FIPI

Federation of Indian Petroleum Industry

POLICY & ECONOMIC REPORT

OIL & GAS MARKET

APRIL 2024

Table of Contents

Table of Figures & Tables

Executive Summary

According to IMF's latest World Economic Outlook report, the world economy is expected to continue growing at 3.2 percent during 2024 and 2025, at the same pace as in 2023. A slight acceleration for advanced economies—where growth is expected to rise from 1.6 percent in 2023 to 1.7 percent in 2024 and 1.8 percent in 2025—will be offset by a modest slowdown in emerging market and developing economies from 4.3 percent in 2023 to 4.2 percent in both 2024 and 2025. In the United States, growth is projected to increase to 2.7 percent in 2024, before slowing to 1.9 percent in 2025, as gradual fiscal tightening and a softening in labor markets slow aggregate demand.

In case of India, the Reserve Bank of India released its latest bi-monthly RBI Monetary Policy Statement for FY 2025 on April 5th, 2024. The key highlights are given below: -

- Benchmark interest rate or repo rate kept unchanged at 6.5%
- GDP growth for 2024-25 retained at 7%, lower than 7.6% last fiscal. The GDP growth target for Q1 FY25 was adjusted to 7.1% from the previous 7.2%, while for Q2 FY25, it was revised to 6.9%, up from the previous forecast of 6.8%. The growth rate for Q3 FY24 remains unchanged at 7% from previous forecasts. In the final quarter of the fiscal year, the RBI revised the growth rate to 7% from the previous 6.9%.
- Outlook for agriculture, rural activity appears bright, with good rabi wheat crop and improved prospects of kharif crops, due to expected normal monsoon
- Retail inflation to average 4.5% this fiscal, lower than 5.4% in FY23
- Net inflows by foreign portfolio investors (FPI) stood at $41.6 billion during 2023-24, the second highest level of FPI inflow after 2014-15
- Current Account Deficit in 2024-25 to remain at a level that is both viable and eminently manageable

According to the HSBC India Manufacturing Purchasing Managers' Index, the headline HSBC Flash India Composite PMI Output Index rose from a final reading of 61.8 in March to 62.2 in April 2024. The strong performance in manufacturing and service sectors, driven by increased new orders, had resulted in the highest composite output index since June 2010. While the manufacturing PMI inched up to 59.1 in April 2024, the HSBC Flash India Services PMI Business Activity Index rose to 61.7 in April 2024.

According to RBI, India's retail inflation eased to a five- month low at 4.85 per cent on an annual basis in March 2024 as against 5.09 per cent in the previous month. The number has remained within the Reserve Bank of India's (RBI) tolerance band of 2-6 per cent. The inflation in the food basket, which accounts for nearly half of the overall consumer price basket was at 8.52 per cent in March, down from 8.66 per cent in February 2024. According to the Monetary Policy Committee (MPC), CPI inflation is projected at 5.4 % for 2023-24 with Q4 at 5.0 %. Assuming a normal monsoon next year, CPI inflation for 2024-25 is projected at 4.5 % with Q1 at 5.0 %; Q2 at 4.0 %; Q3 at 4.6 %; and Q4 at 4.7 %. The MPC has decided to keep the policy repo rate unchanged at 6.50 %.

According to the latest data available from the Centre for Monitoring Indian Economy (CMIE), unemployment rate in India declined to 7.6 per cent in March 2024 from 8 per cent in February 2024. The unemployment rate eased in urban India as well as in rural India. Rural unemployment rate fell to 7.4 per cent in March from 7.8 per cent in February. Urban unemployment rate fell from 8.5 per cent to 8.2 per cent.

As far as oil and gas industry is concerned, benchmark crude oil prices continued their upward trajectory in March and early April, as heightened geopolitical tensions coincided with the prospect of a tighter supply-demand balance through the remainder of the year. Brent crude futures breached the symbolic $90/bbl threshold early April, up nearly $8/bbl from early March, reaching the highest level since October 2023, amid heightened tensions between Israel and Iran.

Crude spot prices rose in March, boosted by the rally in futures prices, higher financial flows in futures markets, and improving sentiments regarding oil market fundamentals. Ongoing geopolitical tensions added to the supply risk premium. The steady recovery of crude demand from refineries, mainly in the US, which coincided with the gradual exit from the heavy refinery maintenance, alongside the prospects of strong supply/demand fundamentals in 2Q24 and 3Q24, further lifted market sentiment.

Lower US crude stocks and a steady recovery in US crude intakes buoyed prices over the month of March. US refinery net input of crude oil rose by 1.22 mb/d between the weeks of 23 February and 29 March. However, spot prices in the Atlantic Basin came under pressure, as crude demand in the spot market softened in Europe, due to unplanned refinery outages that came in addition to the seasonal spring maintenance season.

Hedge funds and other money managers turned more bullish and closed out more bearish positions, raising their futures and options net-long positions in crude by 18.1% in March. They were buyers of an equivalent of about 78 million barrels (mb) between the weeks of 27 February 2024 and 26 March 2024.

Natural gas spot prices at the US Henry Hub benchmark averaged $1.49 per million British thermal units (MMBtu) in March 2024. Henry Hub's natural gas prices experienced another sharp decline in March 2024. Prices averaged in March at $1.5/MMBTU a three-decade low. Warmer weather remained a drag on demand, exacerbating the oversupply that is currently hanging over the market.

Economy in Focus

1. A snapshot of the global economy

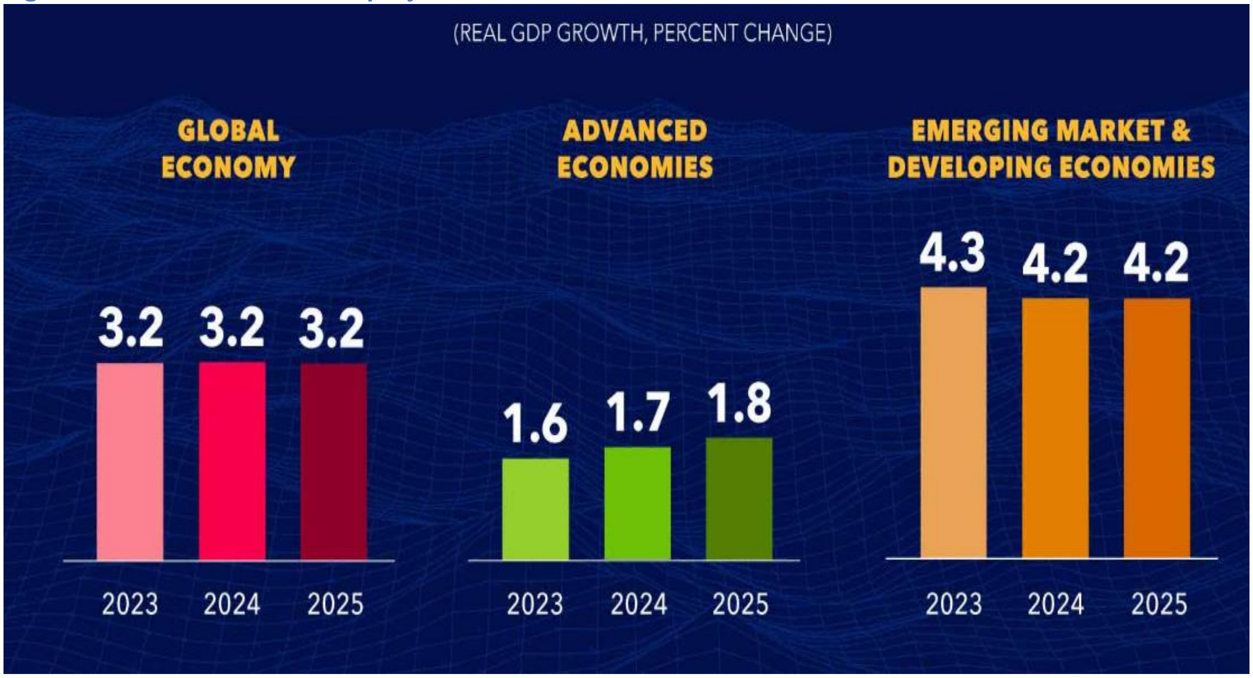
Global economic growth

- According to IMF's latest World Economic Outlook report, the world economy is expected to continue growing at 3.2 percent during 2024 and 2025, at the same pace as in 2023.

- A slight acceleration for advanced economies—where growth is expected to rise from 1.6 percent in 2023 to 1.7 percent in 2024 and 1.8 percent in 2025—will be offset by a modest slowdown in emerging market and developing economies from 4.3 percent in 2023 to 4.2 percent in both 2024 and 2025.

- In the United States, growth is projected to increase to 2.7 percent in 2024, before slowing to 1.9 percent in 2025, as gradual fiscal tightening and a softening in labor markets slow aggregate demand.

Figure 1: Global GDP Growth projections



Source- IMF

- Growth in the euro area is projected to recover from its low rate of an estimated 0.4 percent in 2023, to 0.8 percent in 2024 and 1.5 percent in 2025. Stronger household consumption and a fall in inflation supports growth in real income, is expected to drive the recovery.

Figure 2: Global GDP Growth projections

(Real GDP, annual percent change)	2023	PROJECTIONS 2024	2025
World Output	3.2	3.2	3.2
Advanced Economies	1.6	1.7	1.8
United States	2.5	2.7	1.9
Euro Area	0.4	0.8	1.5
Germany	-0.3	0.2	1.3
France	0.9	0.7	1.4
Italy	0.9	0.7	0.7
Spain	2.5	1.9	2.1
Japan	1.9	0.9	1.0
United Kingdom	0.1	0.5	1.5
Canada	1.1	1.2	2.3
Other Advanced Economies	1.8	2.0	2.4
Emerging Market and Developing Economies	4.3	4.2	4.2
Emerging and Developing Asia	5.6	5.2	4.9
China	5.2	4.6	4.1
India	7.8	6.8	6.5
Emerging and Developing Europe	3.2	3.1	2.8
Russia	3.6	3.2	1.8
Latin America and the Caribbean	2.3	2.0	2.5
Brazil	2.9	2.2	2.1
Mexico	3.2	2.4	1.4
Middle East and Central Asia	2.0	2.8	4.2
Saudi Arabia	-0.8	2.6	6.0
Sub-Saharan Africa	3.4	3.8	4.0
Nigeria	2.9	3.3	3.0
South Africa	0.6	0.9	1.2
Memorandum			
Emerging Market and Middle-Income Economies	4.4	4.1	4.1
Low-Income Developing Countries	4.0	4.7	5.2

Source- IMF

- Growth in China is projected to slow from 5.2 percent in 2023 to 4.6 percent in 2024 and 4.1 percent in 2025 as the positive effects of one-off factors including the post pandemic boost to consumption and fiscal stimulus ease and weakness in the property sector persists.

- Growth in India is projected to remain strong at 6.8 percent in 2024 and 6.5 percent in 2025, with the robustness reflecting continuing strength in domestic demand and a rising working-age population.

- The moderation reflects a prospective decline of growth in Russia from 3.2 percent in 2024 to 1.8 percent in 2025 as the effects of high investment and robust private consumption, supported by wage growth in a tight labor market, fade.

- Growth in the Middle East and Central Asia is projected to rise from an estimated 2.0 percent in 2023 to 2.8 percent in 2024 and 4.2 percent in 2025. The revision reflects a downward adjustment in the 2024 growth forecast for Iran driven by lower non-oil activity and oil revenues, as well as for several smaller economies.

Global inflation

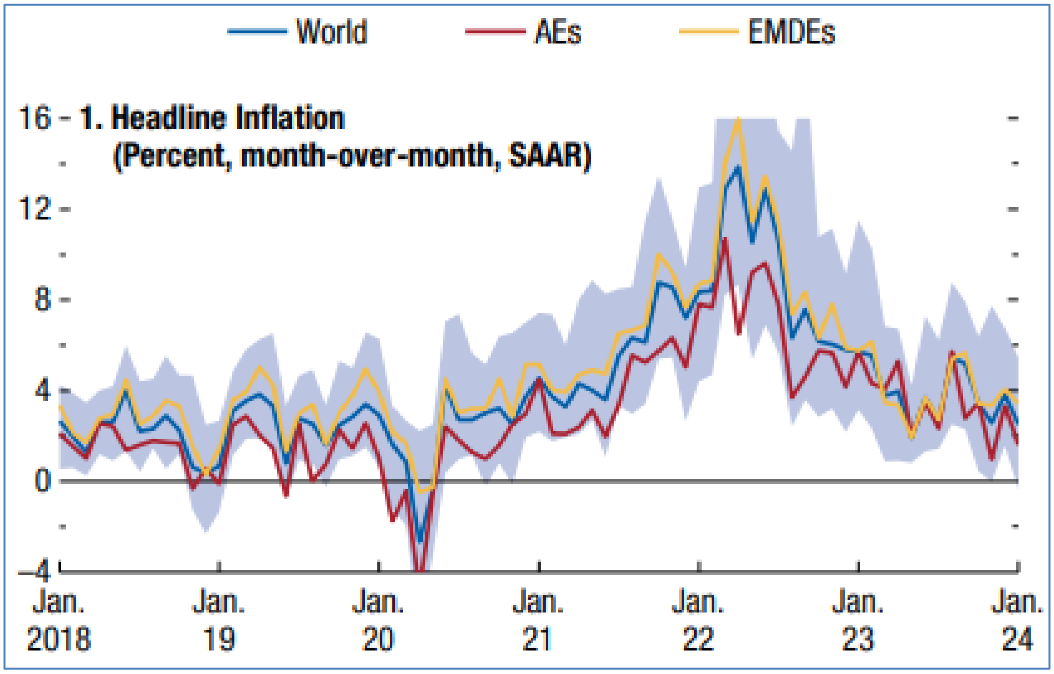
- According to IMF, global inflation is expected to decline steadily, from 6.8 percent in 2023 to 5.9 percent in 2024 and 4.5 percent in 2025, with advanced economies returning to their inflation targets sooner than emerging market and developing economies.

