



भारत 2023 INDIA

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# Snapshot of India's Oil & Gas data

## Monthly Ready Reckoner

### October 2023



Analysis • Knowledge • Information

## Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

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**Petroleum Planning & Analysis Cell**

(Ministry of Petroleum & Natural Gas)

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

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

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

## Table of contents

| Table | Description   | Page No. |
|-------|---|----------|
|       | Highlights for the month                                    | 2-3      |
|       | <b>ECONOMIC INDICATORS</b>                                  |          |
| 1     | Selected indicators of the Indian economy                   | 5        |
| 2     | Crude oil, LNG and petroleum products at a glance; Graph    | 6-7      |
|       | <b>CRUDE OIL, REFINING &amp; PRODUCTION</b>                 |          |
| 3     | Indigenous crude oil production                             | 9        |
| 4     | Domestic oil & gas production vis-à-vis overseas production | 9        |
| 5     | High Sulphur (HS) & Low Sulphur (LS) Crude Oil processing   | 9        |
| 6     | Quantity and value of crude oil imports                     | 10       |
| 7     | Self-sufficiency in petroleum products                      | 10       |
| 8     | Refineries: Installed capacity and crude oil processing     | 11-12    |
| 9     | Crude oil and product pipeline network                      | 12       |
|       | Oil and Gas map of India                                    | 13       |
| 10    | Gross Refining Margins (GRM) of companies; Graph            | 14-15    |
|       | <b>CONSUMPTION</b>  |          |
| 11    | Production and consumption of petroleum products; Graph     | 17-18    |
| 12    | Kerosene allocation vs upliftment                           | 19       |
| 13    | Ethanol blending programme                                  | 19       |
| 14    | Industry marketing infrastructure                           | 19       |
|       | <b>LIQUEFIED PETROLEUM GAS (LPG)</b>                        |          |
| 15    | LPG consumption   | 21       |
| 16    | LPG marketing at a glance; Graph                            | 21-22    |
| 17    | Region-wise data on LPG marketing; Graph                    | 23       |
|       | <b>NATURAL GAS</b>  |          |
| 18    | Natural gas at a glance; Graph                              | 25       |
| 19    | Coal Bed Methane (CBM) gas development in India             | 26       |
| 20    | Major natural gas pipeline network                          | 26       |
| 21    | Existing LNG terminals                                      | 26       |
| 22    | Status of PNG connections & CNG stations across India       | 27-28    |
| 23    | Domestic natural gas price and gas price ceiling            | 29       |
| 24    | CNG/PNG prices in selected cities                           | 29       |
|       | <b>TAXES &amp; DUTIES ON PETROLEUM PRODUCTS</b>             |          |
| 25    | Information on prices, taxes and under-recoveries/subsidies | 31-32    |
|       | <b>MISCELLANEOUS</b>  |          |
| 26    | Capital expenditure of PSU oil companies                    | 34       |
| 27    | Conversion factors and volume conversion                    | 35       |

## Highlights for the month

- Indigenous crude oil and condensate production during October 2023 was 2.5 MMT. OIL registered a production of 0.3 MMT, ONGC registered a production of 1.6 MMT whereas PSC registered production of 0.6 MMT during October 2023. There is a growth of 1.3% in crude oil and condensate production during October 2023 as compared to October 2022.
- Total Crude oil processed during October 2023 was 20.6 MMT which is 0.7% higher than October 2022, where PSU/JV refiners processed 14.3 MMT and Private refiners processed 6.2 MMT of crude oil. Total indigenous crude oil processed was 2.3 MMT and total imported crude oil processed was 18.3 MMT by all Indian Refineries (PSU+JV+PVT). There was a growth of 2.5 % in total crude oil processed in April October FY 2023 – 24 as compared to same period of FY 2022 – 23.
- Crude oil imports increased by 2.2% and 0.6% during October 2023 and April-October 2023 respectively as compared to the corresponding period of the previous year. As compared to net import bill for Oil & Gas for October 2022 of \$11.9 billion, the net import bill for Oil & Gas for October 2023 was \$11.8 billion. Out of which, crude oil imports constitutes \$11.7 billion, LNG imports \$1.2 billion and the exports were \$3.6 billion during October 2023.
- The price of Brent Crude averaged \$91.05/bbl during October 2023 as against \$94.00/bbl during September 2023 and \$93.33/bbl during October 2022. The Indian basket crude price averaged \$90.08/bbl during October 2023 as against \$93.54/bbl during September 2023 and \$91.70 /bbl during October 2022.
- Production of petroleum products was 21.8 MMT during October 2023 which is 4.2% higher than October 2022. Out of 21.8 MMT, 21.5 MMT was from refinery production & 0.3 MMT was from fractionator. There was a growth of 4.0 % in production of petroleum products in April October FY 2023 – 24 as compared to same period of FY 2022 – 23. Out of total POL production, in October 2023, share of HSD is 43.1 %, MS 15.1 %, naphtha 6.6 %, ATF 5.9 %, petcoke 5.0 %, LPG 4.4% which are of major products and rest are shared by bitumen, FO/LSHS, LDO, lubes & others.
- POL products imports increased by 12.1% and 12.8% during October 2023 and April-October 2023 respectively as compared to the corresponding period of the previous year. Increase in POL products imports during April-October 2023 were mainly due to increase in imports of petcoke, bitumen and fuel oil (FO).

|  |
|--|
| <ul style="list-style-type: none"> <li>Exports of POL products increased by 12.6% and decreased by 0.8% during October 2023 and April-October 2023 respectively as compared to the corresponding period of the previous year. Decrease in POL products exports during April-October 2023 were mainly due to decrease in exports of high-speed diesel (HSD) and naphtha.</li> </ul>   |
| <ul style="list-style-type: none"> <li>The consumption of petroleum products during April-October 2023, with a volume of 133.6 MMT, reported a growth of 6.0 % compared to the volume of 126 MMT during the same period of the previous year. This growth was led by 6.% growth in MS, 6.7% in HSD &amp; 13.1% in ATF &amp; 12.6% in Naptha consumption besides LPG, Lubes, Bitumen, Petcoke and LDO during the period. The consumption of petroleum products during October 2023 recorded a growth of 3.7% with a volume of 19.3 MMT compared to the same period of the previous year.</li> </ul> |
| <ul style="list-style-type: none"> <li>Ethanol blending with Petrol was 12.38% during October 2023 and cumulative ethanol blending during December 2022-October 2023 was 12.06%.</li> </ul>  |
| <ul style="list-style-type: none"> <li>Total Natural Gas Consumption (including internal consumption) for the month of October 2023 was 5447 MMSCM which was 13.4% higher than the corresponding month of the previous year. The cumulative consumption of 38368 MMSCM for the current financial year till October 2023 was higher by 8.8% compared with the corresponding period of the previous year.</li> </ul>   |
| <ul style="list-style-type: none"> <li>Gross production of natural gas for the month of October 2023 (P) was 3161 MMSCM which was higher by 9.3% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 21040 MMSCM for the current financial year till October 2023 was higher by 4.8% compared with the corresponding period of the previous year.</li> </ul>   |
| <ul style="list-style-type: none"> <li>LNG import for the month of October 2023 (P) was 2337 MMSCM which was 18.2% higher than the corresponding month of the previous year. The cumulative import of 17753(P) MMSCM for the current financial year till October 2023 was higher by 13.4% compared with the corresponding period of the previous year.</li> </ul>  |



# **PART-A**

## *Economic Indicators*

## 1. Selected indicators of the Indian economy

| Economic indicators |  | Unit/ Base | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24         |
|---------------------|--|------------|---------|---------|---------|---------|---------|-----------------|
| 1                   | Population (basis RGI projections)       | Billion    | 1.323   | 1.337   | 1.351   | 1.365   | 1.377   | 1.388           |
| 2                   | GDP at constant (2011-12 Prices)         | Growth %   | 6.5     | 4.0     | -6.6    | 9.1     | 7.2     | 7.8             |
|                     |  |            | 2nd RE  | 1st RE  | 1st RE  | 1st RE  | PE      | Q1, 2023-24 (E) |
| 3                   | Agricultural Production (Food grains)    | MMT        | 285.2   | 297.5   | 310.7   | 315.7   | 323.6   | -               |
|                     |  |            |         |         | 4th AE  | 2nd AE  |         |                 |
|                     |  | Growth %   | 0.1     | 4.3     | 4.5     | 1.6     | 2.5     | -               |
| 4                   | Gross Fiscal Deficit (as percent of GDP) | %          | 3.4     | 4.6     | 9.5     | 6.7     | 6.4     | 7.8 (Q1)        |
|                     |  |            |         |         | RE      | RE      | RE      | E               |

| Economic indicators |  | Unit/ Base | 2021-22 | 2022-23 | October |             | April-October |             |
|---------------------|--|------------|---------|---------|---------|-------------|---------------|-------------|
|                     |  |            |         |         | 2022-23 | 2023-24 (P) | 2022-23       | 2023-24 (P) |
| 5                   | Index of Industrial Production (Base: 2011-12) | Growth %   | 11.4    | 5.5#    | 3.3*    | 5.8*        | 7.1#          | 6.0#        |
|                     |  |            |         |         |         | QE          |               |             |
| 6                   | Imports^                                       | \$ Billion | 611.9   | 714.2   | 57.9    | 65.0        | 430.5         | 392.0       |
| 7                   | Exports^                                       | \$ Billion | 422.0   | 451.0   | 31.6    | 33.6        | 263.3         | 244.9       |
| 8                   | Trade Balance                                  | \$ Billion | -189.9  | -263.2  | -26.3   | -31.5       | -167.1        | -147.1      |
| 9                   | Foreign Exchange Reserves @                    | \$ Billion | 617.6   | 578.4   | 524.5   | 581.2       | -             | -           |

Population projection by RGI is taken as on 1st July for the year. IIP is for the month of \*Sept'23 and #April-Sept'23; @2021, 2021-22 - as on March 26, 2022, Mar 2022 as on Mar 25, 2022, Mar 2023-as on Mar 31, 2023, September 2022 as on September 30, 2022 and September, 2023 as on September 29, 2023; ^Imports & Exports are for Merchandise for the month of September 23; E: Estimates; PE: Provisional Estimates; AE-Advanced Estimates; RE-Revised Estimates; QE-Quick Estimates.

