 | 9.00 |
| Total excise duty | 32.98 | 31.83 |

Share of taxes in retail selling price of petroleum products
Table 8.7 : Share of taxes in retail selling price of PDS kerosene effective 1.11.2020 at Mumbai

| Particulars | ₹/litre | Share in RSP (%) |
|--|--------------|------------------|
| Price before taxes and dealers' commission | 20.94 | 84.7% |
| Customs duty | - | - |
| GST (Including GST on dealers' commission) | 1.18 | - |
| Total taxes | 1.18 | 4.8% |
| Dealers' commission | 2.59 | 10.5% |
| Retail selling price | 24.71 | 100.0% |

Table 8.8 : Share of taxes in retail selling price of domestic LPG effective 1.11.2020 at Delhi

| Particulars | ₹/14.2 kg cylinder | Share in RSP (%) |
|---|--------------------|------------------|
| Price before taxes and distributors' commission | 503.86 | 84.8% |
| Customs duty | - | - |
| GST (including GST on distributors' commission) | 28.30 | - |
| Total taxes | 28.30 | 4.8% |
| Distributors' commission | 61.84 | 10.4% |
| Retail selling price | 594.00 | 100.0% |

Table 8.9 : Weightage of crude oil, natural gas and petroleum products in Wholesale Price Index (WPI)

| Product | Weight in % |
|-----------------------------|--------------|
| Crude Petroleum | 1.95 |
| Natural Gas | 0.46 |
| High Speed Diesel (HSD) | 3.10 |
| Petrol | 1.60 |
| Naphtha | 0.87 |
| Furnace Oil (FO) | 0.67 |
| LPG | 0.64 |
| Aviation Turbine Fuel (ATF) | 0.32 |
| Lube Oils | 0.29 |
| Bitumen | 0.23 |
| Kerosene | 0.19 |
| Petroleum Coke | 0.05 |
| Total | 10.37 |

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

Dealers' / Distributors' commission on petroleum products

Table 8.10 : Dealers' commission on petrol & diesel

| Effective date | Petrol | Diesel |
|----------------|---|---|
| As on 1-Apr-04 | 707.00 | 425.00 |
| 21-Jun-05 | 778.00 | 467.00 |
| 01-Aug-05 | 848.00 | 509.00 |
| 01-Mar-07 | 894.00 | 529.00 |
| 16-May-07 | 1024.00 | 600.00 |
| 23-May-08 | 1052.00 | 631.00 |
| 27-Oct-09 | 1125.00 | 673.00 |
| 07-Sep-10 | 1218.00 | 757.00 |
| 01-Jul-11 | 1499.00 | 912.00 |
| 27-Oct-12 | 1794.00 | 1089.00 |
| 21-Dec-13 | ₹ 1390.15/KL + 0.883% of product billable price | 1186.00 |
| 23-Oct-14 | ₹ 1499.37/KL + 0.887% of product billable price | ₹ 1116.09/KL + 0.290% of product billable price |
| 01-Aug-15 | ₹ 1749.86/KL + 0.883% of product billable price | ₹ 1301.70/KL + 0.286% of product billable price |
| 16-Nov-15 | ₹ 1750.08/KL + 0.883% of product billable price | ₹ 1301.88/KL + 0.286% of product billable price |
| 01-Jun-16 | ₹ 1750.29/KL + 0.883% of product billable price | ₹ 1302.06/KL + 0.286% of product billable price |
| 05-Oct-16 | ₹ 1868.14/KL + 0.875% of product billable price | ₹ 1389.35/KL + 0.280% of product billable price |
| 16-Nov-16 | ₹ 2006.33/KL + 0.875% of product billable price | ₹ 1491.72/KL + 0.280% of product billable price |
| 01-Apr-17 | ₹ 2020.38/KL + 0.859% of product billable price | ₹ 1502.13/KL + 0.267% of product billable price |
| 01-Jul-17 | ₹ 2025.97/KL + 0.859% of product billable price | ₹ 1506.81/KL + 0.267% of product billable price |
| 01-Aug-17 | ₹ 2674.74/KL + 0.859% of product billable price | ₹ 2031.38/KL + 0.257% of product billable price |
| 19-Feb-19 | ₹ 2637.80/KL + 0.859% of product billable price | ₹ 2000.60/KL + 0.257% of product billable price |

Note: In addition to above, effective 1st August 2017, slab based incentive is also given to eligible dealers through credit notes.

Table 8.11 : Wholesale dealers' commission on PDS kerosene

| Effective date | With form XV | Other than form XV |
|-----------------|--------------|--------------------|
| As on 01-Apr-04 | 204.00 | 161.00 |
| 01-Mar-07 | 243.00 | 200.00 |
| 24-May-08 | 255.00 | 212.00 |
| 07-Jul-09 | 263.00 | 220.00 |
| 07-Sep-10 | 275.00 | 232.00 |
| 28-Dec-12 | 438.24 | 377.73 |
| 21-Oct-14 | 536.09 | 475.58 |
| 05-Feb-16 | 714.18 | 649.16 |
| 28-Oct-16 | 787.82 | 723.87 |
| 05-Sep-17 | 1008.83 | 928.10 |
| 04-Oct-18 | 1016.37 | 1005.95 |
| 22-Feb-19 | 1341.88 | 1230.98 |