- In the last quarter of 2023, headline inflation for advanced economies was 2.3 percent on a quarter-over-quarter annualized basis, down from a peak of 9.5 percent in the second quarter of 2022.

- For emerging market and developing economies, inflation was 9.9 percent in the last quarter of 2023, down from a peak of 13.7 percent in the first quarter of 2022, but this average was driven by high inflation in a few countries; for the median emerging market and developing economy, inflation declined to 3.9 percent.

- The drivers of declining inflation differ by country but include the effects of still-tight monetary policies, a related softening in labor markets, and fading pass-through effects from earlier declines in relative prices, notably in that of energy.

Figure 3: Global inflation



Source- IMF

Global Trade

- According to IMF, world trade growth is projected at 3.0 percent in 2024 and 3.3 percent in 2025.

- Trade growth is expected to remain below its historical (2000–19) annual average growth rate of 4.9 percent over the medium term, at 3.2 percent in 2029.

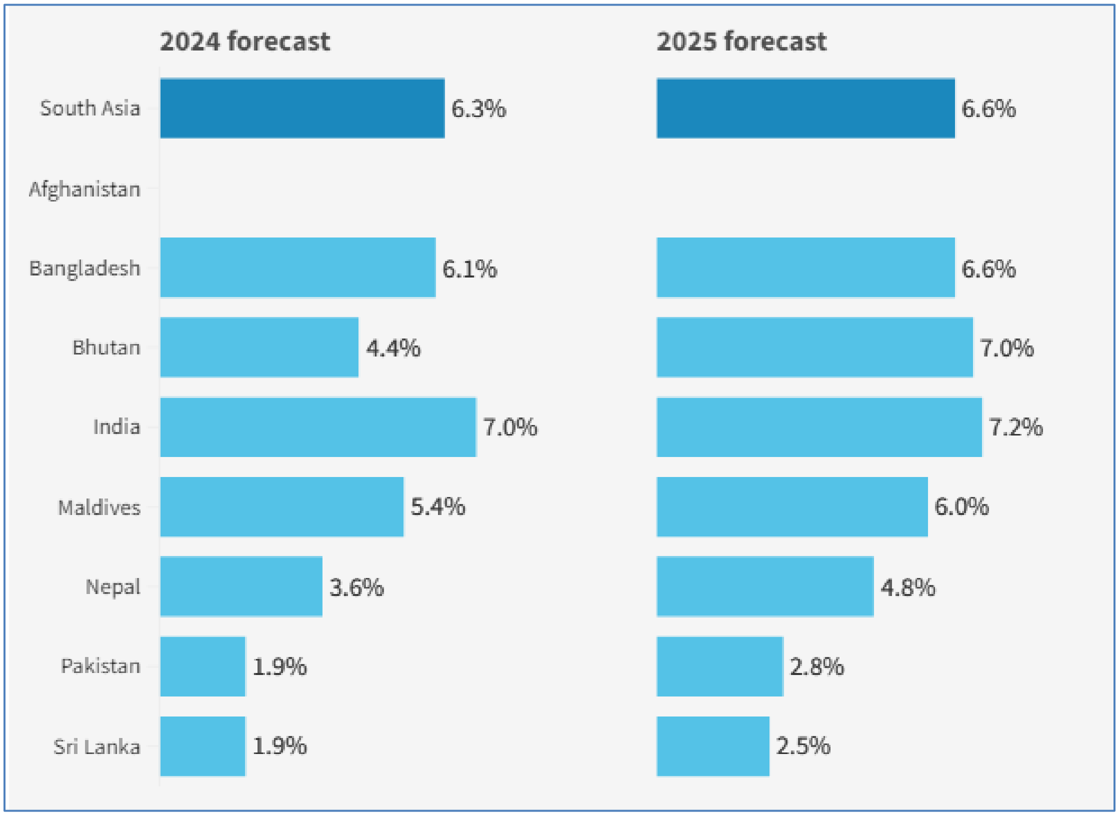
- IMF analysis indicates that growth in trade flows between geopolitical blocs has declined significantly since then compared with growth of trade within blocks. This reallocation of trade flows is occurring in the context of rising cross-border trade restrictions, with about 3,200 new restrictions on trade in 2022 and about 3,000 in 2023, up from about 1,100 in 2019, according to Global Trade Alert data, and increased concerns about supply-chain resilience and national security.

2. **South Asia remains the fastest growing subregion in Asia as domestic demand improves on moderating inflation in most economies**.

- Growth in the South Asian region will continue to exceed the regional average, reaching 6.3% in 2024 and 6.6% in 2025.

- In India, growth is forecast to remain strong at 7.0% for fiscal year (FY) 2024 (ending on 31 March 2025), albeit slower than the 7.6% growth in FY2023, and is expected to accelerate to 7.2% in FY2025 as rising consumption complements continued investment growth. Services will remain the growth mainstay, with manufacturing expected to play a strong supporting role.

Figure 4: South Asia: GDP



Source- ADB Outlook April 2024

- In Bangladesh, garment exports will push growth up to 6.1% in FY2024 (ending on 30 June 2024) and 6.6% in FY2025. Private consumption is expected to rise as inflation eases, while public investment will increase due to large infrastructure projects in energy and railways.

- Hydropower investment and the commissioning of a major hydropower plant will drive growth in Bhutan.

- In Maldives, tourism and construction will boost growth in 2024 and 2025.

- Growth in Nepal will pick up in FY2024 (ending in mid-July 2024) and FY2025 on rising domestic demand and hydroelectric output, and a continued recovery in tourism.

3. World Trade Organization (WTO) forecasts rebound in global trade but warns of downside risks

- In the latest “Global Trade Outlook and Statistics” report, WTO estimates that inflationary pressures are expected to abate this year, allowing real incomes to grow again particularly in advanced economies, thus providing a boost to the consumption of manufactured goods.

- High energy prices and inflation continued to weigh heavily on demand for manufactured goods, resulting in a 1.2% decline in world merchandise trade volume for 2023. The decline was larger in value terms, with merchandise exports down 5% to US$ 24.01 trillion. Trade developments on the services side were more upbeat, with commercial services exports up 9% to US$ 7.54 trillion, partly offsetting the decline in goods trade.

- The report estimates global GDP growth at market exchange rates will remain mostly stable over the next two years at 2.6% in 2024 and 2.7% in 2025, after slowing to 2.7% in 2023 from 3.1% in 2022. The contrast between the steady growth of real GDP and the slowdown in real merchandise trade volume is linked to inflationary pressures, which had a downward effect on consumption of trade-intensive goods, particularly in Europe and North America.

Figure 5: World merchandise trade volume and GDP growth

Source- WTO

- The report warns that geopolitical tensions and policy uncertainty could limit the extent of the trade rebound. Food and energy prices could again be subject to price spikes linked to geopolitical events

- The report mentions on the Red Sea crisis that while the economic impact of the Suez Canal disruptions stemming from the Middle East conflict has so far been relatively limited, some sectors, such as automotive products, fertilizers, and retail, have already been affected by delays and freight costs hikes.

- The report furthermore presents new data indicating that geopolitical tensions have affected trade patterns marginally. Bilateral trade between the United States and China, which reached a record high in 2022, grew 30% less in 2023 than did their trade with the rest of the world.

- World commercial services trade grew 9% in 2023 despite a decline in freight transport, due to recovering international travel and surging digitally delivered services. Global exports of digitally delivered services soared to US$ 4.25 trillion in 2023, up 9.0% year-on-year, and accounted for 13.8% of world exports of goods and services.

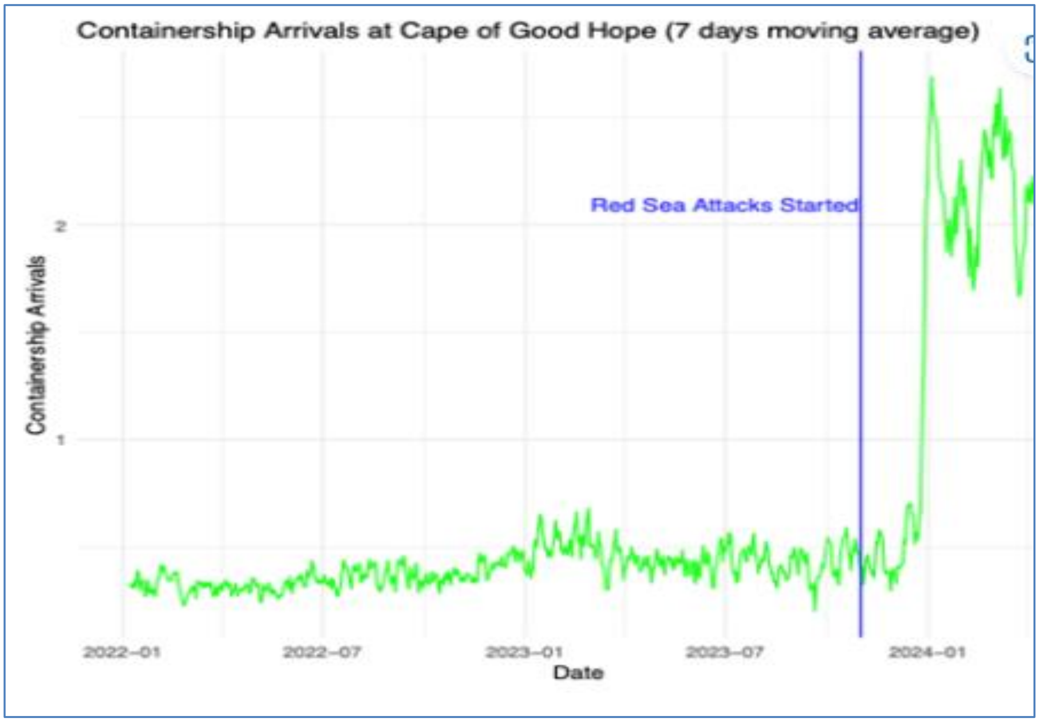
4. Red Sea Crisis and implications for trade facilitation in Africa

- The end of 2023 and the first quarter of 2024 are marked by major disruptions to global maritime trade flows due to the Red Sea crisis.

- This new wave of disruption follows the unprecedented global logistics crunch caused by the COVID-19 pandemic and its fallout in 2020-2022 and the war in Ukraine since 2022. It also compounds the challenges caused by the reduced ship transits in the Panama Canals resulting from the impact of drought on water levels.

- Security threats in the Red Sea have caused a significant redirection of ship arrivals and transits culminating in far-reaching global trade and transport repercussions. Ships across all shipping segments on the Asia-Europe and Asia-Atlantic trade lane have diverted their initial trajectory and started sailing around Africa’s Cape of Good Hope. As a result, ships are now travelling longer distances and facing higher operational costs. The rerouting of vessels is creating pressure on the supply side.

Figure 6: Cape of Good Hope Containership Arrivals



Source- UNCTAD

- The Red Sea crisis has also impacted African ports and causing congestion as rerouting entails the need for more vessels to call at African ports including for bunkering services.

- The disruption in the Red Sea and increased shipping traffic around Africa underscore the need for African countries and ports to scale up ongoing efforts aimed at implementing trade facilitation measures, taking up digitalization and mainstreaming green processes to reduce port congestion and expedite the clearance of goods.

- For African trade, the disruption of the Suez Canal is significant since the European market is the most important trading partner accounting for 26% of all imports in terms of value into African countries, and the first destination market for 26% of all African exports in terms of value. Foreign trade for several East African countries is highly dependent on the Suez Canal. It is estimated that approximately 31% of foreign trade by volume for Djibouti is channeled through the Suez Canal. For Kenya, the share is 15%, and for Tanzania it is 10%.

- The disruption of the Suez Canal has created shortage of not only perishable but also and normal containers due to the increased cargo delivery time such as such as avocado in East Africa but also tea and coffee supply chains.

- In times of crisis, as shown during the COVID-19 pandemic and the war in Ukraine, strengthening the trade facilitation ecosystem is key to keeping trade flowing by reducing port congestion and building the resilience of the border agencies. While, at this stage, it is difficult to measure the long-term impact of the Red Sea crisis on the African economies, it is likely that the unexpected increase in shipping traffic around Africa and higher demand for port and bunkering services will impact port activities and performance.

- Increased port calls that boost the maritime business could stimulate African economies while at the same time incentivize implementation of trade facilitation measures to expedite the clearance of goods. Examples of such measures include the digitalization of trade procedures and investment in hinterland infrastructure and services along transport and trade corridors.