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

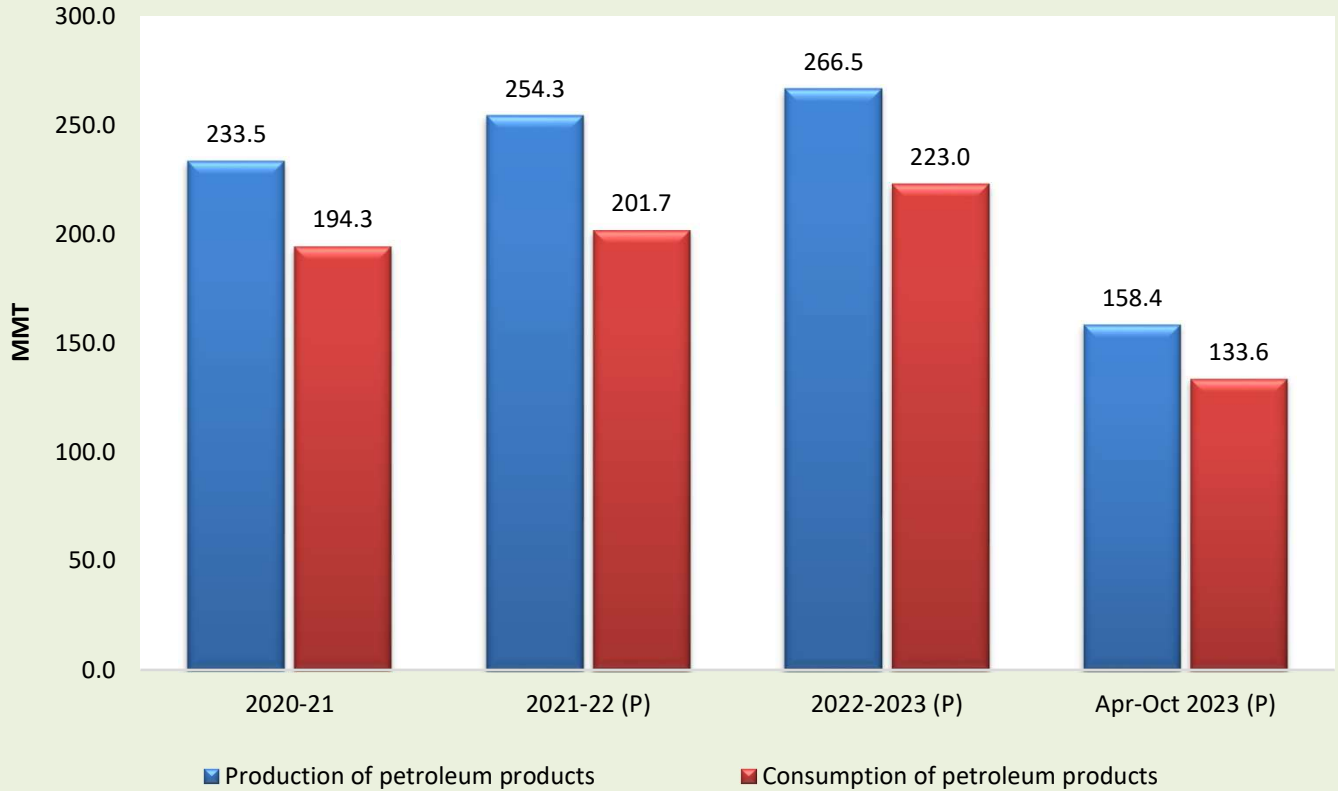


## 2. Crude oil, LNG and petroleum products at a glance

| Details |   | Unit/ Base | 2021-22<br>(P) | 2022-23<br>(P) | October     |             | April-October |             |
|---------|---|------------|----------------|----------------|-------------|-------------|---------------|-------------|
|         |   |            |                |                | 2022-23 (P) | 2023-24 (P) | 2022-23 (P)   | 2023-24 (P) |
| 1       | Crude oil production in India <sup>#</sup>                                | MMT        | 29.7           | 29.2           | 2.5         | 2.5         | 17.2          | 17.2        |
| 2       | Consumption of petroleum products*  | MMT        | 201.7          | 223.0          | 18.6        | 19.3        | 126.0         | 133.6       |
| 3       | Production of petroleum products  | MMT        | 254.3          | 266.5          | 20.9        | 21.8        | 152.3         | 158.4       |
| 4       | Gross natural gas production  | MMSCM      | 34,024         | 34,450         | 2,893       | 3,161       | 20,077        | 21,040      |
| 5       | Natural gas consumption   | MMSCM      | 64,159         | 59,969         | 4,806       | 5,447       | 35,256        | 38,368      |
| 6       | Imports & exports:  |            |                |                |             |             |               |             |
|         | Crude oil imports   | MMT        | 212.4          | 232.7          | 18.1        | 18.5        | 133.6         | 134.4       |
|         |   | \$ Billion | 120.7          | 157.5          | 12.1        | 11.7        | 101.2         | 75.5        |
|         | Petroleum products (POL) imports*   | MMT        | 39.0           | 44.6           | 3.9         | 4.4         | 24.7          | 27.8        |
|         |   | \$ Billion | 23.7           | 26.9           | 2.1         | 2.4         | 16.2          | 13.2        |
|         | Gross petroleum imports (Crude + POL)                                     | MMT        | 251.4          | 277.3          | 22.1        | 22.9        | 158.3         | 162.2       |
|         |   | \$ Billion | 144.3          | 184.4          | 14.2        | 14.1        | 117.3         | 88.6        |
|         | Petroleum products (POL) export   | MMT        | 62.8           | 61.0           | 4.0         | 4.5         | 35.4          | 35.2        |
|         |   | \$ Billion | 44.4           | 57.3           | 3.7         | 3.6         | 36.7          | 27.2        |
|         | LNG imports*  | MMSCM      | 31,028         | 26,304         | 1,977       | 2,337       | 15,657        | 17,753      |
|         |   | \$ Billion | 13.5           | 17.1           | 1.6         | 1.2         | 11.0          | 7.7         |
|         | Net oil & gas imports   | \$ Billion | 113.4          | 144.2          | 12.1        | 11.8        | 91.7          | 69.1        |
| 7       | Petroleum imports as percentage of India's gross imports (in value terms) | %          | 23.6           | 25.8           | 24.5        | 21.7        | 27.3          | 22.6        |
| 8       | Petroleum exports as percentage of India's gross exports (in value terms) | %          | 10.5           | 12.7           | 11.8        | 10.8        | 13.9          | 11.1        |
| 9       | Import dependency of crude oil (on POL consumption basis)                 | %          | 85.5           | 87.4           | 86.9        | 87.4        | 86.6          | 87.576      |

#Includes condensate; \*Private direct imports are prorated for the period Sept'23 to Oct'23 for POL. LNG Imports figure from DGCIS are prorated for Sept'23 to October 2023. Total may not tally due to rounding off.

### Production & Consumption of Petroleum Products (MMT)





## ***PART-B***

# ***Crude Oil, Refining & Production***

### 3. Indigenous crude oil production (Million Metric Tonnes)

| Details                                      | 2021-22     | 2022-23<br>(P) | October        |                    |             | April-October |                    |             |
|--|-------------|----------------|----------------|--------------------|-------------|---------------|--------------------|-------------|
|  |             |                | 2022-23<br>(P) | 2023-24<br>Target* | 2023-24 (P) | 2022-23 (P)   | 2023-24<br>Target* | 2023-24 (P) |
| ONGC   | 18.5        | 18.4           | 1.6            | 1.6                | 1.5         | 10.9          | 11.4               | 10.6        |
| Oil India Limited (OIL)                      | 3.0         | 3.2            | 0.3            | 0.3                | 0.3         | 1.8           | 2.0                | 1.9         |
| Private / Joint Ventures (JVs)               | 7.0         | 6.2            | 0.5            | 0.6                | 0.5         | 3.7           | 4.3                | 3.4         |
| <b>Total Crude Oil</b>                       | <b>28.4</b> | <b>27.8</b>    | <b>2.3</b>     | <b>2.6</b>         | <b>2.3</b>  | <b>16.4</b>   | <b>17.6</b>        | <b>15.9</b> |
| ONGC condensate                              | 0.9         | 1.0            | 0.09           | 0.0                | 0.09        | 0.6           | 0.0                | 0.6         |
| PSC condensate                               | 0.3         | 0.31           | 0.03           | 0.0                | 0.1         | 0.2           | 0.0                | 0.6         |
| <b>Total condensate</b>                      | <b>1.2</b>  | <b>1.4</b>     | <b>0.11</b>    | <b>0.0</b>         | <b>0.2</b>  | <b>0.8</b>    | <b>0.0</b>         | <b>1.2</b>  |
| <b>Total (Crude + Condensate) (MMT)</b>      | <b>29.7</b> | <b>29.2</b>    | <b>2.5</b>     | <b>2.6</b>         | <b>2.5</b>  | <b>17.2</b>   | <b>17.6</b>        | <b>17.2</b> |
| Total (Crude + Condensate) (Million Bbl/Day) | 0.60        | 0.59           | 0.58           | 0.61               | 0.59        | 0.59          | 0.60               | 0.59        |

\*Provisional targets inclusive of condensate.

### 4. Domestic and overseas oil & gas production (by Indian Companies)

| Details                           | 2021-22 | 2022-23<br>(P) | October     |             | April-October |             |
|-----------------------------------|---------|----------------|-------------|-------------|---------------|-------------|
|                                   |         |                | 2022-23 (P) | 2023-24 (P) | 2022-23 (P)   | 2023-24 (P) |
| Total domestic production (MMTOE) | 63.7    | 63.6           | 5.4         | 5.7         | 37.3          | 38.2        |
| Overseas production (MMTOE)       | 21.8    | 19.5           | 1.6         | 1.6         | 11.3          | 11.5        |

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

### 5. High Sulphur (HS) & Low Sulphur (LS) crude oil processing (MMT)

| Details   |                    | 2021-22      | 2022-23<br>(P) | October      |              | April-October |              |
|---|--------------------|--------------|----------------|--------------|--------------|---------------|--------------|
|   |                    |              |                | 2022-23 (P)  | 2023-24 (P)  | 2022-23 (P)   | 2023-24 (P)  |
| 1   | High Sulphur crude | 185.0        | 197.9          | 15.4         | 16.1         | 113.7         | 116.2        |
| 2   | Low Sulphur crude  | 56.7         | 57.4           | 5.0          | 4.4          | 33.0          | 34.1         |
| <b>Total crude processed (MMT)</b>                                |                    | <b>241.7</b> | <b>255.2</b>   | <b>20.4</b>  | <b>20.6</b>  | <b>146.7</b>  | <b>150.4</b> |
| Total crude processed (Million Bbl/Day)                           |                    | 4.85         | 5.13           | 4.83         | 4.86         | 5.03          | 5.15         |
| <b>Percentage share of HS crude in total crude oil processing</b> |                    | <b>76.6%</b> | <b>77.5%</b>   | <b>75.7%</b> | <b>78.4%</b> | <b>77.5%</b>  | <b>77.3%</b> |

### 6. Quantity and value of crude oil imports

| Year                 | Quantity (MMT) | \$ Million | Rs. Crore |
|----------------------|----------------|------------|-----------|
| 2021-22              | 212.4          | 120,675    | 9,01,262  |
| 2022-23              | 232.7          | 157,531    | 12,60,372 |
| April-Oct 2023-24(P) | 134.4          | 75,464     | 6,23,188  |

### 7. Self-sufficiency in petroleum products (Million Metric Tonnes)

| Particulars                       |   | 2021-22      | 2022-23<br>(P) | October      |              | April-October |              |
|-----------------------------------|---|--------------|----------------|--------------|--------------|---------------|--------------|
|                                   |   |              |                | 2022-23 (P)  | 2023-24 (P)  | 2022-23 (P)   | 2023-24 (P)  |
| 1                                 | Indigenous crude oil processing                                       | 27.0         | 26.4           | 2.3          | 2.3          | 15.9          | 15.6         |
| 2                                 | Products from indigenous crude<br>(93.3% of crude oil processed)      | 25.2         | 24.7           | 2.2          | 2.1          | 14.8          | 14.6         |
| 3                                 | Products from fractionators<br>(Including LPG and Gas)                | 4.1          | 3.5            | 0.3          | 0.3          | 2.1           | 2.0          |
| 4                                 | Total production from indigenous<br>crude & condensate <b>(2 + 3)</b> | 29.3         | 28.2           | 2.4          | 2.4          | 16.9          | 16.6         |
| 5                                 | Total domestic consumption  | 201.7        | 223.0          | 18.6         | 19.3         | 126.0         | 133.6        |
| <b>% Self-sufficiency (4 / 5)</b> |   | <b>14.5%</b> | <b>12.6%</b>   | <b>13.1%</b> | <b>12.6%</b> | <b>13.4%</b>  | <b>12.4%</b> |