Table 8.12: Distributors' commission on domestic LPG

| Effective date | (₹/cylinder) | | |
|-------------------|--------------|--|-----------|
| | 14.2 KG cyl. | Additional commission for sale at market determined price (₹/14.2 KG cyl.) | 5 KG cyl. |
| As on 01-April-04 | 16.71 | NA | 8.60 |
| 01-Mar-07 | 19.05 | NA | 9.81 |
| 04-Jun-08 | 20.54 | NA | 10.58 |
| 30-Jun-09 | 21.94 | NA | 11.30 |
| 01-Jul-11 | 25.83 | NA | 13.30 |
| 07-Oct-12 | 37.25 | 0.75 | 18.63 |
| 11-Dec-13 | 40.71 | 0.75 | 20.36 |
| 23-Oct-14 | 44.06 | 0.82 | 22.03 |
| 09-Dec-15 | 45.83 | 0.26 | 22.67 |
| 01-Jan-16 | 45.83 | 0.33 | 22.67 |
| 01-Feb-16 | 45.83 | 0.22 | 22.67 |
| 01-Mar-16 | 45.83 | 0.13 | 22.67 |
| 01-May-16 | 45.83 | 0.15 | 22.67 |
| 01-Jun-16 | 45.83 | 0.18 | 22.67 |
| 01-Jul-16 | 45.83 | 0.16 | 22.67 |
| 01-Aug-16 | 45.83 | 0.09 | 22.67 |
| 01-Sep-16 | 45.83 | 0.06 | 22.67 |
| 01-Oct-16 | 45.83 | 0.09 | 22.67 |
| 28-Oct-16 | 47.48 | 0.09 | 23.74 |
| 01-Nov-16 | 47.48 | 0.14 | 23.74 |
| 01-Dec-16 | 47.48 | 0.21 | 23.74 |
| 01-Feb-17 | 47.48 | 0.30 | 23.74 |
| 01-Mar-17 | 47.48 | 0.43 | 23.74 |
| 01-Apr-17 | 47.48 | 0.40 | 23.74 |
| 01-May-17 | 47.48 | 0.27 | 23.74 |
| 01-Jun-17 | 47.48 | 0.15 | 23.74 |
| 01-Jul-17 | 47.48 | 0.13 | 23.74 |
| 01-Aug-17 | 47.48 | 0.06 | 23.74 |
| 01-Sep-17 | 47.48 | 0.16 | 23.74 |
| 30-Sep-17 | 48.89 | 0.16 | 24.20 |
| 01-Oct-17 | 48.89 | 0.23 | 24.20 |
| 01-Nov-17 | 48.89 | 0.36 | 24.20 |
| 01-Jan-18 | 48.89 | 0.35 | 24.20 |

Table 8.12 : Continued

| Effective date | (₹/cylinder) | | |
|----------------|--------------|--|-----------|
| | 14.2 KG cyl. | Additional commission for sale at market determined price (₹/14.2 KG cyl.) | 5 KG cyl. |
| 01-Feb-18 | 48.89 | 0.34 | 24.20 |
| 01-Mar-18 | 48.89 | 0.28 | 24.20 |
| 01-Apr-18 | 48.89 | 0.23 | 24.20 |
| 01-Jun-18 | 48.89 | 0.29 | 24.20 |
| 01-Jul-18 | 48.89 | 0.36 | 24.20 |
| 01-Aug-18 | 48.89 | 0.42 | 24.20 |
| 01-Sep-18 | 48.89 | 0.46 | 24.20 |
| 01-Oct-18 | 48.89 | 0.54 | 24.20 |
| 01-Nov-18 | 48.89 | 0.63 | 24.20 |
| 07-Nov-18 | 50.58 | 0.63 | 25.29 |
| 01-Dec-18 | 50.58 | 0.45 | 25.29 |
| 01-Jan-19 | 50.58 | 0.28 | 25.29 |
| 01-Feb-19 | 50.58 | 0.24 | 25.29 |
| 01-Mar-19 | 50.58 | 0.30 | 25.29 |
| 01-Apr-19 | 50.58 | 0.31 | 25.29 |
| 01-Jun-19 | 50.58 | 0.35 | 25.29 |
| 01-Jul-19 | 50.58 | 0.21 | 25.29 |
| 01-Aug-19 | 56.20 | - | 28.10 |
| 01-Sep-19 | 59.02 | - | 29.51 |
| 01-Oct-19 | 61.84 | - | 30.92 |

Source: MoP&NG circulars & OMCs

Table 8.13 : Retail selling price of major petroleum products in India & neighbouring countries

| Country | Indian rupees (₹)/ litre/ 14.2 kg cyl. | |
|-------------------|--|----------------------|
| | Kerosene | Domestic LPG |
| India (Delhi) | 24.71 [#] | 594.00 ^{**} |
| Pakistan | 30.36 | 856.36 |
| Bangladesh | 58.21 | 610.37 |
| Sri Lanka | 28.34 | 686.74 |
| Nepal (Kathmandu) | 56.90 | 879.06 |

[#] at Mumbai effective 1.11.2020 for PDS Kerosene , ^{**}Effective cost after DBTL subsidy effective 1.11.2020

Note: Prices for neighboring countries as available on their respective websites as on 1.11.2020.

Sources:

Websites: Pakistan- Pakistan State Oil (www.psopk.com) and Oil and Gas Regulatory Authority (www.ogra.org.pk); Bangladesh- Bangladesh Petroleum Corporation (www.bpc.gov.bd); Nepal- Nepal Oil Corporation (www.nepaloil.com.np); Sri Lanka- Petrol; Diesel & Kerosene- Ceylon Petroleum Corporation (www.ceypetco.gov.in); LPG- Litro Gas Lanka (www.litrogas.com); Exchange rate - www.oanda.com

Table 8.14 : Retail selling price of petroleum products at State capitals / UTs as on 1.11.2020

| State/Union Territory | City | Petrol | Diesel | Domestic LPG (₹/14.2 KG Cylinder) |
|---------------------------|--------------------|-----------|--------|--------------------------------------|
| | | (₹/litre) | | Non subsidized |
| Andaman & Nicobar Islands | Port Blair | 68.29 | 66.10 | 670.00 |
| Andhra Pradesh | Vizag | 85.91 | 78.13 | 602.50 |
| Arunachal Pradesh | Itanagar | 75.31 | 68.12 | 660.00 |
| Assam | Guwahati | 84.93 | 77.47 | 643.00 |
| Bihar | Patna | 83.73 | 76.10 | 692.50 |
| Chandigarh | Chandigarh | 77.99 | 70.17 | 603.50 |
| Chhattisgarh | Raipur | 79.87 | 76.41 | 665.50 |
| Dadra & Nagar Haveli | Silvasa | 77.42 | 74.84 | 609.00 |
| Daman & Diu | Daman | 77.32 | 74.74 | 604.00 |
| Delhi | New Delhi | 81.06 | 70.46 | 594.00 |
| Goa | Panjim | 77.99 | 73.71 | 608.00 |
| Gujarat | Gandhinagar | 78.66 | 75.99 | 620.00 |
| Haryana | Ambala | 78.77 | 70.72 | 612.00 |
| Himachal Pradesh | Shimla | 79.59 | 70.66 | 638.50 |
| Jammu & Kashmir | Srinagar | 84.68 | 74.03 | 710.00 |
| Jharkhand | Ranchi | 80.73 | 74.58 | 651.50 |
| Karnataka | Bengaluru | 83.69 | 74.63 | 597.00 |
| Kerala | Thiruvananthapuram | 82.89 | 75.91 | 603.50 |
| Ladakh | Leh | 86.83 | 76.74 | 831.50 |
| Madhya Pradesh | Bhopal | 88.70 | 78.00 | 600.00 |
| Maharashtra | Mumbai | 87.74 | 76.86 | 594.00 |
| Manipur | Imphal | 84.38 | 73.48 | 746.00 |
| Meghalaya | Shillong | 84.73 | 76.27 | 661.50 |
| Mizoram | Aizawl | 78.64 | 69.87 | 746.00 |
| Nagaland | Kohima | 81.25 | 72.11 | 613.50 |
| Odisha | Bhubaneswar | 81.60 | 76.68 | 620.50 |
| Puducherry | Puducherry | 82.61 | 74.69 | 606.50 |
| Punjab | Jullunder | 82.19 | 72.08 | 624.00 |
| Rajasthan | Jaipur | 88.21 | 79.27 | 598.00 |
| Sikkim | Gangtok | 82.35 | 72.90 | 747.00 |
| Tamil Nadu | Chennai | 84.14 | 75.95 | 610.00 |
| Telangana | Hyderabad | 84.25 | 76.84 | 646.50 |
| Tripura | Agartala | 81.37 | 73.63 | 755.00 |
| Uttar Pradesh | Lucknow | 81.48 | 70.91 | 632.00 |
| Uttarakhand | Dehradun | 82.09 | 71.20 | 613.50 |
| West Bengal | Kolkata | 82.59 | 73.99 | 620.50 |

