

POLICY & ECONOMIC REPORT

OIL & GAS MARKET



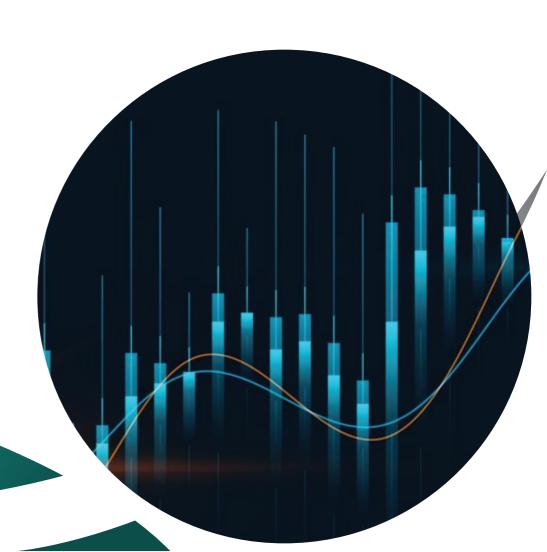


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Executive Summary

According to S&P Global Market, annual global real GDP growth is projected at 2.6% for FY 2023-24. The forecast for GDP reflects higher forecasts for growth in several countries, including the US, the UK, and India. The annual global real GDP growth forecast for FY 2024-25 is unchanged at 2.6%.

Global real GDP growth on a quarter-over-quarter basis likely reached a trough of 0.4% in the final quarter of 2023, with a pickup to 0.8% forecast by the second half of 2024. Support to economic growth is expected from two key sources: a boost to household real incomes from lower inflation and more accommodative financial conditions.



Figure 1: Real GDP growth (% change)

Source- S&P Global Market

In case of India, the National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI) released in the Second Advance Estimates (SAE) of National Income, 2023-24; Quarterly Estimates of Gross Domestic Product (GDP) for October-December quarter (Q3) of 2023-24. The key highlights are as under: -

- Real GDP in the year 2023-24 is estimated to attain a level of ₹172.90 lakh crore, against the GDP for the year 2022-23 of ₹160.71 lakh crore. The growth rate of GDP during 2023-24 is estimated at 7.6 percent as compared to growth rate of 7.0 percent in 2022-23.
- NSO also made upward revisions to the GDP growth rate for the first two quarters: from 7.8
 percent to 8.2 percent for April-June 2023 and from 7.6 percent to 8.1 percent for July-September
 2023.
- Nominal GDP in the year 2023-24 is estimated to attain a level of ₹293.90 lakh crore, against ₹269.50 lakh crore in 2022-23, showing a growth rate of 9.1 percent.

- As per the 2nd Advance Estimates, private final consumption expenditure (PFCE) will grow by 3%, and government final consumption expenditure (GFCE) will also grow by 3% in 2023-24.
- Gross Fixed Capital Formation (GFCF), or fixed investment, continued to drive growth, up 10.6 per cent in Q3.
- Indian industries fared well in the December quarter, with manufacturing and construction growing 11.6 per cent YoY and 9.5 per cent YoY respectively, reflecting the public capex support push.
- Backed by robust growth in manufacturing and construction sector, real GDP grew by 8.4% in Q3 of FY 2023-24.
- The services sector fared well at 6.7 % growth, with recovery seen in the Trade, Hotel, Transport, and Communication segments, in addition to Financial, Real Estate, and Professional Services.

According to the HSBC India Purchasing Managers' Index, the headline HSBC Flash India Composite PMI Output Index rose from a final reading of 60.6 in February 2024 to 61.3 in March 2024. Buoyant demand conditions fueled growth, with aggregate sales rising at a sharp and accelerated pace. This marks the 32nd consecutive month of expanding activity, underlining India's position as the fastest growing major economy.