## 8. Refineries: Installed capacity and crude oil processing (MMTPA / MMT)

| Sl. no. | Refinery          | Installed capacity<br>(01.04.2023)<br>MMTPA | Crude oil processing (MMT) |                |                |                     |                |                |                     |                |
|---------|-------------------|---|----------------------------|----------------|----------------|---------------------|----------------|----------------|---------------------|----------------|
|         |                   |   | 2021-22                    | 2022-23<br>(P) | October        |                     |                | April-October  |                     |                |
|         |                   |   |                            |                | 2022-23<br>(P) | 2023-24<br>(Target) | 2023-24<br>(P) | 2022-23<br>(P) | 2023-24<br>(Target) | 2023-24<br>(P) |
| 1       | Barauni (1964)    | 6.0   | 5.6                        | 6.8            | 0.6            | 0.6                 | 0.5            | 4.0            | 3.8                 | 3.8            |
| 2       | Koyali (1965)     | 13.7  | 13.5                       | 15.6           | 1.3            | 1.2                 | 1.3            | 9.2            | 8.0                 | 8.8            |
| 3       | Haldia (1975)     | 8.0   | 7.3                        | 8.5            | 0.7            | 0.7                 | 0.7            | 5.0            | 4.1                 | 4.5            |
| 4       | Mathura (1982)    | 8.0   | 9.1                        | 9.6            | 0.8            | 0.9                 | 0.9            | 5.4            | 5.1                 | 5.2            |
| 5       | Panipat (1998)    | 15.0  | 14.8                       | 13.8           | 1.2            | 1.4                 | 1.3            | 8.4            | 8.9                 | 8.7            |
| 6       | Guwahati (1962)   | 1.0   | 0.7                        | 1.1            | 0.09           | 0.0                 | 0.0            | 0.6            | 0.5                 | 0.6            |
| 7       | Digboi (1901)     | 0.65  | 0.7                        | 0.7            | 0.06           | 0.06                | 0.07           | 0.4            | 0.4                 | 0.4            |
| 8       | Bongaigaon(1979)  | 2.70  | 2.6                        | 2.8            | 0.3            | 0.3                 | 0.3            | 1.5            | 1.7                 | 1.8            |
| 9       | Paradip (2016)    | 15.0  | 13.2                       | 13.6           | 1.2            | 1.2                 | 0.7            | 6.8            | 8.8                 | 8.5            |
|         | <b>IOCL-TOTAL</b> | <b>70.1</b>                                 | <b>67.7</b>                | <b>72.4</b>    | <b>6.2</b>     | <b>6.2</b>          | <b>5.7</b>     | <b>41.3</b>    | <b>41.4</b>         | <b>42.2</b>    |
| 10      | Manali (1969)     | 10.5  | 9.0                        | 11.3           | 0.7            | 0.9                 | 1.0            | 6.5            | 5.6                 | 6.7            |
| 11      | CBR (1993)        | 0.0   | 0.0                        | 0.0            | 0.0            | 0.0                 | 0.0            | 0.0            | 0.0                 | 0.0            |
|         | <b>CPCL-TOTAL</b> | <b>10.5</b>                                 | <b>9.0</b>                 | <b>11.3</b>    | <b>0.7</b>     | <b>0.9</b>          | <b>1.0</b>     | <b>6.5</b>     | <b>5.6</b>          | <b>6.7</b>     |
| 12      | Mumbai (1955)     | 12.0  | 14.4                       | 14.5           | 1.3            | 1.0                 | 0.7            | 7.9            | 8.2                 | 8.8            |
| 13      | Kochi (1966)      | 15.5  | 15.4                       | 16.0           | 0.6            | 1.3                 | 1.5            | 8.6            | 9.1                 | 9.9            |
| 14      | Bina (2011)       | 7.8   | 7.4                        | 7.8            | 0.7            | 0.7                 | 0.7            | 4.4            | 3.7                 | 3.8            |
|         | <b>BPCL-TOTAL</b> | <b>35.3</b>                                 | <b>37.2</b>                | <b>38.4</b>    | <b>2.6</b>     | <b>2.9</b>          | <b>3.0</b>     | <b>21.0</b>    | <b>21.0</b>         | <b>22.5</b>    |
| 15      | Numaligarh (1999) | 3.0   | 2.6                        | 3.1            | 0.3            | 0.3                 | 0.3            | 1.8            | 1.4                 | 1.1            |

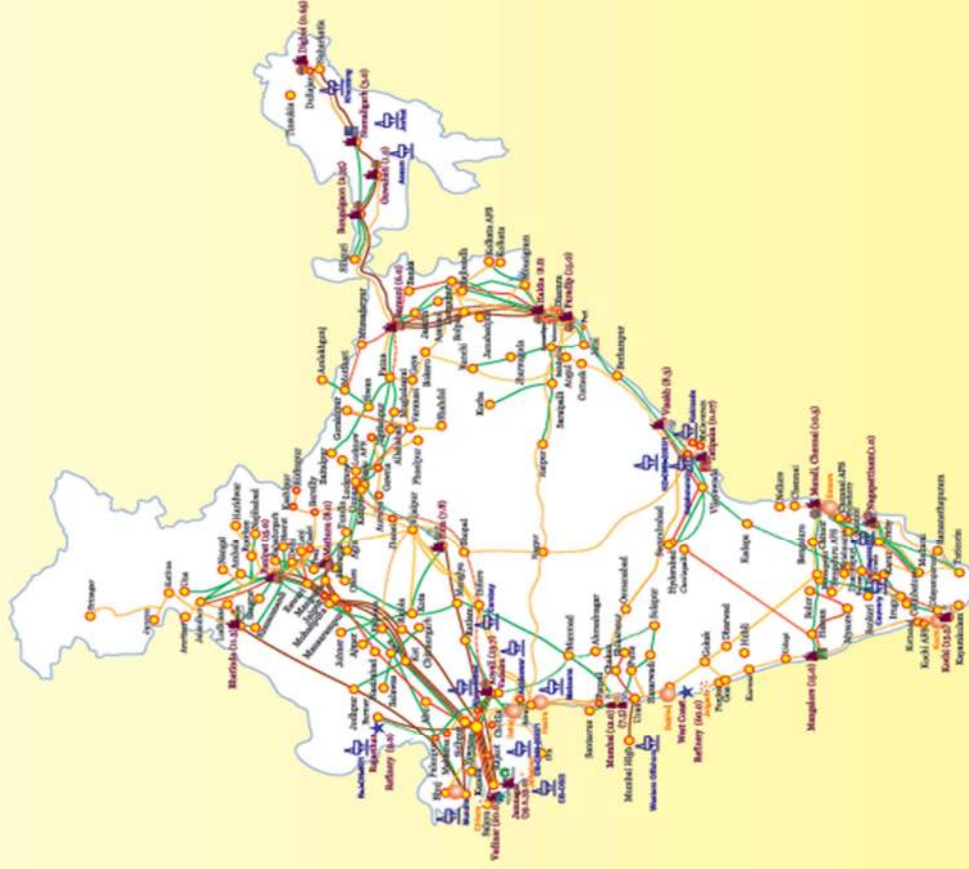
| Sl. no.                            | Refinery                  | Installed capacity<br>(01.04.2023)<br>MMTPA | Crude oil processing (MMT) |              |             |                     |                |               |                     |                |
|------------------------------------|---------------------------|---|----------------------------|--------------|-------------|---------------------|----------------|---------------|---------------------|----------------|
|                                    |                           |   | 2021-22                    | 2022-23      | October     |                     |                | April-October |                     |                |
|                                    |                           |   |                            |              | 2022-23     | 2023-24<br>(Target) | 2023-24<br>(P) | 2022-23       | 2023-24<br>(Target) | 2023-24<br>(P) |
| 16                                 | Tatipaka (2001)           | 0.07  | 0.08                       | 0.07         | 0.01        | 0.01                | 0.005          | 0.04          | 0.04                | 0.04           |
| 17                                 | MRPL-Mangalore (1996)     | 15.0  | 14.9                       | 17.1         | 1.5         | 1.3                 | 1.4            | 9.8           | 8.7                 | 9.0            |
|                                    | <b>ONGC-TOTAL</b>         | <b>15.1</b>                                 | <b>14.9</b>                | <b>17.2</b>  | <b>1.5</b>  | <b>1.3</b>          | <b>1.4</b>     | <b>9.8</b>    | <b>8.7</b>          | <b>9.0</b>     |
| 18                                 | Mumbai (1954)             | 9.5   | 5.6                        | 9.8          | 0.8         | 0.8                 | 0.9            | 5.6           | 5.5                 | 5.9            |
| 19                                 | Visakh (1957)             | 11.0  | 8.4                        | 9.3          | 0.8         | 1.1                 | 1.0            | 5.2           | 6.6                 | 7.2            |
| 20                                 | HMEL-Bathinda (2012)      | 11.3  | 13.0                       | 12.7         | 1.1         | 1.0                 | 1.1            | 7.4           | 6.5                 | 7.6            |
|                                    | <b>HPCL- TOTAL</b>        | <b>31.8</b>                                 | <b>27.0</b>                | <b>31.8</b>  | <b>2.7</b>  | <b>2.9</b>          | <b>3.0</b>     | <b>18.2</b>   | <b>18.6</b>         | <b>20.7</b>    |
| 21                                 | RIL-Jamnagar (DTA) (1999) | 33.0  | 34.8                       | 34.4         | 2.9         | 2.9                 | 2.9            | 20.8          | 20.8                | 20.1           |
| 22                                 | RIL-Jamnagar (SEZ) (2008) | 35.2  | 28.3                       | 27.9         | 1.8         | 1.8                 | 1.6            | 15.4          | 15.4                | 16.2           |
| 23                                 | NEL-Vadinar (2006)        | 20.0  | 20.2                       | 18.7         | 1.7         | 1.7                 | 1.7            | 12.0          | 12.0                | 11.8           |
| <b>All India (MMT)</b>             |                           | <b>253.9</b>                                | <b>241.7</b>               | <b>255.2</b> | <b>20.4</b> | <b>20.9</b>         | <b>20.6</b>    | <b>146.7</b>  | <b>145.0</b>        | <b>150.4</b>   |
| <b>All India (Million Bbl/Day)</b> |                           | <b>5.02</b>                                 | <b>4.85</b>                | <b>5.13</b>  | <b>4.83</b> | <b>4.95</b>         | <b>4.86</b>    | <b>5.03</b>   | <b>4.97</b>         | <b>5.15</b>    |

Note: Provisional Targets; Some sub-totals/ totals may not add up due to rounding off at individual levels. The Inputs to Refinery includes both Crude Oil and Other Inputs (OI), however Other Inputs (OI) do not form part of the above data.

| 9. Major crude oil and product pipeline network (as on 01.11.2023) |             |       |       |       |       |        |       |       |         |               |
|--|-------------|-------|-------|-------|-------|--------|-------|-------|---------|---------------|
| Details  |             | ONGC  | OIL   | Cairn | HMEL  | IOCL   | BPCL  | HPCL  | Others* | Total         |
| Crude Oil  | Length (KM) | 1,284 | 1,193 | 688   | 1,017 | 5,819  | 937   |       |         | <b>10,938</b> |
|  | Cap (MMTPA) | 60.6  | 9.0   | 10.7  | 11.3  | 53.8   | 7.8   |       |         | <b>153.1</b>  |
| Products   | Length (KM) |       | 654   |       |       | 12,235 | 2,600 | 5,123 | 2,399   | <b>23,011</b> |
|  | Cap (MMTPA) |       | 1.7   |       |       | 70.6   | 22.6  | 35.2  | 10.2    | <b>140.3</b>  |

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

# OIL & GAS MAP OF INDIA



## LEGENDS

### Refineries



Refineries Capacity in MMTPA

### Producing Fields



Major Producing Fields

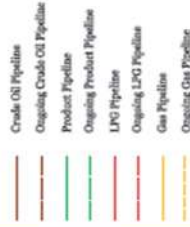
### LNG Terminals



Debbel, Dabhol, Hazira, Kochi, Mundra, Ennore  
★ (Upcoming Terminals) Durgam, Jafaband, Jagdish, Chikara