5. Indian Economy

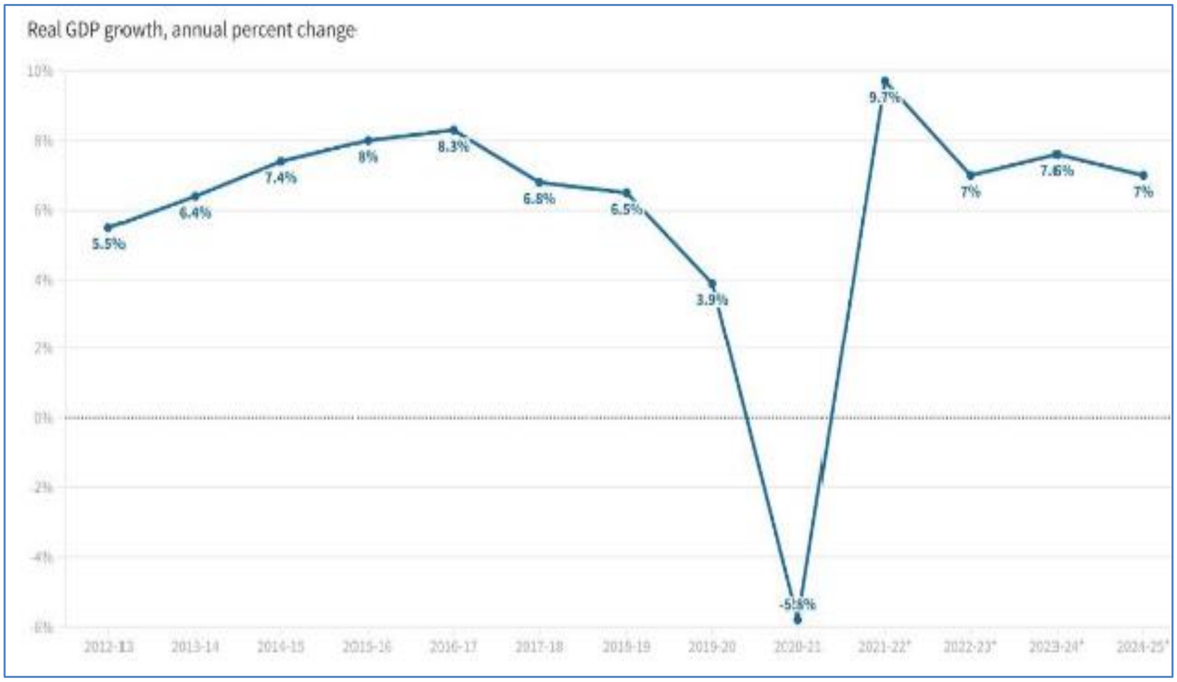
India’s economic growth

The Reserve Bank of India released its latest bi-monthly RBI Monetary Policy Statement for FY 2025 on April 5th, 2024. The key highlights are given below: -

- Benchmark interest rate or repo rate kept unchanged at 6.5%
- GDP growth for 2024-25 retained at 7%, lower than 7.6% last fiscal. The GDP growth target for Q1 FY25 was adjusted to 7.1% from the previous 7.2%, while for Q2 FY25, it was revised to 6.9%, up from the previous forecast of 6.8%. The growth rate for Q3 FY24 remains unchanged at 7% from previous forecasts. In the final quarter of the fiscal year, the RBI revised the growth rate to 7% from the previous 6.9%.

- Outlook for agriculture, rural activity appears bright, with good rabi wheat crop and improved prospects of kharif crops, due to expected normal monsoon
- Retail inflation to average 4.5% this fiscal, lower than 5.4% in FY23
- Net inflows by foreign portfolio investors (FPI) stood at $41.6 billion during 2023-24, the second highest level of FPI inflow after 2014-15
- Current Account Deficit in 2024-25 to remain at a level that is both viable and eminently manageable

Figure 7: India's GDP growth rate

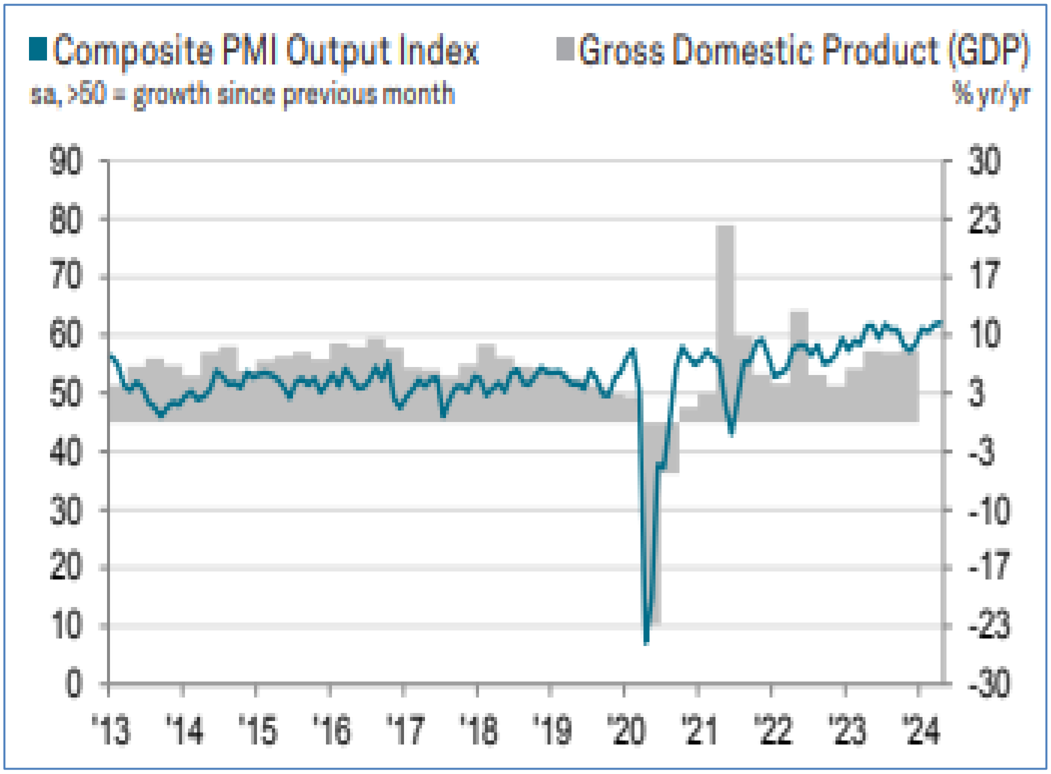


Source- MoSPI

India PMI

- According to the HSBC India Manufacturing Purchasing Managers' Index, the headline HSBC Flash India Composite PMI Output Index rose from a final reading of 61.8 in March to 62.2 in April 2024.

Figure 8: India Output PMI Index



Source- HSBC

- The strong performance in manufacturing and service sectors, driven by increased new orders, had resulted in the highest composite output index since June 2010.
- While the manufacturing PMI inched up to 59.1 in April 2024, the HSBC Flash India Services PMI Business Activity Index rose to 61.7 in April 2024.
- Growth in India remained broad-based across the manufacturing and service sectors. The former saw the sharper rate of increase, albeit one that was softer than in March. In the service economy, business activity rose to the greatest extent in three months.
- Private sector sales expanded for the thirty-third successive month in April and at the quickest pace in just under 14 years.

Inflation in India

- According to RBI, India's retail inflation eased to a five- month low at 4.85 per cent on an annual basis in March 2024 as against 5.09 per cent in the previous month.
- The number has remained within the Reserve Bank of India's (RBI) tolerance band of 2-6 per cent.
- The inflation in the food basket, which accounts for nearly half of the overall consumer price basket was at 8.52 per cent in March, down from 8.66 per cent in February 2024.

- Fuel prices fell 3.2% year-on-year, compared with a 0.77% fall in February 2024.
- According to the Monetary Policy Committee (MPC), CPI inflation is projected at 5.4 % for 2023-24 with Q4 at 5.0 %.
- Assuming a normal monsoon next year, CPI inflation for 2024-25 is projected at 4.5 % with Q1 at 5.0 %; Q2 at 4.0 %; Q3 at 4.6 %; and Q4 at 4.7 %.
- The MPC has decided to keep the policy repo rate unchanged at 6.50 %.

Unemployment in India

- According to the latest data available from the Centre for Monitoring Indian Economy (CMIE), unemployment rate in India declined to 7.6 per cent in March 2024 from 8 per cent in February 2024.
- The unemployment rate eased in urban India as well as in rural India. Rural unemployment rate fell to 7.4 per cent in March from 7.8 per cent in February. Urban unemployment rate fell from 8.5 per cent to 8.2 per cent.
- Unemployment rate dropped in March alongside a fall in labour participation rate (LPR) as well as employment rate. LPR in India inched down to 41.1 per cent in March, from 41.4 per cent in the previous month. Employment rate, which is the proportion of employed persons in the working age population, fell from 38.1 per cent to 37.9 per cent in March 2024.

India's external position

India's forex reserves

- According to latest data released by Reserve Bank of India, India's foreign exchange reserves rose for the seventh straight week to hit a record high of $648.56 billion as of April 5, 2024.
- However, the subsequent week, the country's foreign exchange reserves declined by USD 5.401 billion to USD 643.162 billion in the April 12 week.
- India's foreign currency assets (FCA), the biggest component of the forex reserves, declined by USD 6.513 billion to USD 564.653 billion,
- Gold reserves during the week rose by USD 1.241 billion to USD 55.798 billion.
- Reserve position in the IMF amounted to $4.69 billion.

India's foreign trade position

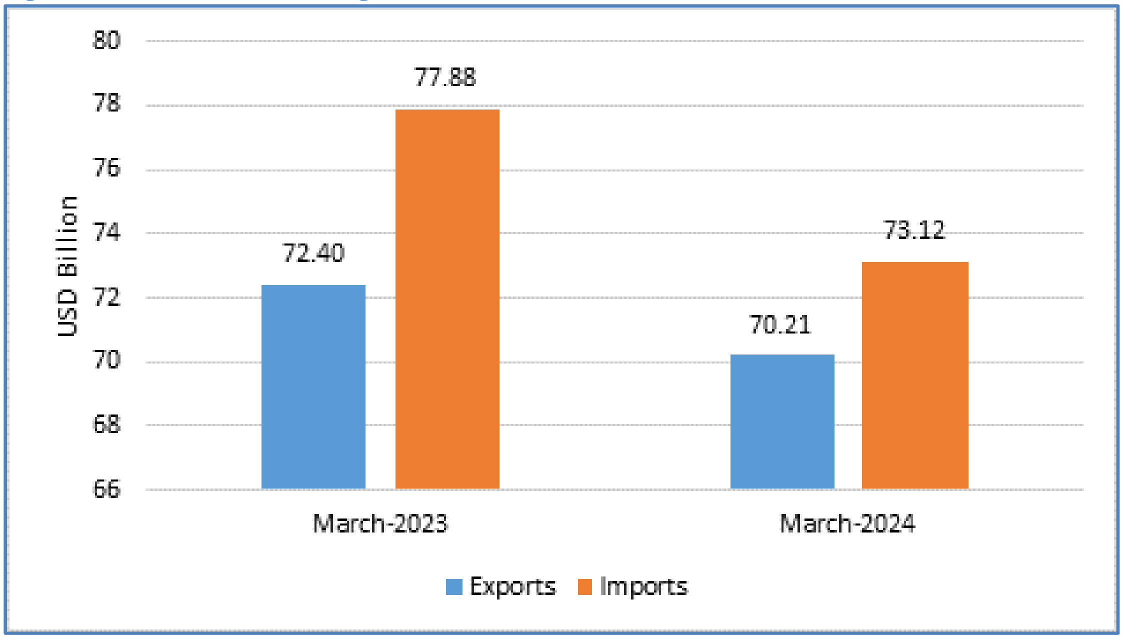
- India's overall exports (Merchandise and Services combined) in March 2024 is estimated to be USD 70.21 Billion, exhibiting a negative growth of (-) 3.01 per cent over March 2023.
- Overall imports in March 2024 is estimated to be USD 73.12 Billion, exhibiting a negative growth of (-) 6.11 per cent over March 2023.

Table 1: Trade during March 2024

		March 2024 (USD Billion)	March 2023 (USD Billion)
Merchandise	Exports	41.68	41.96
	Imports	57.28	60.92
Services	Exports	28.54	30.44
	Imports	15.84	16.96
Overall Trade (Merchandise +Services)	Exports	70.21	72.40
	Imports	73.12	77.88
	Trade Balance	**-2.91**	**-5.48**

Source- Ministry of Commerce & Industry

Figure 9: Overall Trade during March 2024



Source- RBI

- For the month of March 2024, under merchandise exports, 17 of the 30 key sectors exhibited growth in March 2024 as compared to same period last year (March 2023). These include Handicrafts Excl. Hand Made Carpet (128.39%), Spices (51.01%), Coffee (40.3%), Organic & Inorganic Chemicals (39.67%), Tobacco (35.81%), Tea (27.05%), Electronic Goods (23.12%), Carpet

(16.23%), Drugs & Pharmaceuticals (12.73%), Plastic & Linoleum (11.16%), Engineering Goods (10.66%), Meat, Dairy & Poultry Products (8.72%), Cereal Preparations & Miscellaneous Processed Items (8.23%), Cotton Yarn/Fabs./Made-Ups, Handloom Products Etc. (6.78%), Fruits & Vegetables (2.92%), RMG Of All Textiles (1.7%) and Ceramic Products & Glassware (0.22%).