India's wholesale price index-based inflation moderated further to a four-month low of 0.20 per cent in February 2024 on an annual basis, as against 0.27 per cent in January, according to the data from the Commerce Ministry. Positive rate of inflation in February, 2024 is primarily due to increase in prices of food articles, crude petroleum & natural gas, electricity, machinery & equipment and motor vehicles, trailers & semi-trailers etc. Inflation for food articles stood at 6.95 per cent in February 2024. For the primary articles segment, the inflation rate in February surged to 4.49 per cent from 3.84 per cent in the preceding month. Wholesale inflation in crude petroleum and natural gas grew 8.24 per cent in February. The fuel and power inflation witnessed a contraction of (-) 1.59 per cent in February against a contraction of (-)0.51 per cent in January. According to the Monetary Policy Committee (MPC), CPI inflation is projected at 5.4 % for 2023-24 with Q4 at 5.0 %. 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 increased to 8 % in February 2024 from 6.8 % in January 2024. While the unemployment rate eased in urban India, it rose substantially in rural India. Rural unemployment rate increased sharply to 7.8 per cent in February from 5.8 per cent in January. Urban unemployment rate fell from 8.9 per cent to 8.5 per cent.

Reserves rose \$10.47 billion during the week, recording the highest weekly increase since July 14, 2023, to touch a two-year high of \$636.1 billion as of March 8, 2024 as per Reserve Bank of India data. Foreign currency assets increased by \$8.12 billion to \$562.4 billion, due to appreciation in the rupee as well as central bank's intervention.

As far as oil and gas sector is concerned, crude oil futures prices were higher in February, amid persistent volatility fuelled by uncertainties surrounding geopolitical developments, and uncertainty concerning monetary policies from major central banks. The optimism surrounding global economic growth in 2024, short covering from speculators, and indications of strengthening physical oil market fundamentals provided support to oil futures.

Crude spot prices maintained their upward trajectory in February, consolidating gains from the previous month as market fundamentals continued to strengthen, reflected in steepening futures forward curves. The market saw support from short covering in the futures market, further bolstering prices. Persistent geopolitical tensions remained a driver, prompting concerns about potential disruptions to oil supply, thus providing sustained support to the oil risk premium. Spot prices also found support from the reduced supply of light sweet crude in the Atlantic Basin that was exacerbated by supply outages in various regions in recent months, including the US, North Sea, and North Africa.

Hedge funds and other money managers remained bullish about oil prices in February, raising their futures and options net-long positions in crude. The rise in net long positions was mainly in the NYMEX WTI contract which saw an increase of 16.3%. Money managers continued to reduce short positions amid persistent geopolitical tensions and signs of strong market fundamentals that should prices.

Natural gas spot prices at the US Henry Hub benchmark averaged \$1.72 per million British thermal units (MMBtu) in February 2024. Henry Hub's natural gas prices receded by 45.9% m-o-m in February. Prices experienced a correction following a short-lived winter freeze. Moreover, recent announcements about capacity additions in the US and incremental LNG supply outside the US exacerbated the bearish sentiment of prices. Prices were down by 27.8% y-o-y.

Economy in Focus

1. A snapshot of the global economy

Global economic growth

- According to S&P Global Market, annual global real GDP growth is projected at 2.6% for FY 2023-24.
- The forecast for GDP reflects higher forecasts for growth in several countries, including the US, the UK, and India.
- The annual global real GDP growth forecast for FY 2024-25 is unchanged at 2.6%.
- Global real GDP growth on a quarter-over-quarter basis likely reached a trough of 0.4% in the final quarter of 2023, with a pickup to 0.8% forecast by the second half of 2024. Support to economic growth is expected from two key sources: a boost to household real incomes from lower inflation and more accommodative financial conditions.

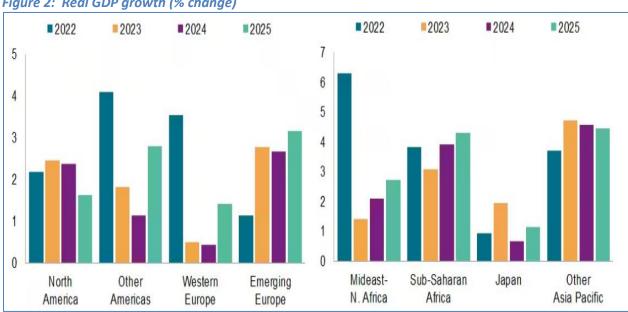


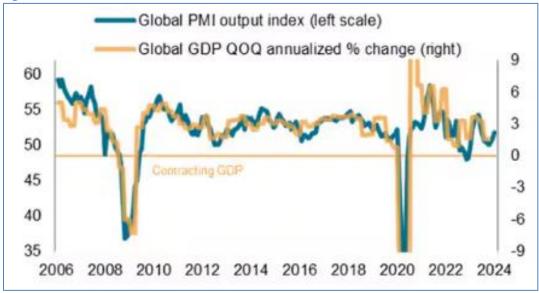
Figure 2: Real GDP growth (% change)

Source- S&P Global Market

Global PMI

- S&P Global 's PMI survey indicates that the global economy gained further growth momentum in February 2024.
- At an eight-month high of 52.1 in February 2024, against 51.8 in January 2024, the headline PMI covering manufacturing and services over 40 economies has risen for four consecutive months.