## LEGENDS

### Pipeline Network





### 10. Gross Refining Margins (GRM) of refineries (\$/bbl)

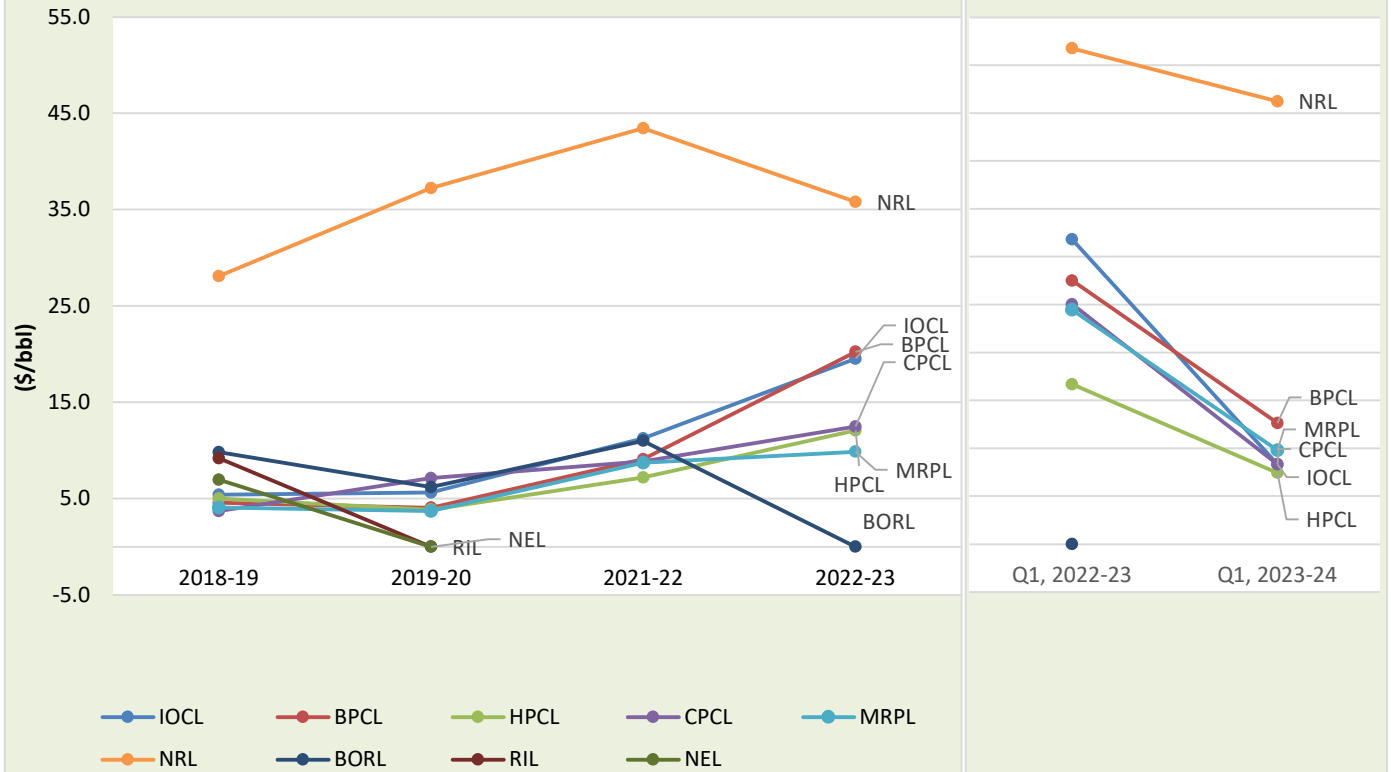
| Company | 2020-21 | 2021-22 | 2022-23 | Apr - June |         |
|---------|---------|---------|---------|------------|---------|
|         |         |         |         | 2022-23    | 2023-24 |
| IOCL    | 5.64    | 11.25   | 19.52   | 31.81      | 8.34    |
| BPCL    | 4.06    | 9.09    | 20.24   | 27.51      | 12.64   |
| HPCL    | 3.86    | 7.19    | 12.09   | 16.69      | 7.44    |
| CPCL    | 7.14    | 8.85    | 12.48   | 25.04      | 8.33    |
| MRPL    | 3.71    | 8.72    | 9.88    | 24.45      | 9.81    |
| NRL     | 37.23   | 43.46   | 35.82   | 51.76      | 46.23   |
| BORL    | 6.20    | 11.00   | #       | #          | #       |
| RIL     | *       | *       | *       | *          | *       |
| NEL     | *       | *       | *       | *          | *       |

GRM of North Eastern refineries are including excise duty benefit

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

\*Not available

## Gross Refining Margins (GRM) of refineries (\$/bbl)



# GRM of North Eastern refineries are including excise duty benefit



**PART-C**

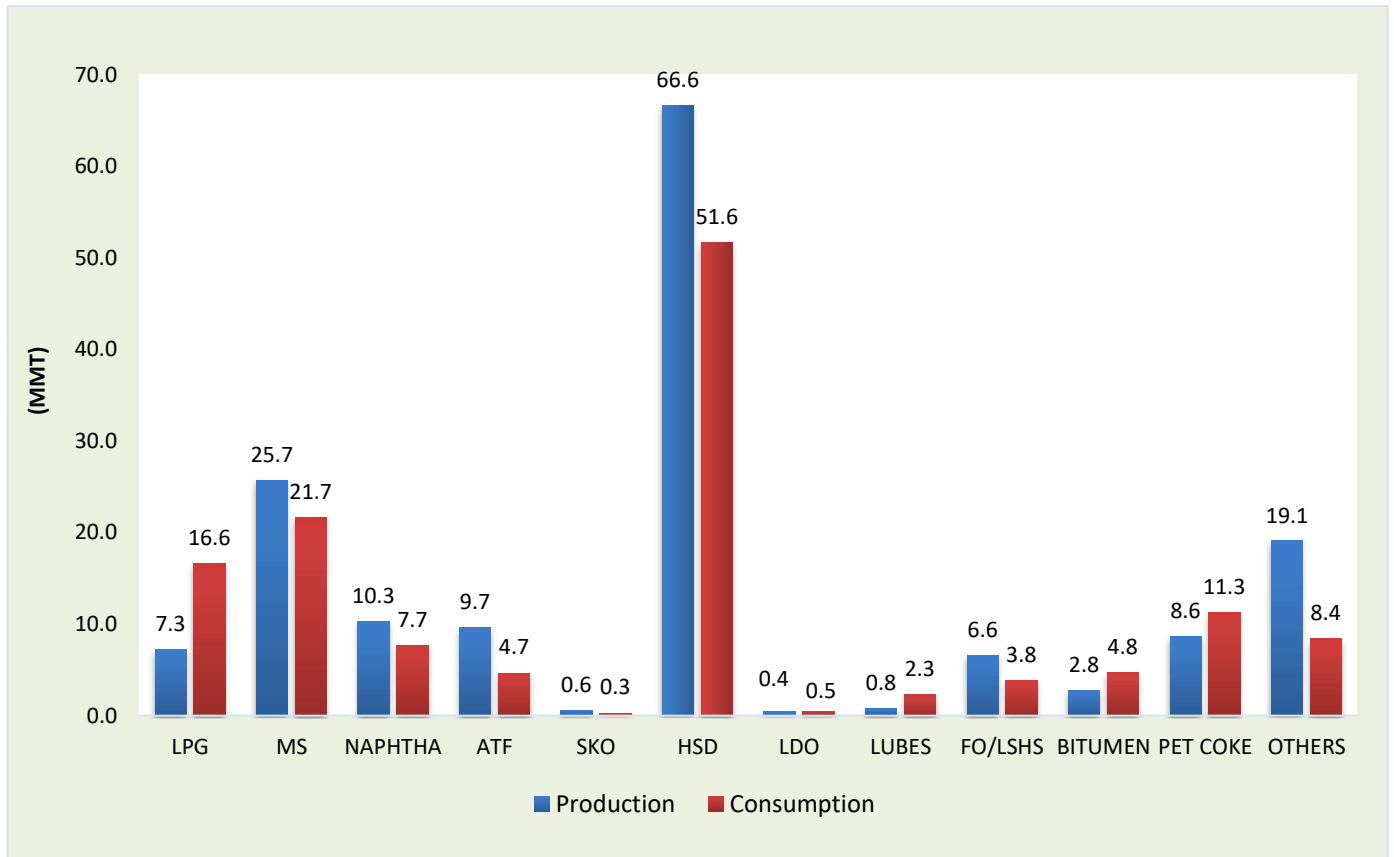
*Consumption*

## 11. Production and consumption of petroleum products (Million Metric Tonnes)

| Products          | 2021-22      |              | 2022-23 (P)  |              | Oct- 2022    |             | Oct-2023 (P) |             | Apr-Oct 2022 |              | Apr-Oct 2023 (P) |              |
|-------------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|-------------|--------------|--------------|------------------|--------------|
|                   | Prod         | Cons         | Prod         | Cons         | Prod         | Cons        | Prod         | Cons        | Prod         | Cons         | Prod             | Cons         |
| LPG               | 12.2         | 28.3         | 12.8         | 28.5         | 1.2          | 2.4         | 1.0          | 2.5         | 7.5          | 16.2         | 7.3              | 16.6         |
| MS                | 40.2         | 30.8         | 42.8         | 35.0         | 3.3          | 3.0         | 3.3          | 3.1         | 24.4         | 20.4         | 25.7             | 21.7         |
| NAPHTHA           | 20.0         | 13.2         | 17.0         | 12.2         | 1.2          | 0.9         | 1.4          | 1.1         | 10.0         | 6.8          | 10.3             | 7.7          |
| ATF               | 10.3         | 5.0          | 15.0         | 7.4          | 1.3          | 0.6         | 1.3          | 0.7         | 8.3          | 4.1          | 9.7              | 4.7          |
| SKO               | 1.9          | 1.5          | 0.9          | 0.5          | 0.0          | 0.0         | 0.0          | 0.0         | 0.6          | 0.3          | 0.6              | 0.3          |
| HSD               | 107.2        | 76.7         | 113.8        | 85.9         | 9.0          | 7.0         | 9.4          | 7.6         | 65.5         | 48.4         | 66.6             | 51.6         |
| LDO               | 0.8          | 1.0          | 0.6          | 0.7          | 0.04         | 0.1         | 0.06         | 0.1         | 0.3          | 0.4          | 0.4              | 0.5          |
| LUBES             | 1.2          | 4.5          | 1.3          | 3.7          | 0.1          | 0.4         | 0.1          | 0.3         | 0.7          | 2.1          | 0.8              | 2.3          |
| FO/LSHS           | 8.9          | 6.3          | 10.4         | 7.0          | 1.0          | 0.6         | 0.7          | 0.5         | 6.2          | 4.0          | 6.6              | 3.8          |
| BITUMEN           | 5.1          | 7.8          | 4.9          | 8.0          | 0.3          | 0.6         | 0.4          | 0.7         | 2.5          | 3.8          | 2.8              | 4.8          |
| PET COKE          | 15.5         | 14.3         | 15.4         | 18.3         | 1.2          | 1.7         | 1.1          | 1.5         | 8.9          | 10.5         | 8.6              | 11.3         |
| OTHERS            | 30.9         | 12.3         | 31.5         | 15.8         | 2.1          | 1.4         | 3.0          | 1.0         | 17.3         | 8.9          | 19.1             | 8.4          |
| <b>ALL INDIA</b>  | <b>254.3</b> | <b>201.7</b> | <b>266.5</b> | <b>223.0</b> | <b>20.9</b>  | <b>18.6</b> | <b>21.8</b>  | <b>19.3</b> | <b>152.3</b> | <b>126.0</b> | <b>158.4</b>     | <b>133.6</b> |
| <b>Growth (%)</b> | <b>-3.1%</b> | <b>-5.4%</b> | <b>4.8%</b>  | <b>10.6%</b> | <b>-3.1%</b> | <b>5.7%</b> | <b>4.2%</b>  | <b>3.7%</b> | <b>8.1%</b>  | <b>13.2%</b> | <b>4.0%</b>      | <b>6.0%</b>  |

**Note:** Prod - Production; Cons - Consumption

## Petroleum Products: April-October 2023 (P) (MMT)



| 12. Kerosene allocation vs upliftment (Kilo Litres) |            |            |            |            |            |            |              |            |
|---|------------|------------|------------|------------|------------|------------|--------------|------------|
| Product   | 2020-21    |            | 2021-22    |            | 2022-23    |            | 2023-24 (P)* |            |
|   | Allocation | Upliftment | Allocation | Upliftment | Allocation | Upliftment | Allocation   | Upliftment |
| PDS Kerosene  | 23,15,008  | 20,38,790  | 17,83,344  | 16,59,906  | 12,43,644  | 3,96,115   | 795,048      | 241,695    |

\* Allocation is for Apr-Dec 2023-24 and upliftment is for Apr-Oct' 2023

| 13. Ethanol blending programme                                |                       |         |         |             |               |
|---|-----------------------|---------|---------|-------------|---------------|
| Particulars   | Ethanol Supply Year * |         |         |             |               |
|   | 2019-20               | 2020-21 | 2021-22 | 2022-23 (P) |               |
|   |                       |         |         | Oct-23      | Dec'22-Oct'23 |
| Ethanol received by PSU OMCs under EBP Program (in Cr. Litrs) | 173.0                 | 296.1   | 408.1   | 35.8        | 494.0         |
| Ethanol blended under EBP Program (in Cr. Litrs)              | 170.5                 | 302.3   | 433.6   | 48.8        | 508.8         |
| Average Percentage of Blending Sales (EBP%)                   | 5.0%                  | 8.1%    | 10.0%   | 12.4%       | 12.1%         |