- Under merchandise imports, 18 out of 30 key sectors exhibited negative growth in March 2024. These include Gold (-53.56%), Newsprint (-36.42%), Fertilisers, Crude & Manufactured (-36.23%), Leather & Leather Products (-25.67%), Vegetable Oil (-24.29%), Metalliferous Ores & Other Minerals (-22.15%), Chemical Material & Products (-20.26%), Artificial Resins, Plastic Materials, Etc. (-19.87%), Organic & Inorganic Chemicals (-19.29%), Pearls, Precious & Semi-Precious Stones (-17.69%), Textile Yarn Fabric, Made-Up Articles (-12.17%), Cotton Raw & Waste (-11.29%), Transport Equipment (-10.7%), Iron & Steel (-10.1%), Wood & Wood Products (-9.84%), Coal, Coke & Briquettes, Etc. (-6.6%), Petroleum, Crude & Products (-4.4%) and Medicinal & Pharmaceutical Products (-2.85%).

- India’s trade deficit has shown considerable improvement in FY 2023-24 (April-March). Overall trade deficit for FY 2023-24 (April-March) is estimated at USD 78.12 Billion as compared to the deficit of USD 121.62 Billion during FY 2022-23 (April-March), registering a decline of (-) 35.77 percent. The merchandise trade deficit during FY 2023-24 (April-March) is USD 240.17 Billion compared to USD 264.90 Billion during FY 2022-23 (April-March), registering a decline of (-) 9.33 percent.

6. India to surpass Japan as 4th-largest economy in 2025- IMF

India's nominal gross domestic product will likely outstrip Japan's in 2025 to become the world's fourth-largest economy, according to an International Monetary Fund estimate, a year earlier than the previous projection.

India's GDP will likely total $4.3398 trillion in 2025, compared with Japan's $4.3103 trillion, the IMF said in its latest estimate.

The IMF's forecast in October had India surpassing Japan in 2026. In its April update, the IMF revised GDP forecasts for both countries slightly in local currency terms, but the depreciation of the Japanese yen looks to reduce Japan's economy in dollar terms, hastening the country's decline in the rankings.

India's nominal GDP was the 10th largest in the world as of 2014. According to the IMF, it is expected to overtake Germany to become the world's third-largest economy by 2027. India overtook Japan in domestic automobile sales in 2022 to become the world's third-largest market after China and the United States.

Although the country suffered an economic slump during the COVID-19 pandemic, it has recorded high growth in recent years, driven by a rising population. The Reserve Bank of India expects GDP to grow 7% in real terms in fiscal year 2024.

7. IMF raises India FY25 GDP growth outlook to 6.8%

Anticipating increased economic activity in the current, ongoing fiscal, the International Monetary Fund (IMF) raised India's FY25 GDP growth forecast to 6.8% from its earlier forecast of 6.5%.

The IMF's upward revision of FY25 GDP growth forecast comes after similar revisions were made by several others, including the World Bank, Asian Development Bank and S&P Global. In its April edition of World Economic Outlook, the IMF said it expects India's FY26 (next fiscal) GDP growth at 6.5%. The IMF expects India to grow at 7.8% in FY24.

The IMF's baseline forecast for the world economy is that it will continue growing at 3.2% during CY2024 and CY2025, at the same pace as in CY2023, the agency said in its latest edition of the World Economic Outlook.

India remains the world's fastest-growing major economy. In December, the Reserve Bank of India (RBI) revised its growth forecast for the economy in FY24 to 7%, up from its previous projection of 6.5%. The revision was due to higher-than-anticipated growth in the first two quarters of the financial year.

Other international agencies have also raised India's GDP growth forecast for FY24 following the higher-than-expected growth during the first two quarters of FY24. Last month, S&P Global raised India's FY25 growth forecast to 6.8% on the back of strong domestic demand and a pick-up in exports. Recently, the World Bank also revised its forecast for India's GDP growth to 6.6% for FY25 from 6.4% predicted for the fiscal earlier.

Growth in investment and manufacturing on the back of the government's investment in infrastructure has pushed India's economic growth in the past quarters.

8. India's outward FDI rises to $3.91 billion in March, shows RBI data

According to Reserve Bank of India (RBI) data, India's outward foreign direct investment (FDI) commitments rose significantly to $3.91 billion in March 2024, compared to $2.63 billion in March 2023. Sequentially, they were also higher than $3.67 billion in February 2024.

Outbound FDI, expressed as a financial commitment, comprises three components: equity, loans, and guarantees. The equity commitments grew more than twofold to $2.03 billion in March 2024 from $758.22 million in March 2023. It was also higher than the $616.46 million recorded in February 2024.

Debt commitments almost doubled to $1.04 billion in March 2024, from $517.98 million a year ago. However, it was much higher than $254.24 million in February 2024. Guarantees for overseas units declined to $839.16 million in March 2024 from $1.36 billion in March 2023. They were down substantially compared to $2.80 billion in February 2024, RBI data showed.

9. India's unemployment rate to decline 97 basis points by 2028: ORF Report

According to Observer Research Foundation (ORF), India's unemployment rate is likely to decline by as much as 97 basis points by 2028 as the country's economy hits the USD 5 trillion mark, fueling a rise in employment.

Unemployment rate, the percentage of people in the labor force who are without jobs is projected to fall from 4.47 per cent in 2024 to 3.68 per cent in 2028, the India Employment Outlook 2030 report by thinktank Observer Research Foundation said.

The report identifies sectors that the country's 600-million-plus population of people aged 18-35 years regard as aspirational, as these sectors could act as engines of growth in the years ahead.

"The report forecasts that as India approaches its USD 5 trillion goal, overall employment could rise 22 per cent, while unemployment could decline by 97 basis points by 2028.

The service sector is set to witness significant job creation with each unit rise in services output expected to contribute to a substantial 0.12 per cent increase in employment. The report singles out ten especially high-opportunity sub-sectors in the services space. These include digital services, financial services, and services related to health, hospitality, consumer retail, e-commerce, and renewable energy. Other areas poised for rapid growth are global capability centers, and MSME and startup ecosystems.

The burgeoning service sector also offers encouraging avenues for women's employment. Hence, investing in women's skilling, financial inclusion, and entrepreneurship needs to be prioritized further. The report concludes that a multistakeholder approach towards employment generation and enhancement could help realize India's vision of a digitally empowered, skilled, innovative, and self-reliant economy.

10. Second highest monthly Gross GST Revenue collection in March at ₹1.78 lakh crore; Records 11.5% y-o-y growth

Gross Good and Services Tax (GST) revenue for March 2024 witnessed the second highest collection ever at ₹1.78 lakh crore, with a 11.5% year-on-year growth. This surge was driven by a significant rise in GST collection from domestic transactions at 17.6%. GST revenue net of refunds for March 2024 is **₹1.65 lakh crore** which is growth of 18.4% over same period last year.

Strong Consistent Performance in FY 2023-24: FY 2023-24 marks a milestone with total gross GST collection of Rs. 20.18 lakh crore exceeding ₹20 lakh crore, a 11.7% increase compared to the previous year. The average monthly collection for this fiscal year stands at ₹1.68 lakh crore, surpassing the previous year’s average of ₹1.5 lakh crore. GST revenue net of refunds as of March 2024 for the current fiscal year is ₹18.01 lakh crore which is a growth of 13.4% over same period last year.

Positive Performance Across Components:

Breakdown of March 2024 Collections:

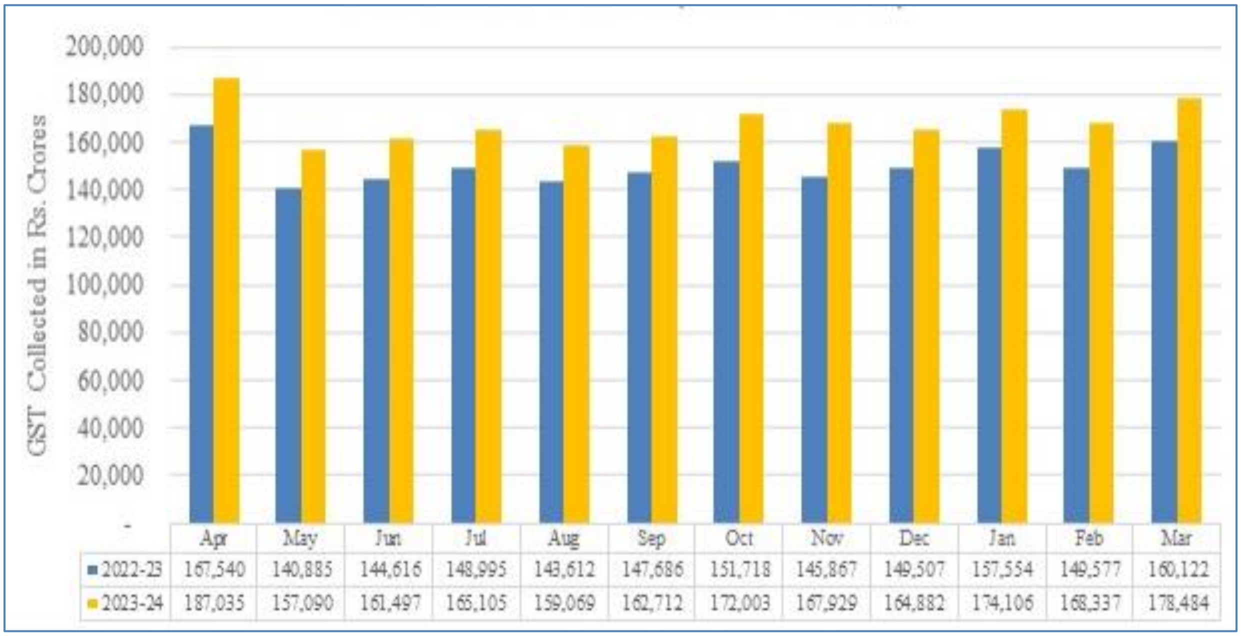
- Central Goods and Services Tax (CGST): ₹34,532 crore;
- State Goods and Services Tax (SGST): ₹43,746 crore;
- Integrated Goods and Services Tax (IGST): ₹87,947 crore, including ₹40,322 crore collected on imported goods;
- Cess: ₹12,259 crore, including ₹996 crore collected on imported goods.

Similar positive trends are observed in the entire FY 2023-24 collections:

- Central Goods and Services Tax (CGST): ₹3,75,710 crore;
- State Goods and Services Tax (SGST): ₹4,71,195 crore;
- Integrated Goods and Services Tax (IGST): ₹10,26,790 crore, including ₹4,83,086 crore collected on imported goods;
- Cess: ₹1,44,554 crore, including ₹11,915 crore collected on imported goods.

The chart below shows trends in monthly gross GST revenues during the current year. **Table-1** shows the state-wise figures of GST collected in each State during the month of March, 2024 as compared to March, 2023.

Figure 10: Total GST collection (Rs. Crores)



Source- Ministry of Finance

Lessons from Economics

Digital Money

Digital money is any means of payment that exists in a purely electronic form. Digital money is not physically tangible, like a rupee note or a coin. It is accounted for and transferred using online systems. It is exchanged using computers, smartphones, cards, and online cryptocurrency exchanges.

Digital money streamlines financial infrastructure, making it cheaper and faster to conduct monetary transactions. It can also make it easier for central banks to implement monetary policy.

Examples of types of digital money are central bank digital currencies, cryptocurrency, and stablecoins.

Digital money makes financial transactions much faster and cheaper, especially concerning cross-border payments and remittances. Given these advantages, digital money has become a priority for several governments around the world. The following are some of the cases prevailing in few of the countries: -

- The central bank of Sweden, a country that has been researching a cashless society, has released several exploratory papers since 2017 that explore the benefits and drawbacks of introducing digital money into its economy.
- China released the digital renminbi (e-CNY), the digital equivalent of its national currency, and began using it to pay government employees; the Bahamian sand dollar was introduced in 2020.

Types of Digital Money

1. Central Bank Digital Currencies (CBDCs)

Central bank digital currencies (CBDCs) are currencies issued by a country's central bank. They are separate from fiat currencies, backed by the authority and credit of a central bank, and are another obligation of the institution.

2. Cryptocurrencies

Cryptocurrencies are a digital currency designed using cryptography. They are more commonly becoming known as virtual currencies, a subclass of digital currencies, to distinguish them from officially recognized money. Since 2017, the popularity of cryptocurrencies as an investment class has skyrocketed the market capitalization of crypto markets. By November 2021, the market cap of cryptocurrencies had surpassed $2.7 trillion. The crypto winter of 2022 saw the total crypto market cap drop under $1 trillion, but it began recovering in 2023, climbing to more than $2.5 trillion in March 2024.

3. Stablecoins

Stablecoins are a variation of cryptocurrencies and were developed to counter the price volatility of regular cryptocurrencies. Stablecoins can be likened to a form of private money whose price is tied to that of a fiat currency or a basket of goods to ensure that they remain stable. They can be a proxy for fiat currencies, except they are not backed by governmental authority.