Source: IOCL **Highest** **Lowest**

Table 8.15 : Retail selling price of PDS kerosene at major cities as on 1.11.2020

| State | City | (₹/litre) |
|-------------|---------|-----------|
| Maharashtra | Mumbai | 24.71 |
| Tamil Nadu | Chennai | 15.00 |
| West Bengal | Kolkata | 26.80 |

Source: OMCs

Note: The allocation of PDS kerosene in Delhi is nil presently.

Table 8.16 : Customs, excise duty and GST rates on petroleum products as on 1.11.2020

Customs duty and Excise duty (Petroleum products on which GST is not levied)

| Particulars | Customs duty | | | Central excise duty | | |
|--------------------------------------|-----------------------------|----------------------------------|-------------------------|---------------------------------------|--------------------------------|---|
| | Basic customs duty | Additional customs duty (CVD) | Additional customs duty | Basic cenvat duty | Special additional excise duty | Additional excise duty (Road and Infrastructure 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.2.98/ltr. + Rs.12.00/ ltr SAD | Rs.18.00/ltr. | Rs.2.98/ltr | Rs.12.00/ltr | Rs.18.00/ltr. |
| Petrol (branded) | 2.50% | Rs.4.16/ltr. + Rs.12.00/ ltr SAD | Rs.18.00/ltr. | Rs.4.16/ltr | Rs.12.00/ltr | Rs.18.00/ltr. |
| High speed diesel | 2.50% | Rs.4.83/ltr+ Rs.9.00/ ltr | Rs.18.00/ltr. | Rs.4.83/ltr | Rs.9.00/ltr | Rs.18.00/ltr. |
| High speed diesel (branded) | 2.50% | Rs.7.19/ltr+ Rs.9.00/ ltr | Rs.18.00/ltr. | Rs.7.19/Ltr | Rs.9.00/ltr | Rs.18.00/ltr. |
| Aviation Turbine Fuel (ATF) (note-2) | 5.00% | 11% | - | 11% | - | - |
| Liquefied Natural Gas (LNG) | 2.50% | Nil | - | Nil | - | - |
| Natural gas [gaseous state] | 5.00% | Nil | - | Nil | - | - |
| Natural gas [compressed] | 5.00% | 14.00% | - | 14.00% | - | - |

Customs duty and GST rates (Petroleum products on which GST is levied)

| Particulars | Customs | | |
|--|--------------------|-----------------------|--------|
| | Basic Customs Duty | CVD (in lieu of IGST) | |
| LPG | Domestic (Note-3) | Nil | 5.00% |
| | Non - Domestic | 5.00% | 18.00% |
| Kerosene | PDS | Nil | 5.00% |
| | Non PDS | 5.00% | 18.00% |
| Naphtha | Fertilizer | Nil | 18.00% |
| | Non- Fertilizer | 4.00% | 18.00% |
| Butane / Propane | Domestic | Nil | 5.00% |
| | Non - Domestic | 2.50% | 18.00% |
| Bitumen & Asphalt | | 5.00% | 18.00% |
| Furnace Oil | Fertilizer | Nil | 18.00% |
| | Non- Fertilizer | 5.00% | 18.00% |
| Light Diesel Oil | | 5.00% | 18.00% |
| Low Sulphur Heavy Stock/ HPS & other Residue | Fertilizer | Nil | 18.00% |
| | Non- Fertilizer | 5.00% | 18.00% |
| Lube oil/greases | | 5.00% | 18.00% |
| Petroleum Coke | | 10.00% | 18.00% |
| Petroleum Jelly | | 5.00% | 18.00% |
| Transformer Oil | | 5.00% | 18.00% |
| Waxes all types | | 5.00% | 18.00% |

Note:

- In addition to the above , 10% Social Welfare Surcharge (3% in case of petrol and diesel) is also applicable on the total duties of Customs (excluding CVD in lieu of IGST).
- 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.
- Basic Customs duty is Nil for import of domestic LPG sold to household consumers (including non domestic exempted category) by PSU OMCs. Basic Customs duty rate is 5% for other importers of domestic LPG

Table 8.17 : Actual rate of Sales Tax/ VAT/GST and other taxes levied by State/UT Governments on major petroleum products as on 1.11.2020