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

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

| 14. Industry marketing infrastructure (as on 01.11.2023) (Provisional) |        |        |        |               |       |       |               |        |
|--|--------|--------|--------|---------------|-------|-------|---------------|--------|
| Particulars  | IOCL   | BPCL   | HPCL   | RIL/RBML/RSIL | NEL   | SHELL | MRPL & Others | Total  |
| POL Terminal/ Depots (Nos.) <sup>5</sup>                               | 126    | 83     | 81     | 18            | 3     |       | 6             | 317    |
| Aviation Fuel Stations (Nos.) <sup>@</sup>                             | 129    | 65     | 54     | 30            |       |       | 1             | 279    |
| Retail Outlets (total) (Nos.) <sup>^</sup>                             | 36,792 | 21,391 | 21,482 | 1,670         | 6,491 | 347   | 75            | 88,248 |
| out of which Rural ROs   | 11,934 | 5,371  | 5,313  | 130           | 2,094 | 89    | 25            | 24,956 |
| SKO/LDO agencies (Nos.)  | 3,849  | 927    | 1,638  |               |       |       |               | 6,414  |
| LPG Distributors (total) (Nos.) (PSUs only)                            | 12,869 | 6,247  | 6,321  |               |       |       |               | 25,437 |
| LPG Bottling plants (Nos.) (PSUs only) <sup>#</sup>                    | 98     | 53     | 56     |               |       |       | 3             | 210    |
| LPG Bottling capacity (TMTPA) (PSUs only) <sup>&amp;</sup>             | 10,782 | 4,890  | 6,530  |               |       |       | 203           | 22,405 |
| LPG active domestic consumers (Nos. crore) (PSUs only)                 | 14.8   | 8.2    | 8.7    |               |       |       |               | 31.6   |

<sup>5</sup>(Others=4 MRPL & 2 NRL); <sup>@</sup>(Others=ShellMRPL); <sup>^</sup>(Others=MRPL); <sup>#</sup>(Others=NRL-1, OIL-1, CPCL-1); <sup>&</sup>(Others=NRL-60, OIL-23, CPCL-120); RBML- Reliance BP Mobility Limited; RSIL- RBML Solutions India Ltd.

| Industry Alternate fuel infrastructure at Retail outlets (Nos. of ROs as on 01.11.2023) (Provisional) |       |      |       |           |     |       |      |       |
|---|-------|------|-------|-----------|-----|-------|------|-------|
| Alternate fuel  | IOCL  | BPCL | HPCL  | RBML/RSIL | NEL | SHELL | MRPL | Total |
| CNG LNG   | 1920  | 1663 | 1540  | 24        | 36  | 0     | 2    | 5185  |
| EV Charging   | 6314  | 855  | 2355  | 42        | 185 | 234   | 7    | 9992  |
| Auto LPG  | 326   | 44   | 126   | 61        | 52  | 0     | 0    | 609   |
| Compressed Bio-Gas outlets  | 55    | 41   | 32    | 1         | 0   | 0     | 0    | 129   |
| Total Retail outlets with at least one  | 7968  | 2304 | 3691  | 117       | 271 | 232   | 9    | 14592 |
| Solarization at Retail outlets  | 21768 | 5149 | 11340 | 74        | 963 | 0     | 0    | 39294 |



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**PART-D**

**LPG**

| 15. LPG consumption (Thousand Metric Tonne) |                 |                 |                |                |             |                 |                 |               |
|---|-----------------|-----------------|----------------|----------------|-------------|-----------------|-----------------|---------------|
| LPG category                                | 2021-22         | 2022-23         | October        |                |             | April-October   |                 |               |
|   |                 |                 | 2022-23        | 2023-24 (P)    | Growth (%)  | 2022-23         | 2023-24 (P)     | Growth (%)    |
| <b>1. PSU Sales :</b>                       |                 |                 |                |                |             |                 |                 |               |
| LPG-Packed Domestic                         | 25,501.6        | 25,381.5        | 2,109.9        | 2,187.6        | 3.7%        | 14,501.9        | 14,631.5        | 0.9%          |
| LPG-Packed Non-Domestic                     | 2,238.8         | 2,606.0         | 243.8          | 238.7          | -2.1%       | 1,391.7         | 1,598.3         | 14.8%         |
| LPG-Bulk                                    | 390.9           | 408.9           | 31.4           | 62.0           | 97.0%       | 210.4           | 346.1           | 64.5%         |
| Auto LPG                                    | 122.0           | 106.7           | 8.9            | 7.5            | -15.9%      | 64.1            | 55.2            | -13.9%        |
| <b>Sub-Total (PSU Sales)</b>                | <b>28,253.3</b> | <b>28,503.1</b> | <b>2,394.0</b> | <b>2,495.7</b> | <b>4.2%</b> | <b>16,168.1</b> | <b>16,631.1</b> | <b>2.9%</b>   |
| <b>2. Direct Private Imports*</b>           | <b>0.1</b>      | <b>0.1</b>      | <b>0.00</b>    | <b>0.01</b>    | <b>-</b>    | <b>0.02</b>     | <b>0.05</b>     | <b>166.4%</b> |
| <b>Total (1+2)</b>                          | <b>28,253.4</b> | <b>28,503.2</b> | <b>2,394.0</b> | <b>2,495.7</b> | <b>4.2%</b> | <b>16,168.1</b> | <b>16,631.1</b> | <b>2.9%</b>   |

\*Sept-Oct'23 DGCIIS data is prorated

| 16. LPG marketing at a glance       |           |       |       |       |       |       |       |        |       |       |       |       |        |                |
|-------------------------------------|-----------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|--------|----------------|
| Particulars<br>(As on 1st of April) | Unit      | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018   | 2019  | 2020  | 2021  | 2022  | 2023   | 1.11.23<br>(P) |
| LPG Active Domestic Customers       | (Lakh)    |       |       |       | 1486  | 1663  | 1988  | 2243   | 2654  | 2787  | 2895  | 3053  | 3140   | 3164           |
|                                     | Growth    |       |       |       |       | 11.9% | 19.6% | 12.8%  | 18.3% | 5.0%  | 3.9%  | 5.5%  | 2.9%   | 1.2%           |
| LPG Coverage (Estimated)            | (Percent) |       |       |       | 56.2  | 61.9  | 72.8  | 80.9   | 94.3  | 97.5  | 99.8  | -     | -      | -              |
|                                     | Growth    |       |       |       |       | 10.1% | 17.6% | 11.1%  | 16.5% | 3.4%  | 2.3%  | -     | -      | -              |
| PMUY Beneficiaries                  | (Lakh)    |       |       |       |       |       | 200.3 | 356    | 719   | 802   | 800   | 899.0 | 958.6  | 967.1          |
|                                     | Growth    |       |       |       |       |       | 77.7% | 101.9% | 11.5% | -0.2% | 12.2% | 6.6%  | 1.2%   |                |
| LPG Distributors                    | (No.)     | 11489 | 12610 | 13896 | 15930 | 17916 | 18786 | 20146  | 23737 | 24670 | 25083 | 25269 | 25386  | 25437          |
|                                     | Growth    | 9.0%  | 9.8%  | 10.2% | 14.6% | 12.5% | 4.9%  | 7.2%   | 17.8% | 3.9%  | 1.7%  | 0.7%  | 0.5%   | 0.4%           |
| Auto LPG Dispensing Stations        | (No.)     | 652   | 667   | 678   | 681   | 676   | 675   | 672    | 661   | 657   | 651   | 601   | 526    | 496            |
|                                     | Growth    | 7.9%  | 2.3%  | 1.6%  | 0.4%  | -0.7% | -0.1% | -0.4%  | -1.6% | -0.6% | -0.9% | -8.5% | -12.5% | -13.0%         |
| Bottling Plants                     | (No.)     | 184   | 185   | 187   | 187   | 188   | 189   | 190    | 192   | 196   | 200   | 202   | 208    | 210            |
|                                     | Growth    | 0.5%  | 0.5%  | 1.1%  | 0.0%  | 0.5%  | 0.5%  | 0.5%   | 1.1%  | 2.1%  | 2.0%  | 1.0%  | 4.5%   | 2.4%           |

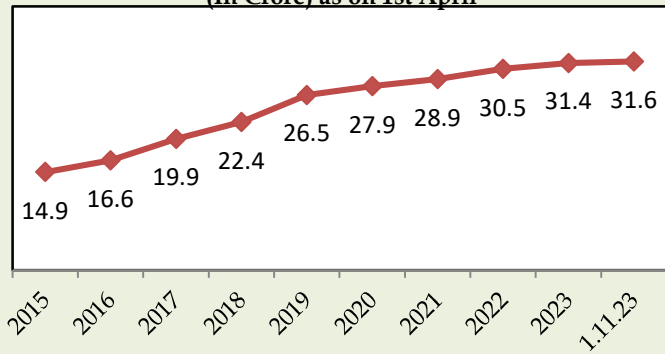
Source: PSU OMCs (IOCL, BPCL and HPCL)

1. Growth rates as on 01.11.2023 are with respect to figs as on 01.11.2022. Growth rates as on 1 April of any year are with respect to figs as on 1 April of previous year.

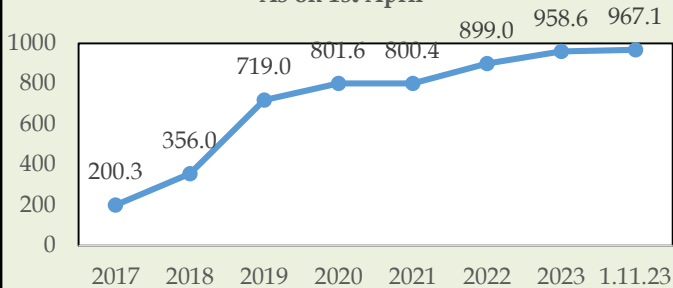
2. The LPG coverage is calculated by PSU OMCs based upon the active LPG domestic connections and the estimated number of households. The number of households has been projected by PSU OMCs based on 2011 census data. Factors like increasing nuclearization of families, migration of individuals/ families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



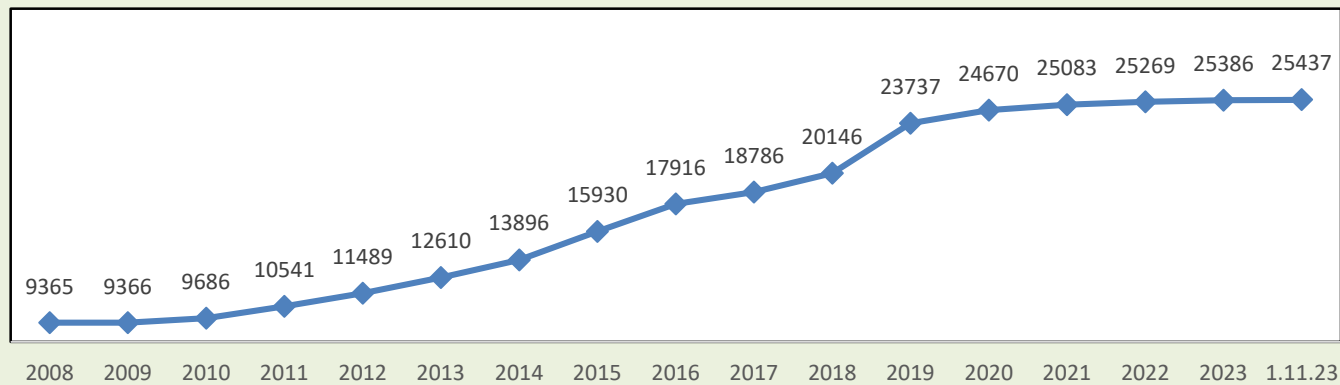
**Numbers of Active Domestic LPG Customers  
(In Crore) as on 1st April**