Advantages of Digital Money

- The main advantage of digital money is that it speeds up transaction speeds and cuts back on costs.
- It eliminates the need for physical storage and safekeeping, a characteristic of cash-intensive systems
- It simplifies accounting and record-keeping. Manual accounting and separate entity-specific ledgers lose their validity to standardization and automation.
- It has the potential to further revolutionize the remittance industry by eliminating intermediaries and reducing the costs associated with cross-border transfers.
- It removes intermediaries and makes it possible to include groups of people previously excluded from the economy. Those who are unbanked can still participate in an economy using digital money.

Disadvantages of Digital Money

- A seamless financial infrastructure consisting of digitally connected entities can be brought down by hackers. Hacks on a large scale have the potential to bring a country's financial infrastructure down and become a national security threat.
- Its use can compromise privacy. Cash is anonymous, and it is nearly impossible to track and trace its users, while digital money can be traced.
- It has costs as well. For example, cryptocurrencies require custody solutions that prevent hacking. Systems that use blockchains generally also charge transaction fees—network participants are compensated via fees by the blockchain for using their resources.

Thus, digital money is a major innovation in financial technology. It overcomes the issues created by cash and makes payment systems faster and cheaper. But it has the attendant dilemmas technology introduces, as digital money can be hacked and erode privacy. While digital money is still in its early days, it will play an important part in the future of finance.

Oil Market

Crude oil price – Monthly Review

Benchmark crude oil prices continued their upward trajectory in March and early April, as heightened geopolitical tensions coincided with the prospect of a tighter supply-demand balance through the remainder of the year. Brent crude futures breached the symbolic $90/bbl threshold early April, up nearly $8/bbl from early March, reaching the highest level since October 2023, amid heightened tensions between Israel and Iran. Russian refinery outages added to product market unease, while OPEC+ put pressure on some countries to increase compliance with agreed voluntary production cuts through 2Q24.

Crude spot prices rose in March, boosted by the rally in futures prices, higher financial flows in futures markets, and improving sentiments regarding oil market fundamentals. Ongoing geopolitical tensions added to the supply risk premium. The steady recovery of crude demand from refineries, mainly in the US, which coincided with the gradual exit from the heavy refinery maintenance, alongside the prospects of strong supply/demand fundamentals in 2Q24 and 3Q24, further lifted market sentiment. All physical crude oil benchmarks rose m-o-m in March, with North Sea Dated increasing by $1.54, or 1.8%, to settle at $85.44/b, while WTI and Dubai first month prices rose respectively by $3.60 and $3.39, or 4.7% and 4.2%, to settle at $80.49/b and $84.21/b.

Lower US crude stocks and a steady recovery in US crude intakes buoyed prices over the month of March. US refinery net input of crude oil rose by 1.22 mb/d between the weeks of 23 February and 29 March. However, spot prices in the Atlantic Basin came under pressure, as crude demand in the spot market softened in Europe, due to unplanned refinery outages that came in addition to the seasonal spring maintenance season. Nonetheless, this was counterbalanced by firm crude demand from Asia-Pacific buyers. Moreover, lower refining margins in March, m-o-m, also limited spot price gains.

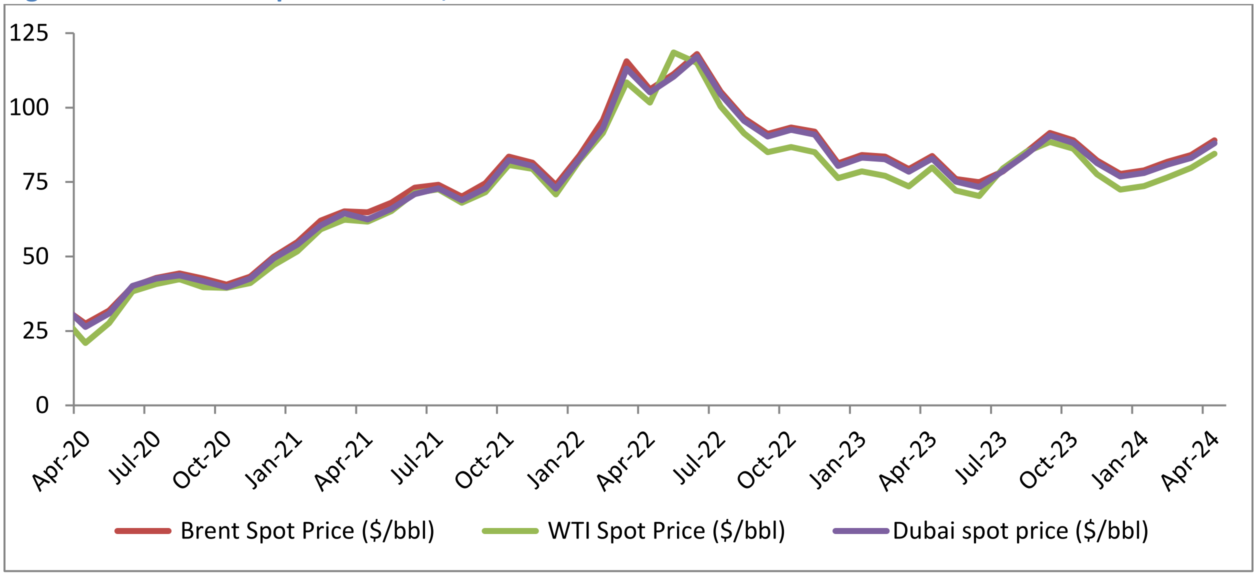
Hedge funds and other money managers turned more bullish and closed out more bearish positions, raising their futures and options net-long positions in crude by 18.1% in March. They were buyers of an equivalent of about 78 million barrels (mb) between the weeks of 27 February and 26 March.

The OPEC Reference Basket (ORB) value rose in March by $2.99/b, or 3.7%, to stand at $84.22/b, with all ORB component values increasing alongside their respective crude oil benchmarks.

The sweet-sour crude differentials showed mixed movement across regions. In Europe and the US Gulf Coast (USGC), the spread widened on a weak sour crude market and the high availability of medium sour crude, amid refinery outages in Europe. In Asia, however, the sweet-sour crude spread contracted due to the narrowing of the product margins between light/medium distillate and heavy distillate.

Brent crude ranged an average to $88.95 a barrel and WTI ranged to $84.54 per barrel in the month of April 2024.

Figure 11: Benchmark price of Brent, WTI and Dubai crude



Source- World Bank

- Brent crude price averaged $88.95 per bbl in April 2024, up by 5.9% on a month on month (MoM) and by 6.2% on year on year (YoY) basis, respectively.

- WTI crude price averaged $84.54 per bbl in April 2024, up by 6.0% on a month on month (MoM) and by 5.9% on year on year (YoY) basis, respectively.

- Dubai crude price averaged $88.03 per bbl in April 2024, up by 5.9% on a month on month (MoM) and by 6.2% on year on year (YoY) basis, respectively.

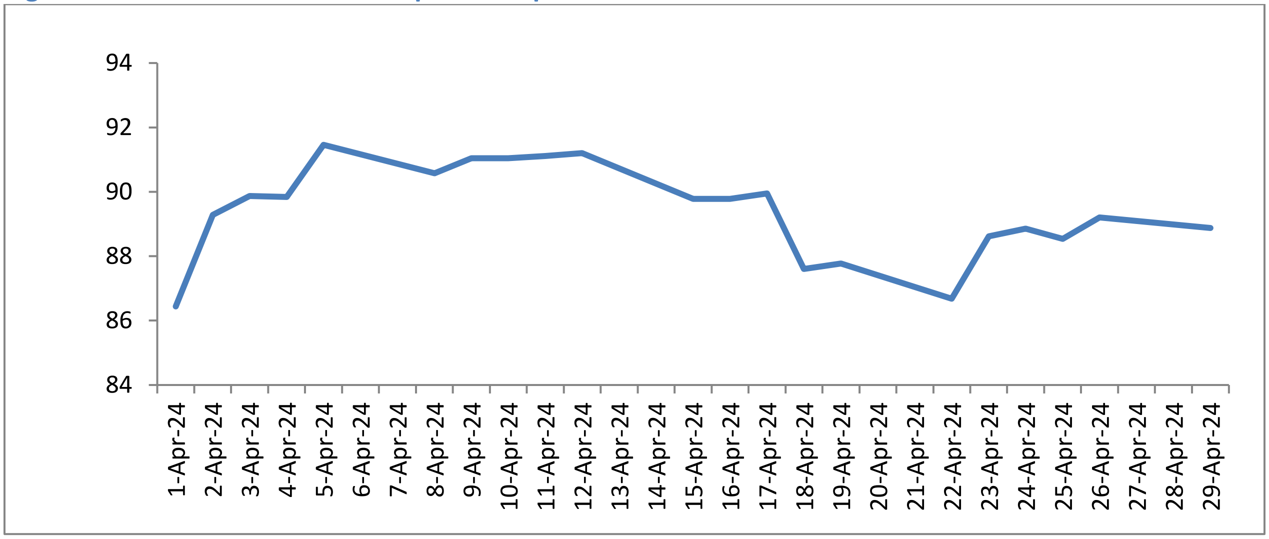
Table 2: Crude oil price in April, 2024

Crude oil	Price ($/bbl)	MoM (%) change	YoY (%) change
Brent	88.95	5.9%	6.2%
WTI	84.54	6.0%	5.9%
Dubai	88.03	5.9%	6.2%

Source- World Bank

Indian Basket Crude oil price

Figure 12: Indian crude oil basket price in $ per bbl



Source- PPAC

- Indian crude basket price averaged $89.41 per barrel in April 2024, up by 6.3% on Month on Month (M-o-M) and by 7.1% on a year on year (Y-o-Y) basis, respectively.

Oil production situation

- The non-DoC liquids supply (i.e. liquids supply from countries not participating in the Declaration of Cooperation) is expected to grow by 1.2 mb/d in 2024, revised down from the previous month's assessment by about 0.1 mb/d. In 2024, the main drivers for liquids supply growth are expected to be the US, Canada, Brazil and Norway. The non-DoC liquids supply growth in 2025 is expected at 1.1 mb/d, revised down by 0.1 mb/d from the previous month's assessment. The growth is mainly driven by the US, Brazil, Canada and Norway.
- The non-OPEC liquids supply (including the 10 non-OPEC countries participating in DoC) in 2024 is expected to grow by 1.0 mb/d, revised down from the previous month's assessment by about 0.1 mb/d. The main drivers for liquids supply growth are expected to be the US, Canada, Brazil and Norway. The forecast for non-OPEC liquids supply growth in 2025 stands at 1.3 mb/d, revised down by 0.1 mb/d from the previous month's assessment. The growth is mainly driven by the US, Brazil, Canada, Russia, Kazakhstan and Norway.
- OPEC natural gas liquids (NGLs) and non-conventional liquids are forecast to grow by around 64 tb/d to average 5.5 mb/d this year, followed by a growth of 110 tb/d to average 5.6 mb/d in 2025.

Table 3: Non-OPEC liquids production in 2024, mb/d

Non-OPEC liquids production	2023	1Q24	2Q24	3Q24	4Q24	2024
Americas	28.70	28.88	29.10	29.44	29.94	29.34
of which US	*20.90*	*20.87*	*21.24*	*21.44*	*21.81*	*21.34*
Europe	3.65	3.69	3.74	3.72	3.90	3.76
Asia Pacific	0.44	0.45	0.42	0.43	0.42	0.43
Total OECD	**32.80**	**33.02**	**33.26**	**33.59**	**34.25**	**33.53**
China	4.52	4.60	4.59	4.46	4.46	4.53
India	0.77	0.78	0.79	0.79	0.78	0.78
Other Asia	2.28	2.29	2.24	2.22	2.22	2.24
Latin America	6.96	7.36	7.31	7.35	7.39	7.35
Middle East	3.27	3.20	3.23	3.27	3.27	3.24
Africa	2.42	2.45	2.40	2.42	2.45	2.43
Russia	10.93	10.83	10.44	10.85	10.87	10.75
Other Eurasia	2.93	2.93	2.91	2.99	3.01	2.96
Other Europe	0.10	0.10	0.10	0.10	0.10	0.10
Total Non-OECD	**34.18**	**34.54**	**34.02**	**34.44**	**34.56**	**34.39**
Total Non-OPEC production	66.98	67.57	67.28	68.03	68.81	67.93
Processing gains	2.47	2.52	2.52	2.52	2.52	2.52
Total Non-OPEC liquids production	**69.45**	**70.09**	**69.80**	**70.55**	**71.33**	**70.44**

*Note. *2024 = Forecast. Totals may not add up due to independent rounding*
Source- OPEC monthly report, April 2024

- From the above table, it can be inferred, that the total non-OPEC liquids production is expected to reach 70.44 mb/d by 2024.
- OPEC NGLs and non-conventional liquids are forecast to grow by around 64 tb/d to an average of 5.5 mb/d.

Oil demand situation

- The global oil demand growth forecast for 2024 remains broadly unchanged from last month's assessment of 2.2 mb/d. Slight adjustments were made to the 1Q24 data, with a slight upward revision in OECD Europe and some non-OECD data, reflecting better-than-expected performance in oil demand data. This increase was offset by a downward revision to Africa in 1Q24 and the Middle East in the first three quarters. Accordingly, the OECD is projected to expand by around 0.3 mb/d and the non-OECD by about 2.0 mb/d.
- In 2025, global oil demand is expected to see robust growth of 1.8 mb/d, y-o-y. The OECD is expected to grow by 0.1 mb/d, y-o-y, while demand in the non-OECD is forecast to increase by 1.7 mb/d.