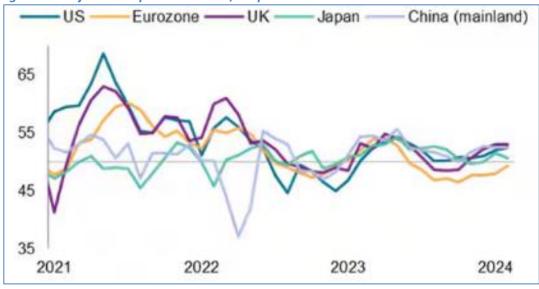
Figure 3: Global PMI



Source- S&P Global

- Business activity in the developed world rose at the fastest rate for eight months. Although growth slowed in Japan, Australia returned to growth and rates of expansion hit nine- and eight-month highs in the UK and US respectively. Downturns meanwhile moderated in both the eurozone and Canada, with composite PMIs at eight- and five-month highs respectively.
- Emerging market growth meanwhile slipped only slightly lower to record the second fastest
 expansion seen over the past eight months. India continued to record the strongest growth, and
 growth accelerated sharply to a 19-month high in Brazil. Steady but subdued growth was also seen
 in mainland China, though Russia's rate of expansion slipped to a 13-month low.

Figure 4: Major developed economies, output



Source- S&P Global

Global Inflation

• The consumer price inflation is projected to fall from the 2023 annual average of 5.7% to 4.8% in 2024.

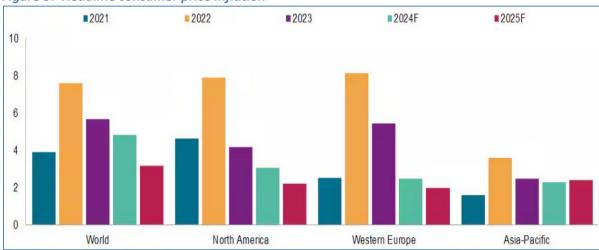


Figure 5: Headline consumer price inflation

Source- S&P Global

- In US for the month of February 2024, the consumer price index, a broad measure of goods and services costs, increased 0.4% for the month and 3.2% from a year ago. Excluding volatile food and energy prices, the core CPI rose 0.4% on the month and was up 3.8% on the year. A 2.3% increase in energy costs helped boost the headline inflation number. Food costs were flat on the month, while shelter climbed another 0.4%.
- The euro area annual inflation rate was 2.6% in February 2024, down from 2.8% in January 2024. Core inflation, excluding components of energy, food, alcohol, and tobacco, was 3.1%. Energy prices, which had reduced drastically last year because of Russia- Ukraine war crisis, continued to reduce, with the rate of deflation moving from -6.1% to -3.7%.

Global Trade

- According to the Global Trade Update, UNCTAD global trade in 2023 will amount to approximately US\$ 31 trillion, contracting by close to 3 per cent compared to the record high of 2022.
- Specifically, trade in goods expected to contract by about US\$ 1.3 trillion in 2023, or 5 per cent, while services trade expected to gain about US\$ 500 billion, or 8 per cent.
- The UNCTAD nowcast for Q1 2024 foresees a small but positive increase both in goods and services trade.
- Trade in environmental products grew in 2023, with electric cars sparking trade growth in motor vehicles.

• The outlook for 2024 is positive, but geopolitical issues and shipping disruptions increase uncertainties.