| Sl.no. | State/Union Territory | Petrol | Diesel | PDS kerosene | Domestic LPG |
|--------|---|--|---|--------------|--------------|
| | | Sales Tax /VAT | | GST | |
| 1 | Andaman & Nicobar Islands | 6% | 6% | | |
| 2 | Andhra Pradesh | 31% VAT + Rs.4/litre VAT+Rs.1/litre Road Development Cess and Vat thereon | 22.25% VAT + Rs.4/litre VAT+Rs.1/litre Road Development Cess and Vat thereon | | |
| 3 | Arunachal Pradesh | 20.00% | 12.50% | | |
| 4 | Assam | 32.66% or Rs.22.63 per litre whichever is higher as VAT | 23.66% or Rs.17.45 per litre whichever is higher as VAT | | |
| 5 | Bihar | 26% or Rs 16.65/Litre whichever is higher (30% Surcharge on VAT as irrecoverable tax) | 19% or Rs 12.33/Litre whichever is higher (30% Surcharge on VAT as irrecoverable tax) | | |
| 6 | Chandigarh | Rs.10/KL cess +22.45% or Rs.12.58/Litre whichever is higher | Rs.10/KL cess + 14.02% or Rs.7.63/Litre whichever is higher | | |
| 7 | Chhattisgarh | 25% VAT + Rs.2/litre VAT | 25% VAT + Rs.1/litre VAT | | |
| 8 | Dadra & Nagar Haveli and Daman & Diu | 20% VAT | 20% VAT | | |
| 9 | Delhi | 30% VAT | Rs.250/KL air ambience charges + 16.75% VAT | | |
| 10 | Goa | 25% VAT + 0.5% Green cess | 22% VAT + 0.5% Green cess | | |
| 11 | Gujarat | 20.1% VAT+ 4% Cess on Town Rate & VAT | 20.2% VAT + 4 % Cess on Town Rate & VAT | | |
| 12 | Haryana | 25% or Rs.15.62/litre whichever is higher as VAT+5% additional tax on VAT | 16.40% VAT or Rs.10.08/litre whichever is higher as VAT+5% additional tax on VAT | | |
| 13 | Himachal Pradesh | 25% or Rs 15.50/Litre- whichever is higher | 14% or Rs 9.00/Litre- whichever is higher | | |
| 14 | Jammu & Kashmir | 24% MST+ Rs.5/Litre employment cess, Reduction of Rs.0.50/Litre | 16% MST+ Rs.1.50/Litre employment cess | | |
| 15 | Jharkhand | 22% on the sale price or Rs. 17.00 per litre , which ever is higher + Cess of Rs 1.00 per Ltr | 22% on the sale price or Rs. 12.50 per litre , which ever is higher + Cess of Rs 1.00 per Ltr | | |
| 16 | Karnataka | 35% sales tax | 24% sales tax | | |
| 17 | Kerala | 30.08% sales tax+ Rs.1/litre additional sales tax + 1% cess | 22.76% sales tax+ Rs.1/litre additional sales tax + 1% cess | | |
| 18 | Ladakh | 24% MST+ Rs.5/Litre employment cess, Reduction of Rs.2.5/Litre | 16% MST+ Rs.1/Litre employment cess , Reduction of Rs.0.50/Litre | | |
| 19 | Lakshadweep | Nil | Nil | 5% | 5% |
| 20 | Madhya Pradesh | 33 % VAT + Rs.4.5/litre VAT+1%Cess | 23% VAT+ Rs.3/litre VAT+1% Cess | | |
| 21 | Maharashtra – Mumbai, Thane & Navi Mumbai | 26% VAT+ Rs.10.12/Litre additional tax | 24% VAT+ Rs.3.00/Litre additional tax | | |
| 22 | Maharashtra (Rest of State) | 25% VAT+ Rs.10.12/Litre additional tax | 21% VAT+ Rs.3.00/Litre additional tax | | |
| 23 | Manipur | 36.50% VAT | 22.50% VAT | | |
| 24 | Meghalaya | 31% or Rs17.60/Litre- whichever is higher (2% surcharge leviable only on advalorem tax) | 22.5% or Rs12.50/Litre- whichever is higher (2% surcharge leviable only on advalorem tax) | | |
| 25 | Mizoram | 25% VAT | 14.5% VAT | | |
| 26 | Nagaland | 25.00% VAT +5% surcharge + Rs.2.00/Litre as road maintenance cess | 14.50% VAT+ 5% surcharge + Rs.2.00/Litre as road maintenance cess | | |
| 27 | Odisha | 32% VAT | 28% VAT | | |
| 28 | Puducherry | 28% VAT | 19.75% VAT | | |
| 29 | Punjab | Rs.2050/KL (cess)+ Rs.0.10 per Litre (Urban Transport Fund) +24.79% VAT+10% additional tax on VAT | Rs.1050/KL (cess) + Rs.0.10 per Litre (Urban Transport Fund) + 15.94% VAT+10% additional tax on VAT | | |
| 30 | Rajasthan | 38% VAT+Rs 1500/KL road development cess | 28% VAT+ Rs.1750/KL road development cess | | |
| 31 | Sikkim | 25.25% VAT+ Rs.3000/KL cess | 14.75% VAT + Rs.2500/KL cess | | |
| 32 | Tamil Nadu | 15% + Rs.13.02 per litre | 11% + Rs.9.62 per litre | | |
| 33 | Telangana | 35.20% VAT | 27% VAT | | |
| 34 | Tripura | 25% VAT+ 3% Tripura Road Development Cess | 16.50% VAT+ 3% Tripura Road Development Cess | | |
| 35 | Uttar Pradesh | 26.80% or Rs 18.74/Litre whichever is higher | 17.48% or Rs 10.41/Litre whichever is higher | | |
| 36 | Uttarakhand | 25% or Rs 19 Per Ltr whichever is greater | 17.48% or Rs 10.41 Per Ltr whichever is greater | | |
| 37 | West Bengal | 25% or Rs.13.12/litre whichever is higher as sales tax+ Rs.1000/KL cess- Rs.17/KL exemption (20% Additional tax on VAT as irrecoverable tax) | 17% or Rs.7.70/litre whichever is higher as sales tax + Rs 1000/KL cess – Rs 290/KL sales tax rebate (20% Additional tax on VAT as irrecoverable tax) | | |

Note:

- As per details provided by IOCL/HPCL
- For petrol & diesel, VAT/Sales Tax at applicable rates is also levied on dealer's commission in Arunachal Pradesh, Delhi, Gujarat, Haryana, Madhya Pradesh, Punjab, Rajasthan, Chandigarh, Puducherry, Andaman & Nikobar, Meghalaya , Dadar Nagar Haveli and Daman & Diu.