Table 4: World Oil demand, mb/d

	2023	1Q24	2Q24	3Q24	4Q24	2024	Growth	%
Total OECD	**45.80**	**45.65**	**45.93**	**46.35**	**46.28**	**46.06**	**0.26**	**0.57**
~ of which US	*20.40*	*20.09*	*20.67*	*20.67*	*20.85*	*20.57*	*0.17*	*0.85*
Total Non-OECD	**56.42**	**57.88**	**57.89**	**58.55**	**59.29**	**58.41**	**1.99**	**3.52**
~ of which India#	*5.34*	*5.66*	*5.64*	*5.40*	*5.59*	*5.57*	*0.23*	*4.26*
~ of which China	16.22	16.35	16.77	17.19	17.29	16.90	0.68	4.22
Total world	**102.21**	**103.53**	**103.82**	**104.90**	**105.57**	**104.46**	**2.25**	**2.20**

Source- OPEC monthly report, April 2024

Note: 2024 = Forecast. Totals may not add up due to independent rounding*

Global petroleum product prices

US Gulf Coast (USGC) refining margins against WTI exhibited significant declines in line with the recovery in refinery product output as refiners returned from maintenance. Although overall US product inventories remained under pressure, gasoline and gasoil stocks showed signs of recovery throughout the month in the USGC. A vast majority of the weakness seen in the US product market was connected to middle distillates with both gasoil and jet/kerosene crack spreads showing a notable drop m o-m. Gasoil crack spreads fell to a seven-month low and inched closer to the zero mark to average 0.89¢/b. In addition, temporary losses in naphtha demand due to steam cracker maintenance added further pressure on the overall product market.

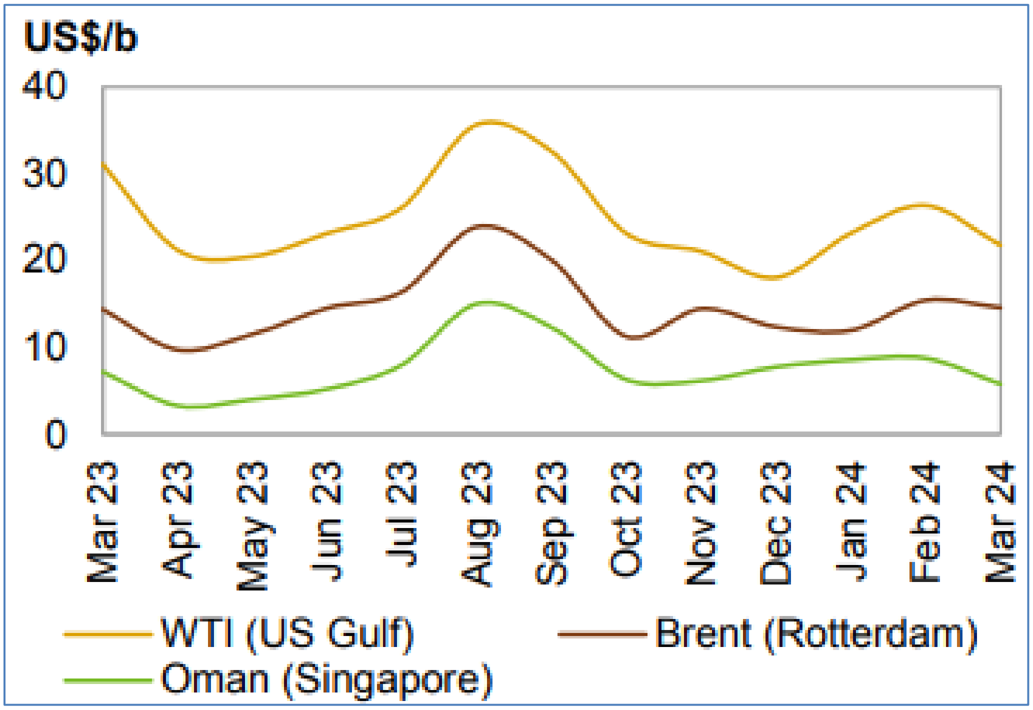
Although gasoline experienced solid gains and outperformed jet/kerosene to become the largest margin driver in the US, this upside, coupled with fuel oil gains, was completely outweighed by the middle distillate and naphtha-derived losses. While maintenance work at US refineries appears to have begun subsiding, product markets in the US may experience added pressure going forward, particularly for diesel. On the other hand, the onset of the summer season and current market signals point to strong demand-side support for gasoline and possibly naphtha and fuel oil, which may help boost refining margins going forward.

In terms of operations, US refinery intake increased to average 16.12 mb/d in March, showing a monthly rise of 1.2 mb/d. USGC margins against WTI averaged $21.76/b, down by $4.60, m-o-m, and by $9.32, y-o-y.

Refinery margins in Rotterdam against Brent experienced a mild loss, as a considerable weakness at the middle of the barrel offset firm gains seen at the top and bottom sections of the barrel. Jet/kerosene was the strongest negative performer in Northwest Europe as requirements from the aviation sector remained subdued. In addition, soft domestic diesel consumption in the region exacerbated the upward pressure on Amsterdam Rotterdam-Antwerp storage hub product inventory levels, resulting in losses. At the same time, the new Dangote refinery was reported to have started supplying the market with some products both domestically and internationally, which may have weighed on European product requirements from Nigeria and likely contributed to the ARA product stock builds. Declines in Russian refinery runs following the unplanned outages on some Russian refineries will likely lead to a decline in product exports, which could partially counterbalance the supply-side pressure linked to new product flows entering the market from the most recent capacity additions.

Refinery throughput in Europe decreased in March, according to preliminary data, and was 200 tb/d lower m-o-m, averaging 9.16 mb/d. Refinery margins against Brent in Europe averaged $14.62/b in March, which is 84¢ lower, m-o-m, but 20¢ higher, y-o-y.

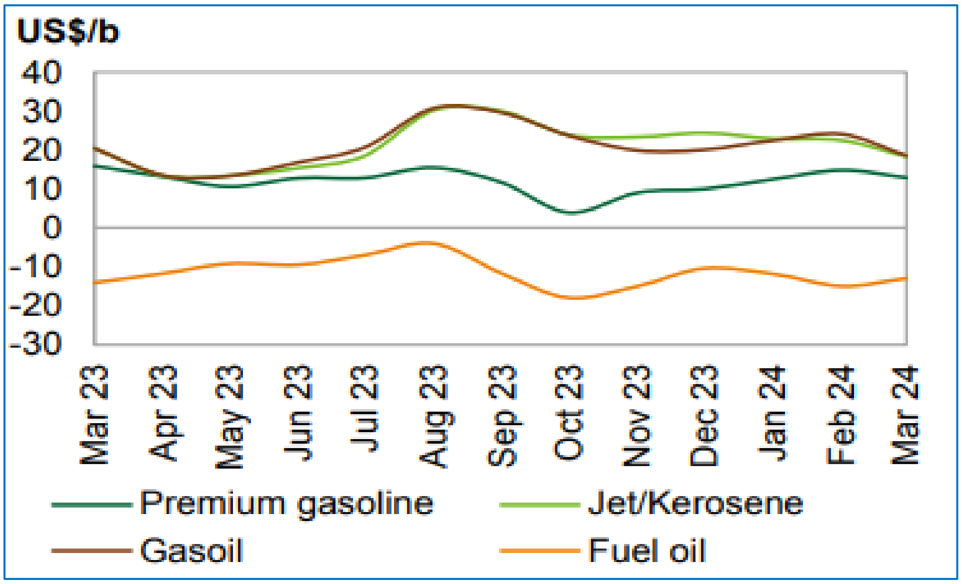
Figure 13: Refining Margins ($/bbl)



Source- Argus and OPEC

The Southeast Asian gasoline 92 crack weakened as healthy gasoline availability in the Atlantic Basin due to seasonally weak consumption levels affected East-to-West arbitrage opportunities. Going forward, gasoline markets, even in Asia, are expected to experience temporary pressure before gaining solid strength, particularly in 3Q24. This should boost gasoline exports from Asia and thus support the products market performance in the region. The Singapore gasoline crack spread against Dubai in March averaged $12.88/b. This was down by $1.88, m-o-m, and by $2.95, y-o-y.

Figure 14: Singapore crack Spreads vs. Dubai ($/bbl)



Source- Argus and OPEC

The Singapore gasoil crack spread took a downturn following three consecutive months of gains as regional balances expanded due to high output, with stock builds being exacerbated by limited export requirements to the East and a surge in imports from the Middle East. In the near term, gasoil balances could remain under pressure, even though rising demand for road transportation over the summer months could limit the downside. The Singapore gasoil crack spread against Oman averaged $18.55/b, down by $5.50/b, m-o-m, and by $1.88, y-o-y.

Table 5: Singapore FOB, refined product prices ($/bbl) in March 2024

Singapore product prices	Price ($/b)	MoM (%) change	YoY (%) change
Naphtha	76.45	5.5%	4.5%
Premium gasoline (unleaded 95)	101.52	1.4%	3.0%
Regular gasoline (unleaded 92)	97.09	1.6%	3.0%
Jet/Kerosene	102.54	-0.7%	3.7%
Gasoil/Diesel (50 ppm)	103.45	-2.5%	1.1%
Fuel oil (180 cst 2.0% S)	101.43	-2.4%	6.4%
Fuel oil (380 cst 3.5% S)	71.28	8.1%	10.7%

Source- OPEC

Petroleum products consumption in India

Monthly Review:

- Overall consumption of all petroleum products in March 2024 with a volume of 21.09 MMT registered a growth of 2.90% on volume of 20.49 MMT in March 2023.

- MS (Petrol) consumption during the month of March 2024 with a volume of 3.32 MMT recorded a growth of 6.97% on volume of 3.11 MMT in March 2023.

- HSD (Diesel) consumption during the month of March 2024 with a volume of 8.04 MMT recorded a growth of 3.13% on volume of 7.79 MMT in the month of March 2023.

- LPG consumption during the month of March 2024 with a volume of 2.61 MMT registered growth of 8.58% over the volume of 2.41 MMT in the month of March 2023.

- ATF consumption during March 2024 with a volume of 0.758 MMT registered a growth of 10.15% over the volume of 0.688 MMT in March 2023.

- Bitumen consumption during March 2024 with a volume of 0.990 MMT registered growth of 6.06% over volume of 0.933 MMT in the month of March 2023.

- Kerosene consumption registered growth of 5.49% during the month of March 2024 as compared to March 2023.

Table 6: Petroleum products consumption in India, March 2024

Consumption of Petroleum Products (P)	Consumption in '000 MT	MoM (%) change	YoY (%) change
LPG	2,612	0.7%	8.6%
Naphtha	1,191	-0.1%	3.7%
MS	3,324	10.0%	7.0%
ATF	758	7.6%	10.2%
SKO	32	-12.4%	5.5%
HSD	8,039	8.1%	3.1%
LDO	67	6.6%	-15.3%
Lubricants & Greases	416	29.0%	-4.9%
FO & LSHS	534	4.3%	-8.6%
Bitumen	990	9.2%	6.1%
Petroleum coke	1,633	6.7%	14.4%
Others	1,497	6.6%	-19.6%
TOTAL	21,091	6.9%	2.9%

Source- PPAC

Natural Gas Market

Natural Gas Price – Monthly Review

- Natural gas spot prices at the US Henry Hub benchmark averaged $1.49 per million British thermal units (MMBtu) in March 2024. Henry Hub's natural gas prices experienced another sharp decline in March 2024. Prices averaged in March at $1.5/MMBTU a three-decade low. Warmer weather remained a drag on demand, exacerbating the oversupply that is currently hanging over the market. According to the US Energy Information, as of 22nd March 2024, working gas in storage was 41.1% above the five-year average.