- Quarterly services — Quarterly goods

20%

10%

-10%

-20%

2019 Q1 2020 Q1 2021 Q1 2022 Q1 2023 Q1 2024 Q1

Figure 6: Global trade trends 2024 (annual growth in value of trade in goods and services, %)

Source- UNCTAD

2. US Fed keeps benchmark rates steady at 23-year high-mark

- The US Federal Reserve announced its second interest rate decision for 2024 on March 20th, 2024 after a two-day Federal Open Market Committee (FOMC) meeting, where it unanimously voted to leave the benchmark interest rates unchanged at 5.25 per cent 5.50 per cent for the fifth straight meeting.
- The US central bank has maintained its key overnight interest rate at the 23-year high mark since
 July 2023, and also signaled three rate cuts in 2024, despite sticky inflation. Fed policymakers
 foresee fewer rate cuts in 2025, and slightly raised the US core inflation and US GDP growth
 forecasts for 2024.
- The Fed's rate hikes have helped lower annual inflation from a peak of 9.1 per cent in June 2022 to 3.2 per cent.
- According to Fed, the annual core inflation -- which excludes energy and food prices is forecasted to 2.6 per cent, compared to 2.4 per cent in the projections issued in December. The unemployment rate projection also got lowered to four per cent from 4.1 per cent, for 2024.

3. UN General Assembly declares 2025 as Int'l year of peace, trust

- The UN General Assembly adopted a resolution to declare 2025 as the International Year of Peace and Trust.
- The resolution calls on the international community to resolve conflicts through inclusive dialogue and negotiation in order to ensure the strengthening of peace and trust in relations between UN

member states as a value that promotes sustainable development, peace and security, and human rights.

- It encourages all member states, organizations of the UN system and other international, regional, and subregional organizations, as well as other relevant stakeholders, to observe the International Year in an appropriate manner and to disseminate the advantages of peace and trust.
- It invites the UN Educational, Scientific and Cultural Organization and the Department of Political and Peacebuilding Affairs of the UN Secretariat to facilitate the implementation of the International Year.
- In a separate resolution, the UN General Assembly declares November 15 as the International Day for the Prevention of and Fight Against All Forms of Transnational Organized Crime.
- The resolution invites all UN member states, the organizations of the UN system and other global and regional organizations, as well as other relevant stakeholders, to commemorate the International Day in an appropriate manner, including through educational and public awareness-raising activities, and to share best practices in this regard.

4. UN Adopts First Global Artificial Intelligence Resolution

- The United Nations General Assembly adopted the first global resolution on artificial intelligence to encourage protecting personal data, monitoring Al for risks, and safeguarding human rights.
- The nonbinding resolution, proposed by the United States and co-sponsored by China and 121 other nations, took three months to negotiate and advocates strengthening privacy policies.
- In November 2023, the U.S., Britain, and other countries unveiled the first detailed international agreement on how to keep artificial intelligence safe from rogue actors, pushing for companies to create AI systems that are "secure by design."
- Europe is ahead of the United States, with EU lawmakers adopting a provisional agreement to oversee the technology, moving closer to adopting the world's first artificial intelligence rules.
- Like governments around the world, Chinese and Russian officials are eagerly exploring the use of
 Al tools for a variety of purposes.

5. Electric vehicles drive global trade in environmental goods

Trade in environmental products grew in 2023, with electric cars sparking trade growth in motor vehicles. The overall global trade saw a 2% rise in trade for environmental products, driven primarily by soaring electric car sales.

Trade in electric vehicles grew by 60%, highlighting shifting market demands and preferences.

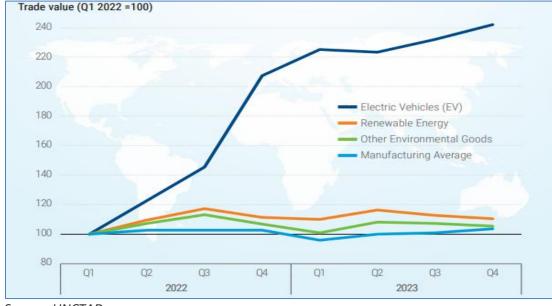


Figure 7: Electric vehicles drive trade in environmental goods

Source- UNCTAD

Environmental goods are defined as in the Combined List of Environmental Goods (OECD). Renewable energy includes solar panels, wind turbines and related products for energy production.

6. Indian Economy

India's economic growth

The National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI) released in the Second Advance Estimates (SAE) of National Income, 2023-24; Quarterly Estimates of Gross Domestic Product (GDP) for October-December quarter (Q3) of 2023-24. The key highlights are as under: -

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- NSO also made upward revisions to the GDP growth rate for the first two quarters: from 7.8
 percent to 8.2 percent for April-June 2023 and from 7.6 percent to 8.1 percent for July-September
 2023.
- Nominal GDP in the year 2023-24 is estimated to attain a level of ₹293.90 lakh crore, against ₹269.50 lakh crore in 2022-23, showing a growth rate of 9.1 percent.
- As per the 2nd Advance Estimates, private final consumption expenditure (PFCE) will grow by 3%, and government final consumption expenditure (GFCE) will also grow by 3% in 2023-24.
- Gross Fixed Capital Formation (GFCF), or fixed investment, continued to drive growth, up 10.6 per cent in Q3.