Table 8.18 : Contribution of petroleum sector to exchequer

| (₹ Crore) | | | | | | |
|---|--|---------------|---------------|---------------|------------------|---------------|
| Particulars | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) | |
| 1. Contribution to Central exchequer | | | | | | |
| A. | Tax/ duties on crude oil & petroleum products | | | | | |
| | Cess on crude oil | 14514 | 17741 | 14789 | 6564 | 2384 |
| | Royalty on crude oil / natural gas | 4747 | 6062 | 5602 | 2912 | 1691 |
| | Customs duty | 11171 | 16035 | 22927 | 10970 | 3680 |
| | NCCD on Crude Oil | 968 | 1180 | 1130 | 561 | 434 |
| | Excise duty | 229716 | 214369 | 223057 | 93719 | 131545 |
| | Service tax | 1228 | 340 | 17 | | – |
| | IGST | 9211 | 16479 | 13099 | 6445 | 4562 |
| | CGST | 4488 | 7437 | 6831 | 3497 | 2219 |
| | Others | 125 | 204 | 88 | 70 | 13 |
| | Sub total (A) | 276168 | 279847 | 287540 | 124736 | 146529 |
| B. | Dividend to Government/ income tax etc. | | | | | |
| | Corporate/ income tax | 33599 | 38561 | 23134 | 12903 | 5896 |
| | Dividend income to Central Government | 14575 | 15525 | 12270 | 2325 | – |
| | Dividend distribution tax | 5981 | 6415 | 5462 | 1754 | – |
| | Profit petroleum on exploration of oil/ gas* | 5839 | 7694 | 5909 | 2847 | 856 |
| | Sub total (B) | 59994 | 68194 | 46775 | 19829 | 6752 |
| | Total contribution to Central exchequer (A+B) | 336163 | 348041 | 334315 | 144565 | 153281 |
| 2. Contribution to State exchequer | | | | | | |
| C. | Tax/ duties on crude oil & petroleum products | | | | | |
| | Royalty on crude oil / natural gas | 9370 | 13371 | 11882 | 6324 | 3173 |
| | Sales tax/ VAT | 185850 | 201265 | 200493 | 94842 | 78164 |
| | SGST/UTGST | 4974 | 7961 | 7345 | 3681 | 2229 |
| | Octroi/ duties (incl. electricity duty) | 1663 | 685 | 716 | 329 | 334 |
| | Entry tax / others | 4745 | 4114 | 405 | 130 | 157 |
| | Sub total (C) | 206601 | 227396 | 220841 | 105306 | 84057 |
| D. | Dividend to Government/ direct tax etc. | | | | | |
| | Dividend income to State Government | 262 | 195 | 215 | 43 | – |
| | Sub total (D) | 262 | 195 | 215 | 43 | – |
| | Total contribution to State exchequer (C+D) | 206863 | 227591 | 221056 | 105349 | 84057 |
| | Total contribution of petroleum sector to exchequer (1+2) | 543026 | 575632 | 555370 | 249914 | 237338 |

* as provided by MOP&NG. (P)- Provisional

- Based on data provided by 16 oil & gas companies.

Table 8.19 : State/UT wise collection of sales tax/ VAT by petroleum sector

| (₹ Crore) | | | | | | |
|-----------|--|---------------|---------------|---------------|--------------|------------------|
| Sl. no. | State/Union territory | Sales tax/VAT | | | | |
| | | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| 1 | Andaman & Nicobar Islands | 51 | 92 | 94 | 45 | 32 |
| 2 | Andhra Pradesh | 9693 | 10784 | 10168 | 5138 | 4485 |
| 3 | Arunachal Pradesh | 67 | 49 | 26 | 5 | 34 |
| 4 | Assam | 3108 | 3879 | 3641 | 1696 | 1532 |
| 5 | Bihar | 5447 | 6584 | 6238 | 1626 | 1127 |
| 6 | Chandigarh | 54 | 62 | 60 | 30 | 25 |
| 7 | Chhattisgarh | 3682 | 3986 | 3877 | 1725 | 1548 |
| 8 & 9 | Dadra and Nagar Haveli and Daman & Diu | | 2 | 2 | 1 | 1 |
| 10 | Delhi | 42 | 4379 | 3833 | 1835 | 893 |
| 11 | Goa | 3944 | 694 | 754 | 370 | 232 |
| 12 | Gujarat | 657 | 16229 | 15337 | 7696 | 5950 |
| 13 | Haryana | 15593 | 8286 | 7648 | 3903 | 3291 |
| 14 | Himachal Pradesh | 7647 | 364 | 440 | 176 | 339 |
| 15 | Jammu & Kashmir | 344 | 1449 | 1459 | 749 | 608 |
| 16 | Jharkhand | 1329 | 2796 | 3296 | 1670 | 1498 |
| 17 | Karnataka | 3224 | 14417 | 15381 | 7664 | 6287 |
| 18 | Kerala | 13306 | 7995 | 8074 | 3508 | 2127 |
| 19 | Ladakh | 7300 | 0 | 14 | 0 | 20 |
| 20 | Lakshadweep | 0 | 0 | 0 | 0 | |
| 21 | Madhya Pradesh | 9380 | 9485 | 10720 | 4375 | 4607 |
| 22 | Maharashtra | 25256 | 27191 | 26791 | 13690 | 9750 |
| 23 | Manipur | 162 | 181 | 192 | 87 | 95 |
| 24 | Meghalaya | 0 | 0 | 0 | 0 | |
| 25 | Mizoram | 55 | 88 | 91 | 46 | 39 |
| 26 | Nagaland | 86 | 97 | 116 | 50 | 50 |
| 27 | Odisha | 6870 | 5660 | 5495 | 2546 | 2220 |
| 28 | Puducherry | 15 | 8 | 5 | 3 | 3 |
| 29 | Punjab | 6062 | 6576 | 5548 | 2809 | 2665 |
| 30 | Rajasthan | 12094 | 12714 | 13319 | 6365 | 6683 |
| 31 | Sikkim | 110 | 134 | 129 | 62 | 37 |
| 32 | Tamil Nadu | 15507 | 18143 | 18175 | 9204 | 6892 |
| 33 | Telangana | 8776 | 10037 | 10045 | 4450 | 3202 |
| 34 | Tripura | 205 | 277 | 384 | 168 | 177 |
| 35 | Uttar Pradesh | 17420 | 19168 | 20112 | 8977 | 8493 |
| 36 | Uttarakhand | 1323 | 1595 | 1495 | 722 | 618 |
| 37 | West Bengal | 7042 | 7866 | 7534 | 3449 | 2606 |
| | TOTAL | 185850 | 201265 | 200493 | 94842 | 78164 |

(P)- Provisional

Source: Based on data provided by 16 oil & gas companies

Note: The amounts have been rounded off to the nearest crore, hence some amounts are shown as zero.
Totals may not tally due to round off