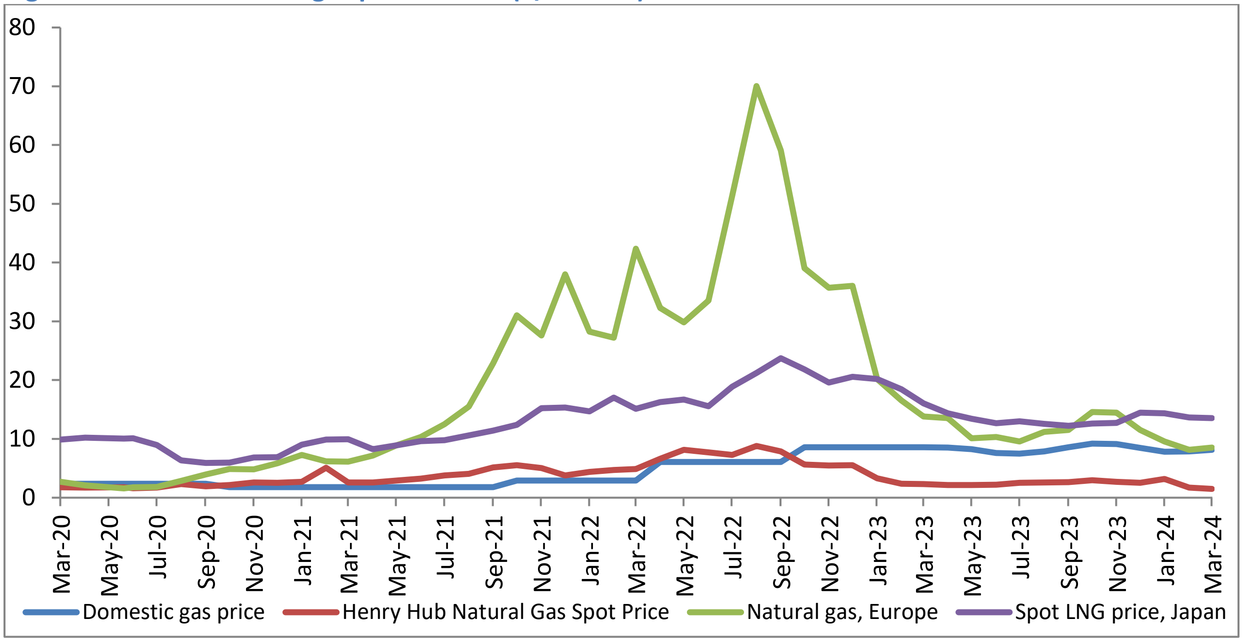
- The natural gas spot price at the Title Transfer Facility (TTF) in the Netherlands in Europe traded at an average of $8.55 per MMBtu. Natural gas prices in Europe rebounded after trending downward for four consecutive months. The average Title Transfer Facility (TTF) price went from $8.1/mmbtu in February to $8.6/mmbtu in March, a 5.0% m-o-m increase. Prices rose amid geopolitical developments in Eastern Europe, which renewed market concerns about supply risk. Nonetheless, prices remained under pressure from elevated storage levels. According to data from Gas Infrastructure Europe, EU gas storage was at 58.3% as of 31 March, about 6% higher compared with the same period last year. Prices declined 38.1% y-o-y.

- Japan Liquefied Natural Gas Import Price averaged at $13.54 per MMBtu for March 2024. There is a change of -0.7% from last month and -15.5% from one year ago.

- The Union Cabinet has approved a new formula for pricing of natural gas and imposed cap or ceiling price on the same. Natural gas produced from legacy or old fields, known as APM gas, will now be indexed to crude oil prices. From April 1 2023, APM gas will be priced at 10 % of the price of basket of crude oil that India imports. The rate such arrived at however will be capped at US$ 6.5 per MMBTU. The price such arrived at will also have a floor of US$ 4 per MMBTU.

- Further, in accordance with MoP&NG, Govt. of India, pricing freedom for gas being produced from discoveries in Deepwater, Ultra Deepwater and High Pressure-High Temperature areas, the gas price ceiling for the period 1st April, 2023 - 30th September, 2023 was notified as US$ 12.12/MMBTU on Gross Calorific Value (GCV) basis as per notification dated 31st March, 2023. Gas price ceiling was further revised for the period 1st October, 2023 – 31st March, 2024 was notified as US$ 9.96/MMBTU on Gross Calorific Value (GCV) basis as per notification dated 30th September 2023. Gas price ceiling was further revised for the period 1st April, 2024 – 31st September, 2024 was notified as US$ 9.87/MMBTU on Gross Calorific Value (GCV) basis as per notification dated 31st March 2024.

Figure 15: Global natural gas price trends ($/mmbtu)



Source- EIA, World Bank

Table 7: Gas price, March 2024

Natural Gas	Price ($/MMBTU)	MoM (%) change	YoY (%) change
India, Domestic gas price (April'24)	8.38	2.57%	-1.87%
India, Gas price ceiling – difficult areas (Apr-Sep'24)	9.87	-0.90%	-18.56%
GIXI (Gas index of India) price*	9.6	-10%	-32%
Henry Hub	1.49	-13.4%	-35.5%
Natural Gas, Europe	8.55	4.9%	-38.1%
Liquefied Natural Gas, Japan	13.54	-0.7%	-15.5%

Source- EIA, PPAC, World Bank, IGX
**Prices are weighted average prices (excluding ceiling price gas)*

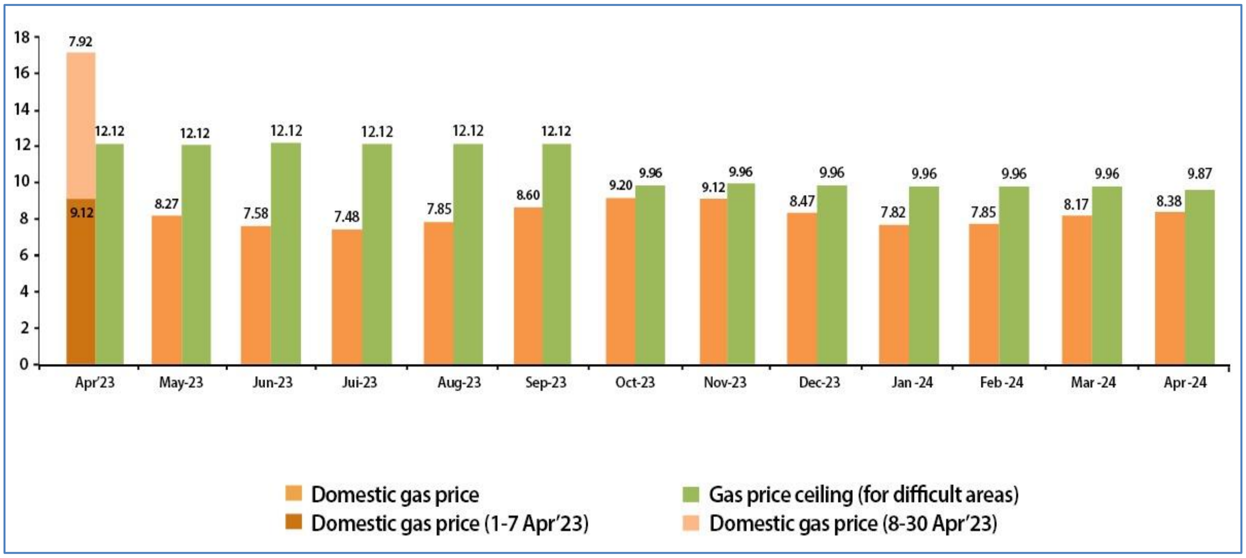
Table 8: Gas price, GCV Basis

Period	Domestic Gas calculated price in US$/MMBTU
1-7 April 2023	9.16
8-30 April 2023	7.92
1-31 May 2023	8.27
1-30 June 2023	7.58
1-31 July 2023	7.48
1-31 August 2023	7.85
1-30 September 2023	8.60

Period	Domestic Gas calculated price in US$/MMBTU
1-31 October 2023	9.20
1-30 November 2023	9.12
1-31 December 2023	8.47
1-31 January 2024	7.82
1-29 February 2024	7.85
1-31 March 2024	8.17
1-31 April 2024	8.38

Source- PPAC

Figure 16: Domestic natural gas price April 2023 – April 2024 ($/mmbtu)



Source- PPAC

Indian Gas Market

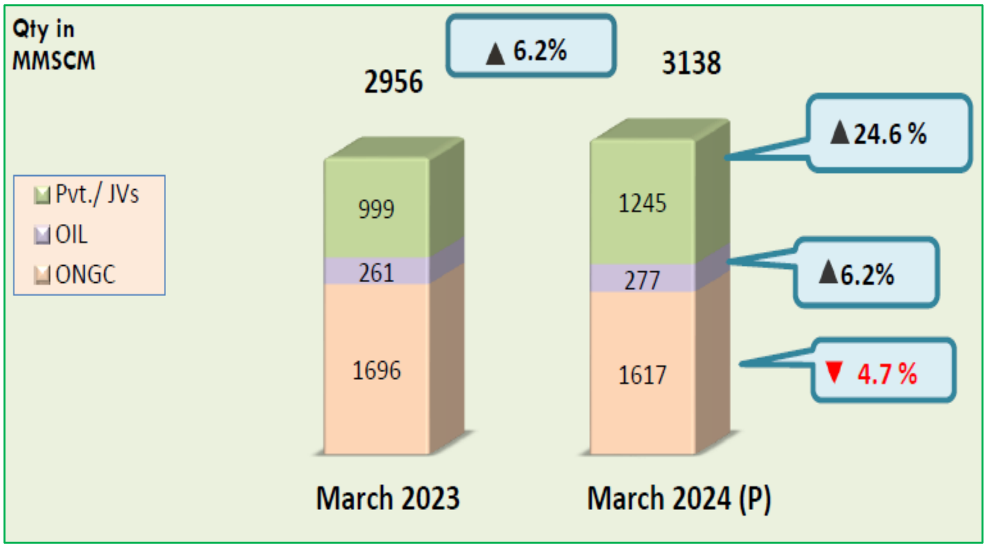
- Gross production of natural gas for the month of March 2024 was 3138 MMSCM which was higher by 6.2% compared with the corresponding month of the previous year.
- Total import of LNG (provisional) during the month of January 2024 was 2522 MMSCM (P) (lower than -1.1% over the corresponding month of the previous year).
- Natural gas available for sale during March 2024 was 5093 MMSCM (increase of 2.2% over the corresponding month of the previous year).
- Total consumption during March 2024 was 6066 MMSCM (provisional). Major consumers were fertilizer (28%), City Gas Distribution (CGD) (20%), Power (11%), Refinery (11%) and Petrochemicals (4%).

Monthly Report on Natural gas production, imports, and consumption – March 2024

1. Domestic Natural Gas Gross Production:

Domestic natural gas gross production for the month of March 2024 was 3138 MMSCM (increase of 6.2% over the corresponding month of the previous year).

Figure 17: Domestic natural gas Gross production (Qty in MMSCM)

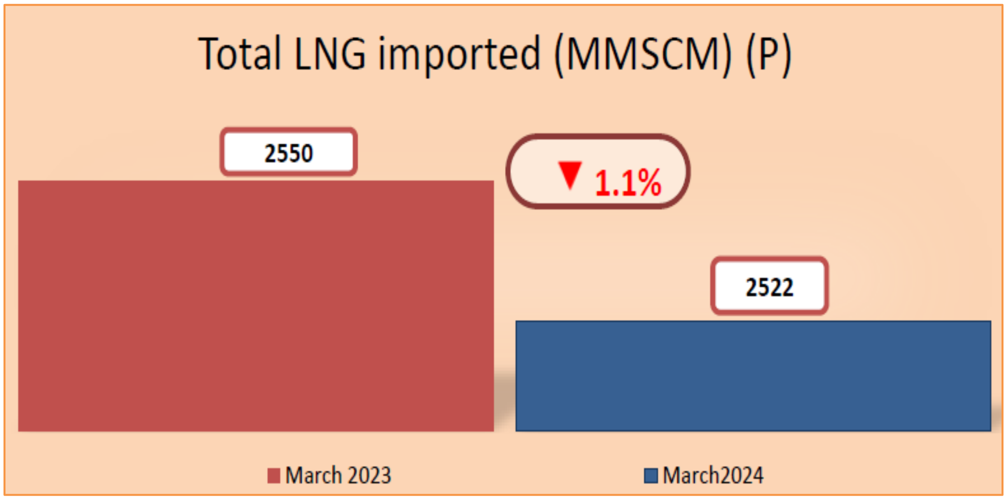


Source- PPAC

2. LNG imports:

Total imports of LNG (provisional) during the month of March 2024 were 2522 MMSCM (lower than -1.1% over the corresponding month of the previous year).

Figure 18: LNG imports (Qty in MMSCM)

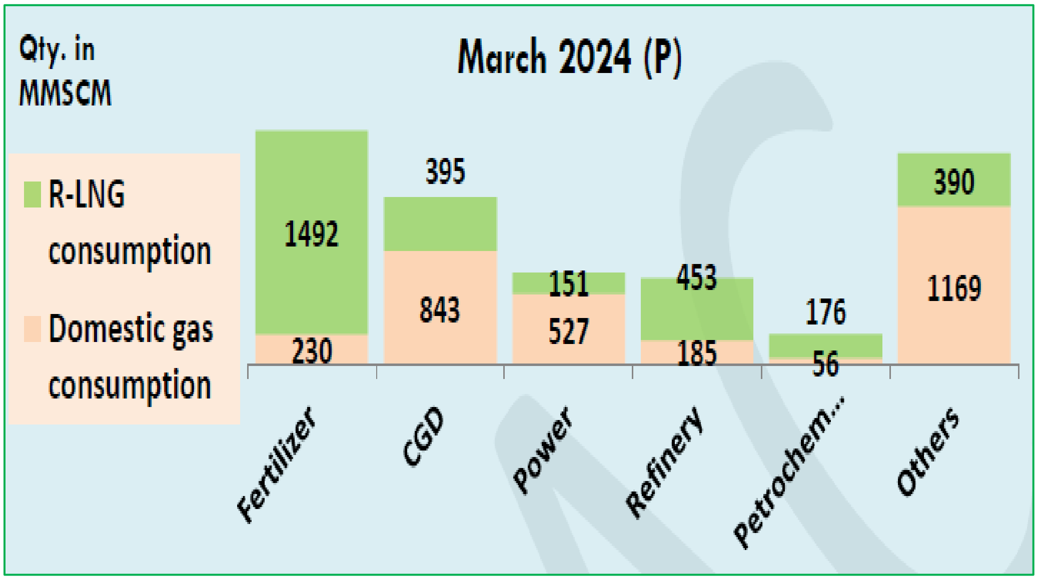


Source- PPAC

3. Sectoral Consumption of Natural Gas:

Major consumers were fertilizer, CGD, power, refinery, petrochemicals among others.