- Indian industries fared well in the December quarter, with manufacturing and construction growing 11.6 per cent YoY and 9.5 per cent YoY respectively, reflecting the public capex support push.
- Backed by robust growth in manufacturing and construction sector, real GDP grew by 8.4% in Q3 of FY 2023-24.
- The services sector fared well at 6.7 % growth, with recovery seen in the Trade, Hotel, Transport, and Communication segments, in addition to Financial, Real Estate, and Professional Services.

India PMI

- According to the HSBC India Purchasing Managers' Index, the headline HSBC Flash India Composite
 PMI Output Index rose from a final reading of 60.6 in February 2024 to 61.3 in March 2024.
- Buoyant demand conditions fueled growth, with aggregate sales rising at a sharp and accelerated
 pace. This marks the 32nd consecutive month of expanding activity, underlining India's position as the
 fastest growing major economy.

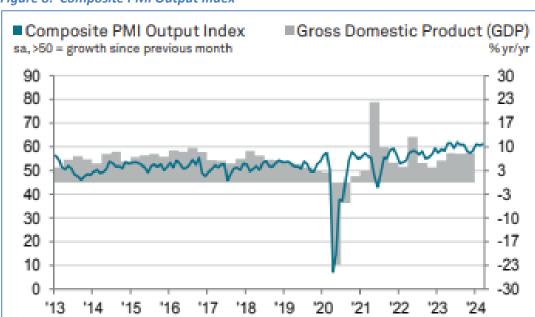


Figure 8: Composite PMI Output Index

Source- HSBC

- While the HSBC Flash India Services PMI Business Activity Index rose to 60.3 in March 2024, HSBC Flash India Manufacturing PMI rose to 59.2 in March 2024 from 56.9 in February 2024.
- The Flash PMI Index thus pointed to a renewed improvement in business optimism during March.
 New client enquiries and projects in the pipeline boosted business sentiment. Goods producers were
 more upbeat about the year-ahead outlook than service providers, as has been the case since last
 November.

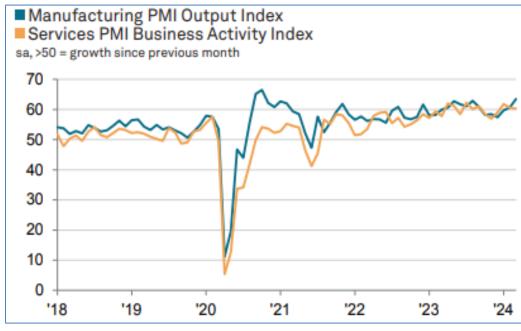


Figure 9: Manufacturing & Services PMI Index

Source- HSBC

Inflation in India

- India's wholesale price index-based inflation moderated further to a four-month low of 0.20 per cent in February 2024 on an annual basis, as against 0.27 per cent in January, according to the data from the Commerce Ministry.
- Positive rate of inflation in February, 2024 is primarily due to increase in prices of food articles, crude petroleum & natural gas, electricity, machinery & equipment and motor vehicles, trailers & semitrailers etc.
- Inflation for food articles stood at 6.95 per cent in February 2024. For the primary articles segment, the inflation rate in February surged to 4.49 per cent from 3.84 per cent in the preceding month.
- Wholesale inflation in crude petroleum and natural gas grew 8.24 per cent in February. The fuel and power inflation witnessed a contraction of (-) 1.59 per cent in February against a contraction of (-)0.51 per cent in January.
- 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 5.0 % for Q1; 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 increased to 8 % in February 2024 from 6.8 % in January 2024.
- While the unemployment rate eased in urban India, it rose substantially in rural India. Rural unemployment rate increased sharply to 7.8 per cent in February from 5.8 per cent in January. Urban unemployment rate fell from 8.9 per cent to 8.5 per cent.
- Unemployment rate increased in February alongside a rise in labor participation rate (LPR) as well as
 employment rate. LPR in India climbed to 41.4 per cent in February, from 40.6 per cent in the previous
 month. Employment rate, which is the proportion of employed persons in the working age population,
 inched up from 37.8 per cent to 38.1 per cent in February 2024.