Table 8.20 : State/UT wise collection of SGST/UTGST by petroleum sector

| (₹ Crore) | | | | | | |
|-------------------|--|-------------|-------------|-------------|--------------|------------------|
| Sl. no. | State/Union territory/Others | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| States/UTs | | | | | | |
| 1 | Andaman & Nicobar Islands | 1 | 0 | 0 | 0 | 0 |
| 2 | Andhra Pradesh | 172 | 257 | 156 | 79 | 48 |
| 3 | Arunachal Pradesh | 1 | 6 | 0 | 0 | 0 |
| 4 | Assam | 116 | 559 | 475 | 203 | 107 |
| 5 | Bihar | 91 | 159 | 145 | 75 | 43 |
| 6 | Chandigarh | 1 | 1 | 1 | 0 | 0 |
| 7 | Chhattisgarh | 39 | 18 | 9 | 4 | 7 |
| 8 & 9 | Dadra and Nagar Haveli and Daman & Diu | 10 | 12 | 20 | 12 | 6 |
| 10 | Delhi | 114 | 52 | 51 | 27 | 17 |
| 11 | Goa | 5 | 3 | 9 | 5 | 3 |
| 12 | Gujarat | 1022 | 2060 | 1801 | 917 | 464 |
| 13 | Haryana | 379 | 659 | 685 | 324 | 190 |
| 14 | Himachal Pradesh | 15 | 3 | 4 | 2 | 2 |
| 15 | Jammu & Kashmir | 38 | 20 | 17 | 7 | 14 |
| 16 | Jharkhand | 57 | 13 | 16 | 9 | 5 |
| 17 | Karnataka | 329 | 356 | 269 | 101 | 92 |
| 18 | Kerala | 136 | 146 | 171 | 91 | 46 |
| 19 | Ladakh | 0 | 0 | 1 | 0 | 0 |
| 20 | Lakshadweep | 0 | 0 | 0 | 0 | 0 |
| 21 | Madhya Pradesh | 73 | 87 | 98 | 50 | 29 |
| 22 | Maharashtra | 797 | 1272 | 1126 | 554 | 369 |
| 23 | Manipur | 2 | 1 | 1 | 1 | 1 |
| 24 | Meghalaya | 0 | 1 | 0 | 0 | 0 |
| 25 | Mizoram | 1 | 1 | 1 | 0 | 0 |
| 26 | Nagaland | 1 | 1 | 1 | 0 | 0 |
| 27 | Odisha | 52 | 93 | 192 | 93 | 71 |
| 28 | Puducherry | 2 | 1 | 1 | 0 | 1 |
| 29 | Punjab | 157 | 116 | 128 | 86 | 19 |
| 30 | Rajasthan | 88 | 205 | 176 | 90 | 63 |
| 31 | Sikkim | 3 | 2 | 0 | 0 | 0 |
| 32 | Tamil Nadu | 517 | 642 | 562 | 310 | 173 |
| 33 | Telangana | 88 | 19 | 21 | 10 | 9 |
| 34 | Tripura | 6 | 20 | 17 | 9 | 30 |
| 35 | Uttar Pradesh | 362 | 616 | 619 | 317 | 251 |
| 36 | Uttarakhand | 20 | 6 | 7 | 3 | 3 |
| 37 | West Bengal | 272 | 545 | 553 | 297 | 163 |
| Others | | | | | | |
| 1 | Other territory (Offshore areas of India beyond 12 Nautical Miles) | 8 | 11 | 11 | 5 | 3 |
| TOTAL | | 4974 | 7961 | 7345 | 3681 | 2229 |

(P)- Provisional

Source: Based on data provided by 16 oil & gas companies

Note: As the amounts have been rounded off to the nearest crore, hence some amounts are shown as zero.

Totals may not tally due to round off

Since GST was implemented w.e.f 01.07.2017, data for 2017-18 is for a period of nine months

Table 8.21 : Profit After Tax (PAT) of oil companies

| (₹ Crore) | | | | | |
|--|--------------|--------------|---------------|--------------|------------------|
| Companies | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| PSU upstream/midstream companies | | | | | |
| ONGC | 19945 | 26765 | 13445 | 12316 | 3374 |
| OIL | 2668 | 2590 | 2584 | 1252 | (10) |
| GAIL | 4618 | 6026 | 6621 | 2352 | 1495 |
| Total | 27231 | 35381 | 22650 | 15920 | 4859 |
| PSU downstream Oil Marketing Companies (OMCs) | | | | | |
| IOCL | 21346 | 16894 | 1313 | 4160 | 8138 |
| BPCL | 7919 | 7132 | 2683 | 2784 | 4324 |
| HPCL | 6357 | 6029 | 2637 | 1863 | 5291 |
| Total | 35622 | 30055 | 6633 | 8807 | 17753 |
| PSU stand alone refineries | | | | | |
| MRPL | 2224 | 332 | (2708) | (1075) | (484) |
| CPCL | 913 | (213) | (2078) | (446) | 562 |
| NRL | 2044 | 1968 | 1381 | 806 | 1254 |
| Total | 5181 | 2087 | (3305) | (715) | 1332 |
| PSU consultancy company | | | | | |
| EIL | 378 | 370 | 430 | 192 | 141 |
| Total | 378 | 370 | 430 | 192 | 141 |
| Private sector companies | | | | | |
| RIL | 33612 | 35163 | 30903 | 18738 | 15840 |
| NEL | 532 | 344 | 1485 | * | * |
| Total | 34144 | 35507 | 32388 | 18738 | 15840 |

(P)- Provisional

* details not provided.

Source: Published results/ information provided by oil companies.

Note: Financials are on standalone basis.

Table 8.22 : Financial details of oil companies

| 2019-20 | | | | | | | | | |
|---------------------------------------|-----------|--------|--------|--------|--------|-------|---------|----------|-------|
| Particulars | IOCL | BPCL | HPCL | ONGC | OIL | GAIL | MRPL | CPCL | NRL |
| | (₹ Crore) | | | | | | | | |
| Sales turnover | 562088 | 326393 | 286250 | 95701 | 11761 | 71730 | 60728 | 48624 | 14072 |
| Profit Before Interest and Tax (PBIT) | 2285 | 4853 | 2654 | 23192 | 2619 | 8052 | (3213) | (2603) | 1737 |
| Interest | 5979 | 2182 | 1082 | 2824 | 499 | 109 | 743 | 413 | 2 |
| Tax | (5007) | (12) | (1065) | 6924 | (464) | 1323 | (1248) | (938) | 353 |
| Profit After Tax (PAT) | 1313 | 2683 | 2637 | 13445 | 2584 | 6621 | (2708) | (2078) | 1381 |
| Net worth | 93769 | 33214 | 28962 | 194338 | 24387 | 41854 | 7800 | 1192 | 5304 |
| Borrowings (loan fund) | 116545 | 41875 | 43021 | 13949 | 8885 | 5257 | 11896 | 8698 | 74 |
| Ratios | | | | | | | | | |
| PAT as % of turnover (net sales) | 0.23% | 0.82% | 0.92% | 14.05% | 21.97% | 9.23% | -4.46% | -4.27% | 9.82% |
| Debt (loan fund) to equity ratio | 1.24 | 1.26 | 1.49 | 0.07 | 0.36 | 0.13 | 1.53 | 7.30 | 0.01 |
| Earnings Per Share (EPS) | 1.43 | 13.64 | 17.31 | 10.69 | 23.83 | 14.68 | (15.45) | (139.52) | 18.78 |