Figure 19: Sectoral Consumption of Natural Gas (Qty in MMSCM) in March 2024



Source- PPAC

Key developments in Oil & Gas sector

- **Monthly Production Report for March, 2024**

1. Production of Crude Oil

Indigenous crude oil and condensate production during March 2024 was 2.5 MMT. OIL registered a production of 0.3 MMT, ONGC registered a production of 1.6 MMT whereas PSC/RSC registered production of 0.6 MMT during March 2024. There is a growth of 2.02% in crude oil and condensate production during March 2024 as compared to March 2023.

2. Production of Natural Gas

Gross production of natural gas for the month of March 2024 (P) was 3138 MMSCM which was higher by 6.2 % compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 36438 MMSCM for the current financial year till March 2024 was higher by 5.8 % compared with the corresponding period of the previous year.

3. Crude Oil Processed (Crude Throughput)

Total Crude oil processed during March 2024 was 23.4 MMT which is 1.6% higher than March 2023, where PSU/JV refiners processed 16.1 MMT and private refiners processed 7.3 MMT of crude oil. Total indigenous crude oil processed was 2.4 MMT and total Imported crude oil processed was 21.0 by all Indian refineries (PSU+JV+PVT). There was a growth of 2.5% in total crude oil processed in April March FY 2023 – 24 as compared to same period of FY 2022 – 23.

4. Production of Petroleum Products

Production of petroleum products was 24.9 MMT during March 2024 which is 1.5% higher than March 2023. Out of 24.6 MMT, 24.6 MMT was from refinery production & 0.3 MMT was from fractionator. There was a growth of 3.6 % in production of petroleum products in April March FY 2023 – 24 as compared to same period of FY 2022 – 23. Out of total POL production, in March 2024, share of HSD is 40.5 %, MS 16.6 %, Naphtha 6.7 %, ATF 6.3 %, Pet Coke 5.5 %, LPG 4.6% which are of major products and rest are shared by Bitumen, FO/LSHS, LDO, Lubes & others

Key Policy developments/significant news in Energy sector

Govt. decreased windfall tax on crude petroleum to Rs. 8,400/tonne

The government announced a decrease in the windfall tax on crude oil to Rs. 8,400 per tonne effective May 1, 2024, from the previous rate of Rs. 9,600 per tonne.

However, the Special Additional Excise Duty (SAED) on export of diesel, petrol and jet fuel or ATF has been retained at nil.

India initially introduced the windfall tax in July 2022 in response to the escalating price of crude oil. This tax is imposed by governments when an industry unexpectedly generates substantial profits, typically attributed to an unprecedented event. A windfall tax is imposed on domestically produced crude oil when the rates of the global benchmark exceed $75 per barrel. For the export of diesel, aviation turbine fuel (ATF), and petrol, the levy is applicable when the product cracks, or margins, surpass $20 per barrel.

SJVN partners with IIT Patna to improve Tunneling Project Performance using Advanced Geological Models

SJVN Limited had signed a Memorandum of Understanding (MoU) with the Indian Institute of Technology Patna (IIT Patna) to use advanced geological models in SJVN's tunnelling projects, thus significantly reducing time and cost overruns.

One of the key outcomes of this partnership will be the development of predictive analytics algorithms. These algorithms, leveraging integrated geotechnical data, will forecast potential risks and provide early warning systems specifically tailored for tunnelling projects. Such proactive measures are expected to substantially mitigate time and cost overruns during project execution.

Chairperson & Managing Director, SJVN, Smt. Geeta Kapur said that the primary focus of the MoU is to develop cutting-edge methodologies which integrate diverse geotechnical data sources. These would include geological surveys, borehole data, geophysical measurements and monitoring data from projects of SJVN.

The collaboration also aims to evaluate the intricate relationship between overburden and deformation, thereby enhancing the evaluation and design of support systems crucial for tunnelling projects. By harnessing integrated geotechnical data and 3D geological models, SJVN and IIT Patna aim to identify and analyze potential risks and hazards.

Hydroelectric power projects with aggregate capacity of 15 GW under construction

Hydroelectric power projects with aggregate capacity of 15 GW are under construction in the country. The hydro capacity is likely to increase from 42 GW to 67 GW by 2031-32, marking an increase of more than half of present capacity.

The Indian Meteorological Department has predicted higher rainfall in the current financial year. Further, hydropower projects located in the Himalayan region get base flow from contribution of snowmelt, i.e., from surface runoff produced by melting snow; so, any rise in temperature will increase snowmelt contribution.

Moreover, given the ongoing energy transitions in the country, the development of Pumped Storage Projects (PSPs) assumes importance for providing greater inertia and balancing power to the grid. PSPs are also known as 'the Water Battery', which is an ideal complement to modern clean energy systems.

Currently, PSPs with aggregate capacity of 2.7 GW are under construction in the county and another 50 GW is under various stages of development. It is projected that PSP capacity shall increase from 4.7 GW to around 55 GW by 2031-32.

Ministry of Heavy Industries receives Seven bids against Global Tender for selection of bidders to set up giga-scale Advanced Chemistry Cell (ACC) manufacturing facilities of cumulative 10 GWh capacity under PLI ACC scheme

Ministry of Heavy Industries (MHI) has received bids from seven bidders under global tender for the re-bidding of Production Linked Incentives (PLI) for 10 GWh Advanced Chemistry Cell (ACC) manufacturing announced on 24th January 2024. The pre-bid meeting was held on 12th February 2024. The last date for receiving applications was 22nd April 2024 on CPP portal and the Technical Bids opened on 23rd April 2024.

The list of bidders (in alphabetical order) who have submitted bids in response to this tender are ACME Cleantech Solutions Private Limited, Amara Raja Advanced Cell Technologies Private Limited, Anvi Power Industries Private Limited, JSW Neo Energy Limited, Reliance Industries Limited, Lucas TVS Limited, and Waaree Energies Limited for a cumulative capacity of 70 GWh.

In May 2021, the Cabinet had approved the technology agnostic PLI Scheme on 'National Programme on Advanced Chemistry Cell (ACC) Battery Storage' for achieving manufacturing capacity of Fifty (50) Giga Watt hours (GWh) of ACC with an outlay of Rs.18,100 Crore. The first round of the ACC PLI bidding was concluded in March 2022, and three beneficiary firms were allocated a total capacity of Thirty (30) Giga Watt hours (GWh), and the program agreement with selected beneficiary firms was signed in July 2022.

Further, MHI, Government of India had released Request for Proposal (RfP) on 24th January 2024 for Shortlisting and Selection of bidders under the Production Linked Incentive (PLI) Scheme 'National Programme on Advanced Chemistry Cell (ACC) Battery Storage' for setting up of ACC Manufacturing Units with a total manufacturing capacity of 10 Giga Watt Hour (GWh) with maximum budgetary outlay of Rs. 3,620 crores.

Government takes measures to operationalize Gas-based Power Plants to help meet Summer Electricity Demand

In order to help meet the high electricity demand in the country during the summer season, the Government of India has decided to operationalize gas-based power plants. To ensure maximum power generation from Gas-Based Generating Stations, the Government has issued directions to all Gas-Based Generating Stations under Section 11 of the Electricity Act, 2003 (under which the appropriate government may specify that a generating company shall, in extraordinary circumstances operate and maintain any generating station in accordance with the directions of that Government).

A significant portion of the Gas-Based Generating Stations (GBSs) is currently unutilized, primarily due to commercial considerations. The order under Section 11, which is on similar lines as done for imported-coal-based power plants, aims to optimise the availability of power from Gas-Based Generating Stations during the ensuing high demand period. The order shall remain valid for generation and supply of power from May 1, 2024 to June 30, 2024.

GRID-INDIA to inform Gas-based Generating Stations of Power Requirement

As per the arrangement, GRID-INDIA will inform the Gas-based Generating Stations in advance, of the number of days for which Gas-based power is required. Gas-Based Generating Stations holding Power Purchase Agreements (PPAs) with Distribution Licensees shall first offer their power to PPA holders. If the power offered is not utilised by any PPA holder, then it shall be offered in the power market. Gas-Based Generating Stations not tied to PPAs must offer their generation in the power market. A high-level committee headed by Chairperson, Central Electricity Authority has been constituted to facilitate the implementation of this direction.

The decision to operationalize gas-based generating stations is part of a series of measures taken by the Government of India, to ensure that the electricity demand in the summer season is met. The Union Minister for Power and New & Renewable Energy Shri R. K. Singh held a series of meetings on this, emphasizing the need for ensuring adequate availability of power to meet the load during the hot-weather season.

Other Measures to Meet Summer Electricity Demand

The government has taken the following measures to meet the summer demand, apart from the decision on gas-based generating stations:

- Planned Maintenance of Power Plants to be shifted to Monsoon Season
- New Capacity Additions to be Speeded up
- Partial Outages of Thermal Power Plants being brought down
- Surplus Power with Captive Generating Stations to be Utilized
- Surplus Power to be offered for sale in Energy Exchange
- Section 11 Directions for Imported-Coal-Based Power Plants, to make full capacity available for generation
- Shifting of hydro power generation to peak hours
- Advance planning by all stakeholders to ensure coal availability

India's electricity demand has been rising rapidly, driven by economic growth, particularly during hot-weather and high-demand periods. The Indian Meteorological Department (IMD) has predicted above-normal maximum temperatures over most parts of the country during the 2024 hot weather season. The above measures are being taken in this context, in anticipation of the high electricity demand during the season.

SJVN sets milestone with Inauguration of First Multi-purpose Green Hydrogen Pilot Project of the Nation

SJVN Limited has achieved a significant milestone with the inauguration of India's first Multi-purpose (Combined Heat & Power) Green Hydrogen Pilot Project at SJVN's 1,500 MW Nathpa Jhakri Hydro Power Station (NJHPS) in Jhakri, Himachal Pradesh. The green hydrogen produced from the project will be utilized for High Velocity Oxygen Fuel (HVOF) Coating Facility of NJHPS for meeting its combustion fuel requirements. In addition, it will also generate electricity through its fuel cell of 25 kW capacity.

The first Multi-purpose (Combined Heat & Power) Green Hydrogen Generation Plant of the nation has been inaugurated by Chairperson and Managing Director, Smt. Geeta Kapur on April 24, 2024. Speaking about the project, the Chairperson said: “Aligned with National Green Hydrogen Mission of Government of India, SJVN's Green Hydrogen Pilot Project is poised to accelerate the development of green hydrogen production infrastructure in the power sector, thus establishing green hydrogen as a clean energy source.”

The state-of-the-art Green Hydrogen Pilot Project is set to produce 14 kilograms of Green Hydrogen daily during 8 hours of operation. The hydrogen produced will be stored at a pressure of 30 bars, in six storage tanks, with a total storage capacity of 12 m3. The project will produce hydrogen using alkaline electrolyzer of 20 Nm3/hour capacity, which would be powered by renewable energy supplied from 1.31 MW Solar Power Plant of SJVN in Wadhal, Shimla.

Besides generating power, the green hydrogen will also be used for High Velocity Oxygen Fuel Coating of turbine underwater parts.

During her visit, the SJVN Chairperson also inaugurated first-of-its-kind Centralized Operation of the 1,500 MW Nathpa Jhakri Hydro Power Station (NJHPS) and 412 MW Rampur Hydro Power Station (Rampur HPS), by remotely operating Unit-2 of Rampur HPS from NJHPS Control Room at Jhakri, Himachal Pradesh. Rampur HPS is being successfully operated on Tandem Operating System with NJHPS.

NHPC Limited to collaborate with Norwegian company for implementation of Floating Solar Energy Technology in India

NHPC Limited, has signed a Memorandum of Understanding with M/s Ocean Sun, a Norwegian company operating as a technology provider to the floating solar industry. As per the MoU, NHPC and Ocean Sun will explore key areas of cooperation for demonstration of Ocean Sun’s floating solar energy technology based on photovoltaic panels. The panels would be mounted on hydro-elastic membranes, at relevant sites to be identified by NHPC.

The agreement is in continuation of efforts towards sustainable development and addition of renewable energy capacity by NHPC, which is engaged not only in hydro power development but also in various renewable energy projects such as solar, wind and green hydrogen projects.

The MoU was signed in hybrid mode on 29th April, 2024, by Executive Director (Renewable Energy and Green Hydrogen), NHPC, Shri V.R. Shrivastava and CEO, Ocean Sun, Mr. Kristian Tørvold. Ambassador of Norway to India, H.E. Ms. May-Elin Stener; Director (Technical), NHPC, Shri Raj Kumar Chaudhary and Executive Director (Strategy Business Development & Consultancy), NHPC, Shri Rajat Gupta joined the signing ceremony from Embassy of Norway, New Delhi and Ambassador of India to Norway, H.E. Dr. Acquino Vimal joined from Oslo.

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