India's external position

India's forex reserves

- Reserves rose \$10.47 billion during the week, recording the highest weekly increase since July 14, 2023, to touch a two-year high of \$636.1 billion as of March 8, 2024 as per Reserve Bank of India data.
- Foreign currency assets increased by \$8.12 billion to \$562.4 billion, due to appreciation in the rupee as well as central bank's intervention.
- The jump in reserves was also led by an increase in gold reserves by \$2.3 billion to \$50.72 billion as of March 18, 2024.
- SDRs (Special drawing rights) were up \$31 million to \$18.21 billion. The reserve position in the International Monetary Fund (IMF) increased by \$19 million to \$4.82 billion.

India's foreign trade position

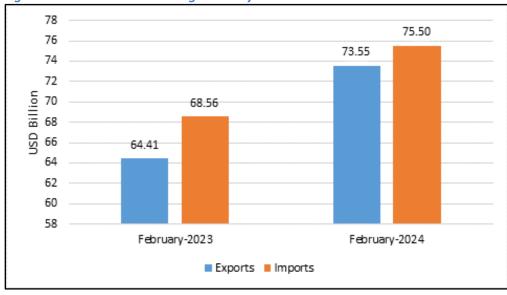
- India's overall exports (Merchandise and Services combined) in February 2024 is estimated to be USD 73.55 Billion, exhibiting a growth of 14.20 per cent over February 2023.
- Overall imports in February 2024 are estimated to be USD 75.50 Billion, exhibiting a growth of 10.13 per cent over February 2023.

Table 1: Trade during February 2024

		February 2024 (USD Billion)	February 2023 (USD Billion)
Merchandise	Exports	41.40	37.01
	Imports	60.11	53.58
Services*	Exports	32.15	27.40
	Imports	15.39	14.97
Overall Trade	Exports	73.55	64.41
(Merchandise +Services) *	Imports	75.50	68.56
	Trade Balance	-1.95	-4.15

Source- Ministry of Commerce & Industry

Figure 10: Overall Trade during February 2024



Source- RBI

• For the month of February 2024, under merchandise exports, 22 of the 30 key sectors exhibited growth in February 2024 as compared to same period last year (February 2023). These include Handicrafts Excl. Hand Made Carpet (86.98%), Tobacco (58.24%), Electronic Goods (54.81%), Coffee (45.92%), Tea (38.21%), Meat, Dairy & Poultry Products (37.83%), Oil Seeds (37.71%), Organic & Inorganic Chemicals (33.04%), Iron Ore (32.87%), Drugs & Pharmaceuticals (22.24%), Plastic & Linoleum (22.14%), Cereal Preparations & Miscellaneous Processed Items (17.69%),

Cotton Yarn/Fabs./Made-Ups, Handloom Products Etc. (17.07%), Engineering Goods (15.9%), Spices (14.84%), Carpet (14.55%), Fruits & Vegetables (12.72%), Ceramic Products & Glassware (9.79%), Man-Made Yarn/Fabs./Made-Ups Etc. (8.66%), Petroleum Products (5.08%).

- Under merchandise imports, 13 out of 30 key sectors exhibited negative growth in February 2024. These include Project Goods (-89.87%), Sulphur & Unroasted Iron Pyrites (-55.98%), Fertilisers, Crude & Manufactured (-33.72%), Vegetable Oil (-29.84%), Leather & Leather Products (-20.96%), Chemical Material & Products (-15.52%), Pearls, Precious & Semi-Precious Stones (-13.37%), Organic & Inorganic Chemicals (-12.35%), Cotton Raw & Waste (-9.4%), Artificial Resins, Plastic Materials, Etc. (-8.7%), Newsprint (-7.9%), Transport Equipment (-5.2%) and Wood & Wood Products (-1.68%).
- India's trade deficit has shown considerable improvement in April-February 2023-24. Overall trade deficit for April-February 2023-24 is estimated at USD 72.24 Billion as compared to the deficit of USD 116.13 Billion during April-February 2022-23, registering a decline of (-) 37.80 percent. The merchandise trade deficit during April-February 2023-24 is USD 225.20 Billion compared to USD 245.94 Billion during April-February 2022-23, registering a decline of (-) 8.43 percent.