**Number of PMUY beneficiaries (in Lakhs)  
As on 1st April**



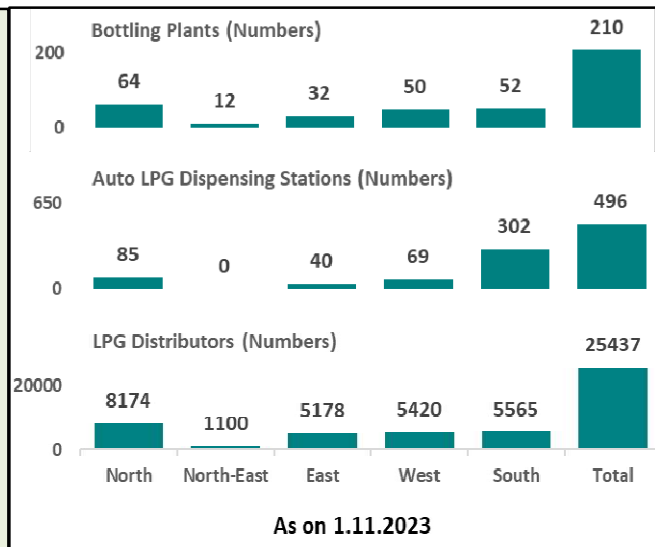
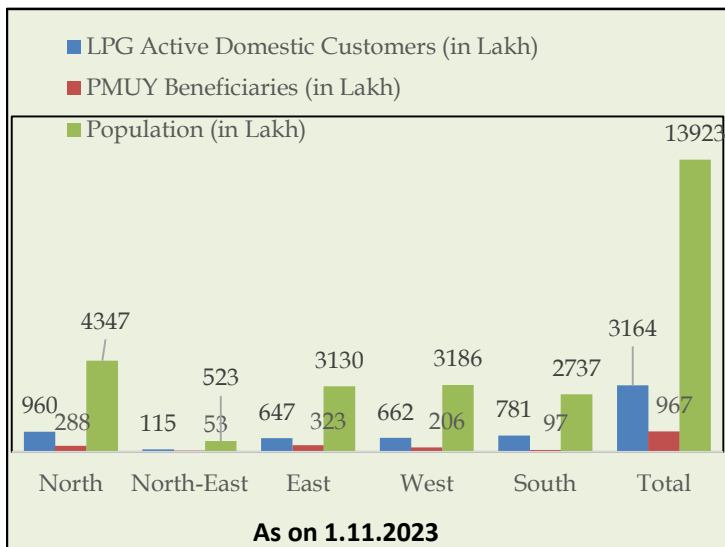
**Number of LPG distributors (as on 1st April)**



### 17-Region-wise data on LPG marketing (As on 01.11.2023)

| Particulars                             | North  | North-East | East   | West   | South  | Total   |
|---|--------|------------|--------|--------|--------|---------|
| LPG Active Domestic Customers (in Lakh) | 959.7  | 114.7      | 646.9  | 662.1  | 780.9  | 3164.2  |
| Population^ (in Lakh)                   | 4347.5 | 523.0      | 3130.2 | 3185.9 | 2736.7 | 13923.3 |
| PMUY Beneficiaries (in Lakh)            | 287.8  | 53.3       | 323.1  | 206.4  | 96.5   | 967.1   |
| LPG Distributors (Numbers)              | 8174   | 1100       | 5178   | 5420   | 5565   | 25437   |
| Auto LPG Dispensing Stations (Numbers)  | 85     | 0          | 40     | 69     | 302    | 496     |
| Bottling Plants* (Numbers)              | 64     | 12         | 32     | 50     | 52     | 210     |

\*Includes Numaligarh BP, Duliajan BP and CPCL BP. ^Population as on 1st July 2023 taken from RGI POPULATION PROJECTIONS 2011 – 2036





***PART-E***

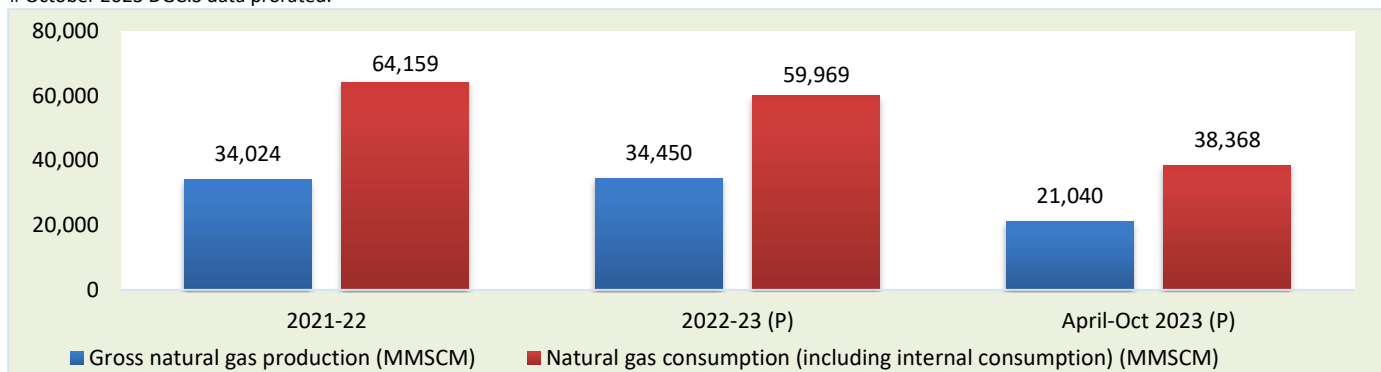
*Natural Gas*

## 18. Natural gas at a glance

(MMSCM)

| Details   | 2021-22<br>(P) | 2022-23<br>(P) | October        |                     |                | April-October  |                     |             |
|---|----------------|----------------|----------------|---------------------|----------------|----------------|---------------------|-------------|
|   |                |                | 2022-23<br>(P) | 2023-24<br>(Target) | 2023-24<br>(P) | 2022-23<br>(P) | 2023-24<br>(Target) | 2023-24 (P) |
| (a) Gross production  | 34,024         | 34,450         | 2,893          | 3,331               | 3,161          | 20,077         | 21,829              | 21,040      |
| - ONGC  | 20,629         | 19,969         | 1,683          | 1,756               | 1,634          | 11,759         | 12,087              | 11,385      |
| - Oil India Limited (OIL)                                     | 2,893          | 3,041          | 260            | 274                 | 273            | 1,786          | 1,831               | 1,791       |
| - Private / Joint Ventures (JVs)                              | 10,502         | 11,440         | 951            | 1,302               | 1,254          | 6,532          | 7,912               | 7,865       |
| (b) Net production<br>(excluding flare gas and loss)          | 33,131         | 33,664         | 2,829          |                     | 3,111          | 19,600         |                     | 20,615      |
| (c) LNG import <sup>#</sup>                                   | 31,028         | 26,304         | 1,977          |                     | 2,337          | 15,657         |                     | 17,753      |
| (d) Total consumption including internal<br>consumption (b+c) | 64,159         | 59,969         | 4,806          |                     | 5,447          | 35,256         |                     | 38,368      |
| (e) Total consumption (in BCM)                                | 64.2           | 60.0           | 4.8            |                     | 5.4            | 35.3           |                     | 38.4        |
| (f) Import dependency based on<br>consumption (%), {c/d*100}  | 48.4           | 43.9           | 41.1           |                     | 42.9           | 44.4           |                     | 46.3        |

# October 2023 DGCI data prorated.



## 19. Coal Bed Methane (CBM) gas development in India

|  |                    |          |        |
|--|--------------------|----------|--------|
| Prognosticated CBM resources   |                    | 91.8     | TCF    |
| Established CBM resources  |                    | 10.4     | TCF    |
| CBM Resources (33 Blocks)  |                    | 62.8     | TCF    |
| Total available coal bearing areas (India)   |                    | 32760    | Sq. KM |
| Total available coal bearing areas with MoPNG/DGH  |                    | 12254*   | Sq. KM |
| Area awarded   |                    | 20,460** | Sq. KM |
| Blocks awarded*  |                    | 36       | Nos.   |
| Exploration initiated (Area considered if any boreholes were drilled in the awarded block) |                    | 10670    | Sq. KM |
| Production of CBM gas  | April-Oct 2023 (P) | 379.93   | MMSCM  |
| Production of CBM gas  | Oct 2023 (P)       | 55.23    | MMSCM  |

\*ST CBM Block awarded & relinquished twice- in CBM Round II and Round IV -Area considered if any boreholes were drilled in the awarded block. \*\*MoPNG awarded 04 new CBM Blocks (Area 3862 sq. km) under Special CBM Bid Round 2021 in September 2022. \*\*\*Area considered if any boreholes were drilled in the awarded block.

## 19a. Status of Compressed Bio Gas (CBG) projects under SATAT (as on 01.11.2023) (Provisional)

| Particulars  | Units         | IOCL  | HPCL | BPCL | GAIL  | IGL | Total  |
|--|---------------|-------|------|------|-------|-----|--------|
| No. of CBG plants commissioned and initiated sale of CBG | No. of plants | 22    | 6    | 3    | 10    | 5   | 46     |
| Start of CBG sale from retail outlet(s)                  | Nos.          | 52    | 31   | 45   | 1     | 3   | 132    |
| Sale of CBG in 2022-23                                   | Tons          | 5,822 | 77   | 6    | 5322  |     | 11,227 |
| Sale of CBG in 2023-24 (up to October, 2023)             | Tons          | 3699  | 84   | 27   | 5737* |     | 9548   |
| Sale of CBG in CGD network                               | GA Nos.       |       |      |      | 18    |     | 18     |

\*Sale of CBG sourced under CBG-CGD synchronization scheme by GAIL through its own marketing channels as well as other CGDs/OMCs.

## 20. Common Carrier Natural Gas pipeline network as on 30.06.2023

| Nature of pipeline                  |          | GAIL          | GSPL         | PIL          | IOCL         | AGCL       | RGPL       | GGL       | DFPCL     | ONGC      | GIGL         | GITL       | Others*      | Total         |
|-------------------------------------|----------|---------------|--------------|--------------|--------------|------------|------------|-----------|-----------|-----------|--------------|------------|--------------|---------------|
| Operational                         | Length   | 10,932        | 2,716        | 1,479        | 143          | 107        | 304        | 73        | 42        | 24        |              |            |              | 15,820        |
|                                     | Capacity | 233.2         | 43.0         | 85.0         | 20.0         | 2.4        | 3.5        | 5.1       | 0.7       | 6.0       |              |            |              | -             |
| Partially commissioned <sup>#</sup> | Length   | 4,342         |              |              |              |            |            |           |           |           | 1,279        |            | 365          | 6,371         |
|                                     | Capacity |               |              |              |              |            |            |           |           |           |              |            |              | -             |
| <b>Total operational length</b>     |          | <b>15,274</b> | <b>2,716</b> | <b>1,479</b> | <b>529</b>   | <b>107</b> | <b>304</b> | <b>73</b> | <b>42</b> | <b>24</b> | <b>1,279</b> | <b>0</b>   | <b>365</b>   | <b>22,191</b> |
| Under construction                  | Length   | 4,327         | 100          |              | 1,110        |            |            |           |           |           | 1,053        | 220        | 4,361        | 11,171        |
|                                     | Capacity | -             | 3.0          |              |              |            |            |           |           |           | -            | -          | -            | -             |
| <b>Total length</b>                 |          | <b>19,601</b> | <b>2,816</b> | <b>1,479</b> | <b>1,639</b> | <b>107</b> | <b>304</b> | <b>73</b> | <b>42</b> | <b>24</b> | <b>2,332</b> | <b>220</b> | <b>4,726</b> | <b>33,363</b> |

Source: PNGRB; Length in KMs ; Authorized Capacity in MMSCMD (Arithmetic sum taken for each entity -capacity may vary from pipeline to pipeline); \*Others-APGDC, , IGL, IMC,GITL,HPPL Consortium of H-Energy. Total authorized Natural Gas pipelines including Tie-in connectivity, dedicated & STPL is 35,515 Kms (P)