| Apr-Sep 2019 | | | | | | | | | |
|---------------------------------------|-----------|--------|--------|--------|--------|-------|--------|---------|-------|
| Particulars | IOCL | BPCL | HPCL | ONGC | OIL | GAIL | MRPL | CPCL | NRL |
| | (₹ Crore) | | | | | | | | |
| Sales turnover | 280341 | 160318 | 140694 | 50839 | 6376 | 36286 | 26448 | 24908 | 8108 |
| Profit Before Interest and Tax (PBIT) | 9011 | 4098 | 3348 | 19535 | 2172 | 3567 | (1264) | (433) | 1271 |
| Interest | 2817 | 1091 | 492 | 1328 | 244 | 51 | 373 | 204 | 1 |
| Tax | 2034 | 223 | 993 | 5891 | 676 | 1164 | (562) | (191) | 464 |
| Profit After Tax (PAT) | 4160 | 2784 | 1863 | 12316 | 1252 | 2352 | (1075) | (446) | 806 |
| Net worth | 108400 | 37470 | 28207 | 211288 | 27522 | 40926 | 9439 | 2863 | 6089 |
| Borrowings (loan fund) | 80382 | 31756 | 29759 | 10397 | 8306 | 947 | 11803 | 6757 | 64 |
| Ratios | | | | | | | | | |
| PAT as % of turnover (net sales) | 1.48% | 1.74% | 1.32% | 24.23% | 19.64% | 6.48% | -4.06% | -1.79% | 9.94% |
| Debt (loan fund) to equity ratio | 0.74 | 0.85 | 1.06 | 0.05 | 0.30 | 0.02 | 1.25 | 2.36 | 0.01 |
| Earnings Per Share (EPS) | 4.53 | 14.15 | 12.23 | 9.79 | 11.55 | 5.21 | (6.13) | (29.98) | 10.96 |

| Apr-Sep 2020 (P) | | | | | | | | | |
|---------------------------------------|-----------|--------|--------|--------|--------|-------|--------|-------|--------|
| Particulars | IOCL | BPCL | HPCL | ONGC | OIL | GAIL | MRPL | CPCL | NRL |
| | (₹ Crore) | | | | | | | | |
| Sales turnover | 203600 | 116093 | 107225 | 29781 | 3789 | 25671 | 16086 | 15668 | 7673 |
| Profit Before Interest and Tax (PBIT) | 12361 | 6824 | 7602 | 5703 | 217 | 1983 | (607) | 1094 | 1686 |
| Interest | 1392 | 600 | 582 | 809 | 249 | 77 | 132 | 204 | 3 |
| Tax | 2830 | 1900 | 1729 | 1520 | (23) | 411 | (255) | 328 | 429 |
| Profit After Tax (PAT) | 8138 | 4324 | 5291 | 3374 | (10) | 1495 | (484) | 562 | 1254 |
| Net worth | 102245 | 37692 | 32799 | 196858 | 24095 | 43432 | 7311 | 1754 | 6552 |
| Borrowings (loan fund) | 91505 | 27849 | 31963 | 12111 | 9418 | 5317 | 13156 | 8890 | 14 |
| Ratios | | | | | | | | | |
| PAT as % of turnover (net sales) | 4.00% | 3.72% | 4.93% | 11.33% | -0.25% | 5.82% | -3.01% | 3.59% | 16.34% |
| Debt (loan fund) to equity ratio | 0.89 | 0.74 | 0.97 | 0.06 | 0.39 | 0.12 | 1.80 | 5.07 | 0.00 |
| Earnings Per Share (EPS) | 8.86 | 21.98 | 34.72 | 2.68 | (0.09) | 3.32 | (2.76) | 37.75 | 17.05 |

(P) - Provisional

Source: Published results/ Information provided by oil companies.

Table 8.23 : Total subsidy/under-recovery on petroleum products & natural gas

| (₹ Crore) | | | | | |
|--|--------------|--------------|--------------|--------------|------------------|
| Particulars | 2017-18 | 2018-19 | 2019-20 | Apr-Sep 2019 | Apr-Sep 2020 (P) |
| Petrol | 0 | 0 | 0 | 0 | 0 |
| Diesel | 0 | 0 | 0 | 0 | 0 |
| PDS kerosene | 4672 | 5950 | 1833 | 1349 | 0 |
| Domestic LPG | 0 | 0 | 0 | 0 | 0 |
| Total under-recoveries (A) | 4672 | 5950 | 1833 | 1349 | 0 |
| Direct Benefit Transfer for LPG (DBTL) subsidy | 20880 | 31447 | 22635 | 11249 | 3018 |
| Project Management Expenditure (PME)* | 25 | 92 | 91 | 51 | |
| Total DBTL related subsidies (B) | 20905 | 31539 | 22726 | 11299 | 3018 |
| Pradhan Mantri Ujjwala Yojana (PMUY) claims | 2496 | 5636 | 1403 | 1281 | (38) |
| Project Management Expenditure (PME) & Information Education and Communication (IEC) expenditure under PMUY* | 63 | 34 | 43 | 43 | 0 |
| Total PMUY related subsidy (C) | 2559 | 5670 | 1446 | 1324 | (38) |
| Direct Benefit Transfer of Kerosene (DBTK) subsidy (D) | 113 | 98 | 42 | 40 | 0 |
| PMGKY (E) | 0 | 0 | 0 | 0 | 7883 |
| Natural gas subsidy for North East | 435 | 557 | 574 | 307 | 197 |
| Other subsidies (F) | 435 | 557 | 574 | 307 | 197 |
| Total subsidy/ under-recovery on petroleum products & natural gas (A+B+C+D+E+F) | 28684 | 43814 | 26621 | 14318 | 11060 |

(P)- Provisional *on payment basis.