## 21. Existing LNG terminals

| Location              | Promoters                    | Capacity as on 01.11.2023 | % Capacity utilisation (April-Sept 2023) |
|-----------------------|------------------------------|---------------------------|--|
| Dahej                 | Petronet LNG Ltd (PLL)       | 17.5 MMTPA                | 94.3                                     |
| Hazira                | Shell Energy India Pvt. Ltd. | 5.2 MMTPA                 | 39.8                                     |
| Dabhol                | Konkan LNG Limited           | *5 MMTPA                  | 29.0                                     |
| Kochi                 | Petronet LNG Ltd (PLL)       | 5 MMTPA                   | 19.9                                     |
| Ennore                | Indian Oil LNG Pvt Ltd       | 5 MMTPA                   | 16.2                                     |
| Mundra                | GSFC LNG Limited             | 5 MMTPA                   | 12.5                                     |
| Dhamra                | Adani Total Private Limited  | 5 MMTPA                   | 26.4                                     |
| <b>Total Capacity</b> |                              | <b>47.7 MMTPA</b>         |  |

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

## 22. Status of PNG connections and CNG stations across India (Nos.), as on 30.09.2023(P)

| State/UT<br>(State/UTs are clubbed based on the GAs authorised by PNGRB) | CNG Stations | PNG connections |            |            |
|--|--------------|-----------------|------------|------------|
|  |              | Domestic        | Commercial | Industrial |
| Andhra Pradesh   | 168          | 263,433         | 450        | 36         |
| Andhra Pradesh, Karnataka & Tamil Nadu                                   | 41           | 3,311           | 1          | 5          |
| Assam  | 7            | 53,107          | 1,375      | 450        |
| Bihar  | 111          | 113,900         | 95         | 4          |
| Bihar & Jharkhand  | 6            | 7,658           | 2          | 0          |
| Bihar & Uttar Pradesh  | 14           | 0               | 0          | 0          |
| Chandigarh (UT), Haryana, Punjab & Himachal Pradesh                      | 26           | 26,224          | 142        | 31         |
| Chhattisgarh   | 10           | 0               | 0          | 0          |
| Dadra & Nagar Haveli (UT)  | 7            | 11,563          | 55         | 60         |
| Daman & Diu (UT)   | 5            | 5,169           | 58         | 45         |
| Daman and Diu & Gujarat  | 15           | 3,325           | 15         | 0          |
| Goa  | 12           | 11,426          | 20         | 34         |
| Gujarat  | 999          | 3,128,413       | 22,790     | 5,758      |
| Haryana  | 357          | 362,734         | 937        | 2,010      |
| Haryana & Himachal Pradesh   | 10           | 10              | 0          | 0          |
| Haryana & Punjab   | 26           | 553             | 0          | 0          |
| Himachal Pradesh   | 10           | 6,559           | 8          | 0          |
| Jharkhand  | 83           | 114,540         | 14         | 2          |
| Karnataka  | 330          | 408,754         | 549        | 336        |
| Kerala   | 115          | 52,218          | 27         | 18         |
| Kerala & Puducherry  | 9            | 446             | 0          | 0          |
| Madhya Pradesh   | 254          | 218,603         | 400        | 475        |
| Madhya Pradesh and Chhattisgarh  | 7            | 0               | 0          | 0          |
| Madhya Pradesh and Rajasthan   | 32           | 586             | 0          | 0          |
| Madhya Pradesh and Uttar Pradesh   | 16           | 0               | 0          | 2          |
| Maharashtra  | 795          | 3,072,239       | 4,708      | 930        |
| Maharashtra & Gujarat  | 60           | 187,645         | 8          | 28         |
| Maharashtra and Madhya Pradesh   | 13           | 0               | 0          | 0          |
| National Capital Territory of Delhi (UT)                                 | 481          | 1,473,969       | 3,726      | 1,846      |

| State/UT<br>(State/UTs are clubbed based on the GAs authorised by PNGRB) | CNG Stations | PNG connections   |               |               |
|--|--------------|-------------------|---------------|---------------|
|  |              | Domestic          | Commercial    | Industrial    |
| Odisha   | 70           | 93,776            | 6             | 0             |
| Puducherry   | 2            | 0                 | 0             | 0             |
| Puducherry & Tamil Nadu  | 8            | 233               | 0             | 0             |
| Punjab   | 211          | 76,690            | 471           | 272           |
| Punjab & Rajasthan   | 12           | 0                 | 0             | 0             |
| Rajasthan  | 262          | 236,375           | 143           | 1,589         |
| Tamil Nadu   | 243          | 10,384            | 3             | 10            |
| Telangana  | 161          | 194,519           | 95            | 106           |
| Telangana and Karnataka  | 4            | 0                 | 0             | 0             |
| Tripura  | 18           | 60,209            | 506           | 62            |
| Uttar Pradesh  | 849          | 1,464,380         | 2,398         | 2,889         |
| Uttar Pradesh & Rajasthan  | 42           | 19,116            | 45            | 346           |
| Uttar Pradesh and Uttrakhand   | 26           | 12,089            | 0             | 0             |
| Uttarakhand  | 31           | 71,069            | 73            | 88            |
| West Bengal  | 77           | 1,623             | 3             | 1             |
| <b>Total</b>   | <b>6,035</b> | <b>11,766,848</b> | <b>39,123</b> | <b>17,433</b> |

Source: PNGRB

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

### 23. Domestic natural gas price and gas price ceiling (GCV basis)

| Period                      | Domestic Natural Gas price in | Gas price ceiling in US\$/MMBTU |
|-----------------------------|-------------------------------|---------------------------------|
| November 2014 - March 2015  | 5.05                          | -                               |
| April 2015 - September 2015 | 4.66                          | -                               |
| October 2015 - March 2016   | 3.82                          | -                               |
| April 2016 - September 2016 | 3.06                          | 6.61                            |
| October 2016 - March 2017   | 2.5                           | 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                            |
| April 2021 - September 2021 | 1.79                          | 3.62                            |
| October 2021 - March 2022   | 2.9                           | 6.13                            |
| April 2022 - September 2022 | 6.1                           | 9.92                            |
| October 2022 - March 2023   | 8.57                          | 12.46                           |
| 1 April 2023 - 7 April 2023 | 9.16                          | 12.12                           |

| Period                       | Domestic Gas calculated price in US\$/MMBTU | Domestic Gas ceiling price for ONGC/OIL in US\$/MMBTU | Period                      | HP-HT Gas price ceiling in US\$/MMBTU |
|------------------------------|---|---|-----------------------------|---------------------------------------|
| 8 April 2023 - 30 April 2023 | 7.92  | 6.50  | April 2023 - September 2023 | 12.12                                 |
| 1 May 2023 - 31 May 2023     | 8.27  | 6.50  |                             |                                       |
| 1 June 2023 - 30 June 2023   | 7.58  | 6.50  |                             |                                       |
| 1 July 2023 - 31 July 2023   | 7.48  | 6.50  |                             |                                       |
| 1 Aug 2023 - 31 Aug 2023     | 7.85  | 6.50  |                             |                                       |
| 1 Aug 2023 - 31 Aug 2023     | 7.85  | 6.50  |                             |                                       |
| 1 Oct 2023 - 31 Oct 2023     | 9.20  | 6.50  | October 2023 - March 2024   | 9.96                                  |
| 1 Nov 2023 - 30 Nov 2023     | 9.12  | 6.50  |                             |                                       |

Natural Gas prices are on GCV basis

### 24. CNG/PNG prices

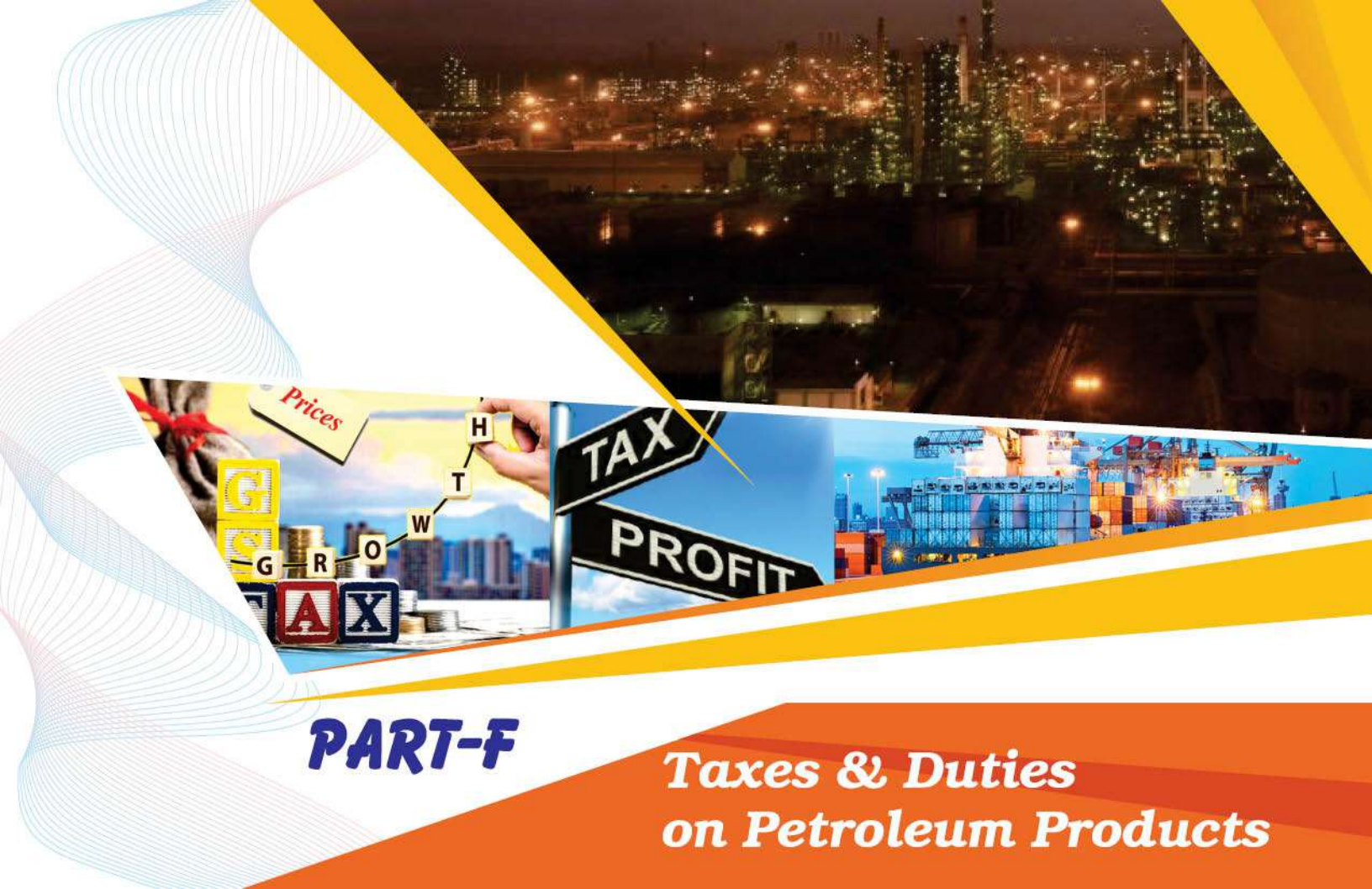
| City   | CNG (Rs/Kg) | PNG (Rs/SCM) | Source                   |
|--------|-------------|--------------|--------------------------|
| Delhi  | 74.59       | 48.59        | IGL website (08.11.2023) |
| Mumbai | 76.00       | 47.00        | MGL website (08.11.2023) |

### Indian Natural Gas Spot Price for Physical Delivery

| IGX Price Index Month | Avg. Price |          | Volume (MMSCM) | Source   |
|-----------------------|------------|----------|----------------|--|
|                       | INR/MMBtu  | \$/MMBtu |                |  |
| Oct 2023              | 1012       | 12.20    | 147.00         | As per IGX website: <a href="http://www.igxindia.com">www.igxindia.com</a> |

\*Prices are weighted average prices | \$1=INR 83.23 | 1 MMBtu=25.2 SCM (Data Excluding Ceiling Price Gas)