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

Table 8.24 : Quantity and value of Indian crude oil imports

| Year | Quantity (MMT) | \$ Million | ₹ Crore |
|-------------|----------------|------------|----------|
| 2018-19 | 226.5 | 111,915 | 7,83,183 |
| 2019-20 (P) | 227.0 | 101,376 | 7,17,001 |

(P)- provisional



Chapter 9

Miscellaneous

Table 9.1 : Average international Calorific Values of different fuels

| A. | Oil products | M Cals/tonne or K Cal/Kg |
|-----------|---|---------------------------------|
| | NGL | 12135 |
| | Kerosene | 10638 |
| | Motor Gasoline | 11135 |
| | Fuel Oil | 10440 |
| B. | Natural gas production (average) - India | 8000-9480 K cal/SCM |
| C. | India | M Cals/tonne or K Cal/Kg |
| | Charcoal | 6900 |
| | Hard coal | 5000 |
| | Firewood | 4750 |
| | Lignite-Brown coal | 2310 |

Source : Indian Petroleum & Natural Gas Statistics, MOP&NG

Conversion factor : 1 K Cal = 4.19 K Joules

Conversion factors

Table 9.2 : Weight to volume conversion

| Product | Weight (MT) | Volume (KL) | BBL | To convert volume at 29.5° C to volume at 15°C multiply by |
|------------------|-------------|-------------|------|--|
| Petrol | 1 | 1.4110 | 8.88 | 0.9830 |
| Diesel | 1 | 1.2100 | 7.61 | 0.9879 |
| Kerosene | 1 | 1.2850 | 8.08 | 0.9864 |
| ATF | 1 | 1.2880 | 8.10 | 0.9862 |
| Light Diesel Oil | 1 | 1.1720 | 7.37 | 0.9877 |
| Furnace Oil | 1 | 1.0424 | 6.74 | 0.9899 |
| Crude Oil | 1 | 1.1700 | 7.33 | |

Note: Petrol and Diesel are as per BS-IV norms

Table 9.3 : Volume conversion

| | |
|---------------------------------|-------------|
| 1 US Bbl. | 159 Litres |
| 1 US Gallon | 3.78 Litres |
| 1 Kilo Litre (KL) | 6.29 Bbl. |
| 1 US Bbl. | 42 Gallons |
| 1 MBD (million barrels per day) | 50 MMTPA |

Table 9.4 : Contents of LPG & Natural Gas

| | |
|-------------|---------------------------------------|
| Natural Gas | Contains 60-95 % Methane |
| LPG | Contains Propane (40%) & Butane (60%) |

Table 9.5 : 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 | = 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 | = 4541 SCM per day | Station Heat Rate (SHR);~1720 Kcal/Kwh-NCV (50% Thermal Efficiency); Natural Gas GCV-@10000Kcal/SCM |
| Power Generation from 1 MMSCMD Gas | = 220 MWH | Station Heat Rate (SHR);~1720 Kcal/Kwh-NCV (50% Thermal Efficiency); Natural Gas GCV-@10000Kcal/SCM |

Source : GAIL (India) Ltd./ PPAC

Table 9.6 : Major end use of petroleum products

| Product | Major end use |
|--|---|
| LPG | Domestic and auto fuel. Also for industrial application where technically essential. Now permittees as auto fuel. |
| Naphtha | Feedstock/fuel for fertiliser units, feedstock for petrochemical sector and fuel for power plants. |
| MS | Fuel for passenger cars, taxies, two & three wheelers. |
| ATF | Fuel for aircrafts. |
| SKO | Fuel for cooking & lighting. |
| HSD | Fuel for transport sector (railways/road), agriculture (tractors, pumpsets, threshers, etc.) and captive power generation. |
| LDO | Fuel for agricultural pumpsets, small industrial units, start up fuel for power generation. |
| FO/LSHS | Secondary fuel for thermal power plants, fuel/feedstock for fertiliser plants, industrial units. |
| Bitumen | Surfacing of roads. |
| Lubes | Lubrication for automotive and industrial applications. |
| Petrloleum coke | Fuel grade petcoke is used as fuel for cement kilns and electric power plants. Calcined petcoke is used to manufacture energy as well as in the aluminium, graphite electrode, steel, titanium dioxide and other carbon consuming industries. |
| Other products (Benzene, Toluene, MTO, LABFS, CBFS, Paraffin wax etc.) | Feedstock for value added products. |

List of Abbreviations

| | | | |
|--------|---|-----------|--|
| BBL | Barrel | MMT | Million Metric Tonne |
| BCM | Billion Cubic Meter | MMTPA | Million Metric Tonne Per Annum |
| BPCL | Bharat Petroleum Corporation Limited | MoA | Ministry of Agriculture |
| BPRL | Bharat Petro Resources Limited | MoC&I | Ministry of Commerce & Industry |
| CBM | Coal Bed Methane | MoF | Ministry of Finance |
| CBR | Cauvery Basin Refinery | MoP&NG | Ministry of Petroleum & Natural Gas |
| CGD | City Gas Distribution | MoSPI | Ministry of Statistics and Programme Implementation |
| CNG | Compressed Natural Gas | MRPL | Mangalore Refinery and Petrochemicals Limited |
| DBTL | Direct Benefit Transfer for LPG | Mtoe | Million tonnes of oil equivalent, |
| DGCIS | Directorate General of Commercial Intelligence and Statistics | NELP | New Exploration Licensing Policy |
| DGH | Directorate General of Hydrocarbons | NGLs | Natural Gas Liquids |
| DSF | Discovered Small Field | NRL | Numaligarh Refinery Limited |
| EBP | Ethanol Blending Programme | OALP | Open Acreage Licensing Policy |
| FBIL | Financial Benchmark India Private Limited | OECD | Organisation for Economic Co-operation and Development |
| GA | Geographical Areas | OIL | Oil India Limited |
| GAIL | Gas Authority of India Limited | OMCs | Oil Marketing Companies |
| GREP | Gas Rehabilitation and Expansion Project | ONGC | Oil and Natural Gas Corporation Limited |
| GRM | Gross Refining Margins | OPEC | Organization of the Petroleum Exporting Countries |
| GSPL | Gujarat State Petronet Limited | PDS | Public Distribution System |
| GST | Goods & Service Tax | PMUY | Pradhan Mantri Ujjwala Yojana |
| HELP | Hydrocarbon Exploration and Licensing Policy | PNG | Piped Natural Gas |
| HPCL | Hindustan Petroleum Corporation Limited | POL | Petroleum, Oil and Lubricants |
| IEA | International Energy Agency | PPAC | Petroleum Planning & Analysis Cell |
| IOCL | Indian Oil Corporation Limited | PSC | Production Sharing Contracts |
| KL | Kilo Litre | PSU | Public Sector Undertaking |
| LNG | Liquefied Natural Gas | R/P ratio | Reserves-to-production ratio |
| LPG | Liquefied Petroleum Gas | RBI | Reserve Bank of India |
| MBN | MBTU/Bbl/NRGF | SEZ | Special Economic Zone |
| MBTU | Thousand British Thermal Unit | TCF | Trillion cubic feet |
| MMBTU | Metric Million British Thermal Unit | Toe | Tonnes of oil equivalent |
| MMSCMD | Million Standard Cubic Meter Per Day | WPI | Wholesale Price Index |



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