## ***PART-F***

# ***Taxes & Duties on Petroleum Products***

## 25. Information on Prices, Taxes and Under-recoveries/Subsidies

| International FOB prices/ Exchange rates (\$/bbl)   |                                  |  |                  | Price buildup of petroleum products (Rs./litre/Cylinder) * |                |                                |
|---|----------------------------------|--|------------------|--|----------------|--------------------------------|
| <b>Particulars</b>  | <b>2021-22</b>                   | <b>2022-23</b>   | <b>Oct 2023</b>  | <b>Particulars</b>   | <b>Petrol</b>  | <b>Diesel</b>                  |
| Crude oil (Indian Basket)   | 79.18                            | 93.15  | 90.08            | Price charged to dealers (excluding Excise Duty and VAT)   | 57.27          | 58.07                          |
| Petrol  | 89.66                            | 107.00   | 93.78            | Excise Duty  | 19.90          | 15.80                          |
| Diesel  | 88.45                            | 128.08   | 113.58           | Dealers' Commission (Average)                              | 3.84           | 2.64                           |
| Kerosene  | 85.31                            | 120.55   | 109.84           | VAT (incl VAT on dealers' commission)                      | 15.71          | 13.11                          |
| LPG (\$/MT)   | 692.67                           | 711.50   | 609.00           | <b>Retail Selling Price</b>                                | <b>96.72</b>   | <b>89.62</b>                   |
| FO (\$/MT)  | 445.25                           | 452.66   | 456.08           |  |                |                                |
| Naphtha (\$/MT)   | 698.25                           | 666.53   | 613.53           |  |                |                                |
| Exchange (Rs./\$)   | 74.51                            | 80.39  | 83.24            |  |                |                                |
| Customs, excise duty & GST rates  |                                  |  |                  |  |                |                                |
| <b>Product</b>  | <b>Basic customs duty #</b>      | <b>Excise duty</b>   | <b>GST rates</b> | <b>Particulars</b>   | <b>PDS SKO</b> | <b>Subsidised Domestic LPG</b> |
| Petrol  | 2.50%                            | Rs 19.90/Ltr   | **               | Price before taxes and dealers'/distributors' commission   | 67.41          | 786.91                         |
| Diesel  | 2.50%                            | Rs 15.80/Ltr   | **               | Dealers'/distributors' commission                          | 2.66           | 73.08                          |
| PDS SKO   | 5.00%                            | Not Applicable   | 5.00%            | GST (incl GST on dealers'/distributors' commission)        | 3.50           | 43.01                          |
| Non-PDS SKO   | 5.00%                            |  | 18.00%           | <b>Retail Selling Price</b>                                | <b>77.61</b>   | <b>903.00</b>                  |
| Domestic LPG  | Nil***                           |  | 5.00%            |  |                |                                |
| Non Domestic LPG  | 5.00%                            |  | 18.00%           |  |                |                                |
| Furnace Oil (Non-Fert)  | 2.50%                            |  | 18.00%           |  |                |                                |
| Naphtha (Non-Fert)  | 2.50%                            |  | 18.00%           |  |                |                                |
| ATF   | 5.00%                            |  | 11% *            | **   |                |                                |
| Crude Oil   | Rs.1/MT+<br>Rs.50/-MT as<br>NCCD | Rs.1/MT+<br>Cess@20% +<br>Rs.50 /-MT NCCD +<br>Rs.9800/ MT SAED<br>^^^ | **               |  |                |                                |
| # Social welfare surcharge @ 10% is levied on aggregate duties of Customs excluding CVD in lieu of IGST;<br>*2% for scheduled commuter airlines from regional connectivity scheme airports;<br>** GST Council shall recommend the date on which GST shall be levied on petroleum crude , HSD, MS, natural gas and ATF;<br>*** Basic Customs duty is Nil for import of domestic LPG sold to household consumers (including NDEC) by PSU OMCs. Basic Customs duty rate is 5% for other importers of domestic LPG;<br>^^ Effective 01.11.2023 SAED on crude oil. |                                  |  |                  |  |                |                                |

\*Petrol and Diesel at Delhi as per IOCL are as on 1st Nov 2023. PDS SKO at Mumbai as on 1st Nov 2023 and Subsidised Domestic LPG at Delhi as on 1st Nov 2023.

## 25. Information on Prices, Taxes and Under-recoveries/Subsidies

| DBTL/ PMUY Subsidy   |              |              |              |
|--|--------------|--------------|--------------|
| Domestic LPG under DBTL (Direct benefit transfer for LPG)  |              |              |              |
| Product  | 2020-21      | 2021-22      | 2022-23 (P)  |
|  | Rs./Crore    |              |              |
| DBTL subsidy   | 3,559        | -            | 823          |
| PME & IEC <sup>^</sup>   | 99           | 242          | 32           |
| <b>Total</b>   | <b>3,658</b> | <b>242</b>   | <b>855</b>   |
| <sup>^</sup> On payment basis (PME & IEC - Project Management Expenditure & Information , Education and Communication)<br>Note: During FY 2022-23 Government of India has approved a one-time grant of Rs. 22,000 crores to PSU OMCs towards under-recoveries in Domestic LPG. |              |              |              |
| PMUY   |              |              |              |
| Particulars  | 2020-21      | 2021-22      | 2022-23 (P)  |
|  | Rs./Crore    |              |              |
| PMUY   | -34          | 1,569        | 6,110        |
| PME & IEC <sup>^</sup>   | 110          | -            | -            |
| Pradhan Mantri Gareeb Kalyan Yojana  | 8,162        | -            | -            |
| <b>Total</b>   | <b>8,238</b> | <b>1,569</b> | <b>6,110</b> |

<sup>^</sup> On payment basis (PME & IEC - Project Management Expenditure & Information , Education and Communication)

| Sales & profit of petroleum sector (Rs. Crores)          |                 |                 |                 |        |
|--|-----------------|-----------------|-----------------|--------|
| Particulars  | 2022-23         |                 | H1-2023-24 (P)  |        |
|  | Turnover        | PAT             | Turnover        | PAT    |
| Upstream/midstream Companies (PSU)                       | 321,099         | 50,941          | 70,340          | 13,040 |
| Downstream Companies (PSU)                               | 19,16,438       | 1,138           | 4,66,763        | 30,505 |
| Standalone Refineries (PSU)                              | 245,272         | 9,875           | 45,025          | 1,484  |
| Private-RIL  | 566,805         | 44,205          | 125,715         | 9,726  |
| Borrowings of OMCs (Rs. Crores), As on                   |                 |                 |                 |        |
| Company  | Mar'22          | Mar'23          | June'23         |        |
| IOCL   | 110,799         | 132,495         | 101,012         |        |
| BPCL   | 24,123          | 35,855          | 27,939          |        |
| HPCL   | 43,193          | 64,517          | 51,698          |        |
| Petroleum sector contribution to Central/State Govt.     |                 |                 |                 |        |
| Particulars  | 2020-21         | 2021-22         | 2022-23         |        |
| Central Government                                       | 4,55,069        | 4,92,303        | 4,28,067        |        |
| % of total revenue receipts                              | 28%             | 23%             | 18%             |        |
| State Governments  | 2,17,650        | 2,82,122        | 3,20,651        |        |
| % of total revenue receipts                              | 8%              | 8%              | 8%              |        |
| <b>Total (Rs. Crores)</b>                                | <b>6,72,719</b> | <b>7,74,425</b> | <b>7,48,718</b> |        |
| Total Subsidy as a percentage of GDP (at current prices) |                 |                 |                 |        |
| Particulars  | 2020-21         | 2021-22         | 2022-23 (P)     |        |
| Petroleum subsidy  | 0.06            | 0.01            | 0.03            |        |

Note: GDP figure for 2020-21 & 2021-22 are Revised Estimates (RE) and 2022-23 are Second Advance Estimates (SAE).

\*\*Totals may not tally due to roundoff.



# **PART-G**

# **Miscellaneous**

## 26. Capital expenditure of PSU oil companies

(Rs in crores)

| Company                                   | 2020-21        | 2021-22        | 2022-23 (P)    | 2023-24 (P)     |                |
|---|----------------|----------------|----------------|-----------------|----------------|
|   |                |                |                | Target (Annual) | Apr-Oct'23 (P) |
| ONGC Ltd                                  | 26,441         | 26,621         | 29,209         | 30,125          | 17,714         |
| ONGC Videsh Ltd (OVL)                     | 5,351          | 4,836          | 2,723          | 3,229           | 1,637          |
| Oil India Ltd (OIL)                       | 12,802         | 4,239          | 5,057          | 4,896           | 2,722          |
| GAIL (India) Ltd                          | 5,560          | 6,970          | 8,313          | 7,750           | 5,036          |
| Indian Oil Corp. Ltd. (IOCL)              | 27,195         | 29,604         | 35,205         | 30,395          | 20,180         |
| Hindustan Petroleum Corp. Ltd (HPCL)      | 14,036         | 16,205         | 13,847         | 10,210          | 7,425          |
| Bharat Petroleum Corp. Ltd (BPCL)         | 10,697         | 11,449         | 11,527         | 10,000          | 5,796          |
| Mangalore Refinery & Petrochem Ltd (MRPL) | 2,218          | 604            | 641            | 820             | 607            |
| Chennai Petroleum Corp. Ltd (CPCL)        | 592            | 575            | 609            | 548             | 346            |
| Numaligarh Refinery Ltd (NRL)             | 981            | 3,403          | 6,615          | 8,290           | 4,069          |
| Balmer Lawrie Co. Ltd (BL)                | 42             | 23             | 46             | 40              | 26             |
| Engineers India Ltd (EIL)                 | 730            | 67             | 60             | 98              | 53             |
| <b>Total</b>                              | <b>106,642</b> | <b>104,596</b> | <b>113,853</b> | <b>106,401</b>  | <b>65,610</b>  |

Includes expenditure on investment in JV/subsidiaries.

(P) Provisional

Totals may not tally due to roundoff.

## 27. Conversion factors and volume conversion

| Weight to volume conversion    |                  |             |              | Volume conversion         |               |
|--------------------------------|------------------|-------------|--------------|---------------------------|---------------|
| Product                        | Weight (MT)      | Volume (KL) | Barrel (bbl) | From                      | To            |
| LPG                            | 1                | 1.844       | 11.60        | 1 US Barrel (bbl)         | 159 litres    |
| Petrol (MS)                    | 1                | 1.411       | 8.88         | 1 US Barrel (bbl)         | 42 US Gallons |
| Diesel (HSD)                   | 1                | 1.210       | 7.61         | 1 US Gallon               | 3.78 litres   |
| Kerosene (SKO)                 | 1                | 1.285       | 8.08         | 1 Kilo litre (KL)         | 6.29 bbl      |
| Aviation Turbine Fuel (ATF)    | 1                | 1.288       | 8.10         | 1 Million barrels per day | 49.8 MMTPA    |
| Light Diesel Oil (LDO)         | 1                | 1.172       | 7.37         | <b>Energy conversion</b>  |               |
| Furnace Oil (FO)               | 1                | 1.0424      | 6.74         | 1 Kilocalorie (kcal)      | 4.187 kJ      |
| Crude Oil                      | 1                | 1.170       | 7.33         | 1 Kilocalorie (kcal)      | 3.968 Btu     |
| <b>Exclusive Economic Zone</b> |                  |             |              | 1 Kilowatt-hour (kWh)     | 860 kcal      |
| 200 Nautical Miles             | 370.4 Kilometers |             |              | 1 Kilowatt-hour (kWh)     | 3,412 Btu     |

| Natural gas conversions                         |                  |  |  |                          |
|---|------------------|--|--|--------------------------|
| 1 Standard Cubic Metre (SCM)                    | 35.31 Cubic Feet |  | 1 MMBTU                                | 25.2 SCM @10000 kcal/SCM |
| 1 Billion Cubic Metres (BCM)/year of Gas        | 2.74 MMSCMD      |  | GCV (Gross Calorific Value)            | 10,000 kcal/SCM          |
| 1 Trillion Cubic Feet (TCF) of Gas Reserve      | 3.88 MMSCMD      |  | NCV (Net Calorific Value)              | 90% of GCV               |
| 1 Million Metric Tonne Per Annum (MMTPA) of LNG | 3.60 MMSCMD      |  | Gas required for 1 MW power generation | 4,541 SCM/day            |
| 1 MT of LNG                                     | 1,325 SCM        |  | Power generation from 1 MMSCMD of gas  | 220 MW                   |



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