7. Moody's raises India's 2024 GDP forecast to 6.8% from 6.1%

- Global rating agency Moody's raised India's GDP growth projection for 2024 calendar year to 6.8 per cent, up from the 6.1 per cent earlier.
- The increase in estimate was attributed to India's robust economic performance in 2023 and diminishing global economic challenges.
- India's economy grew 8.4 per cent during the October-December quarter. Moody's attributed this strong growth to the government's capital spending and vigorous manufacturing activity.
- India's GDP growth is estimated at 7.6 per cent for the year ending March 31, 2024.

Figure 11: GDP growth outlook (% Change), y-o-y

	2023	2024	2025
India	7.7	6.8	6.4
China	5.2	4.0	4.0
G20 EMs	4.7	3.8	3.9
Global	2.9	2.4	2.6
US	2.5	2.1	1.8
G20 Advd economies	1.8	1.5	1.6

Source- Moody's Investor Service

According to Moody, robust goods and services tax collections, rising auto sales, consumer optimism and double-digit credit growth suggest urban consumption demand remains resilient. On the supply side, expanding manufacturing and services PMIs add to evidence of solid economic momentum.

8. S&P Global Market Intelligence revises India's FY25 growth forecast to 6.8%

- In line with the projections from global agencies, the S&P Global Market Intelligence revised its forecast for India's growth to 6.8% for fiscal year 2025. Earlier, the rating agency predicted that India would grow at 6.6% during FY24-25. S&P Global Market Intelligence also raised its global growth forecast for 2024 from 2.3% to 2.6%.
- According to S&P Global, government capital expenditure and strong domestic consumption will
 underpin India's economic growth. Moreover, India is poised to benefit from increased global
 trade and investment opportunities.

9. Russia remains India's top crude supplier

- According to data from the Ministry of Commerce, Russia remained the top supplier of oil to India
 in January, 2024 accounting for nearly a third of the crude brought into the country. At \$4.47
 billion, the value of the crude oil supply from Russia jumped 41% year-on-year. Sequentially, crude
 imports from that country increased 14% from \$3.92 billion in December 2023, the data showed.
- Moscow was the biggest crude supplier to India in 2023, accounting for more than 30% of its imports, and will likely remain so through early 2024 despite the Red Sea crisis, as per a report by S&P Global Commodity Insights.
- Meanwhile, the increase in oil supplies from Russia has coincided with a year-on-year decline in imports from traditional suppliers in the Gulf region. Iraq was the second-largest source of crude oil for India in December, supplying \$2.54 billion worth of the commodity, 5% higher year-on-year.
- Supplies from Saudi Arabia fell 31.3% on year to \$1.55 billion in January. Among the top five suppliers, the United Arab Emirates (UAE) and the US followed, with their supplies to India worth \$980.24 million and \$107.49 million, respectively. The UAE saw a 6.70% rise in its oil supplies to India in January 2024, up from \$918.63 million a year ago. In contrast, crude oil supplies from the US to India slumped about 91%, falling to \$107.49 million in January.
- Prior to the Ukraine conflict, in fiscal year 2021-22, Russian oil accounted for only 2% of India's total oil imports, with Iraq being the top supplier, followed by Saudi Arabia and the UAE.
- However, post-invasion, Russia climbed to the top, driven by substantial discounts on oil prices.
 Despite a decrease in these discounts from over \$30 per barrel to \$4-6 per barrel, India's procurement of Russian oil has continued.

10. India ranks 113 out of 190 countries in the World Bank's legal gender gap index

- India's ranked improved to 113 out of 190 countries, with a score of 74.4 per cent in the World Bank's Women, Business and Law index, according to the 10th edition of the report.
- The index indicates the gap between legal rights enjoyed by men and women,
- Indian women enjoyed 60% of the legal rights given to men as per the new report, lower than the global average of 64.2%, as per the 2024 index report. However, India outperformed its South Asian counterparts, where women have only 45.9 per cent of the legal protections enjoyed by men. When it comes to constraints on freedom of movement and constraints related to marriage, the country got a full score.
- When it comes to supportive frameworks, India scored higher than both the global and South
 Asian averages. The lowest indicator in frameworks was childcare and the report recommended
 creating a publicly accessible registry or database of childcare providers and implementing a welldefined application process for parents seeking government financial support for childcare
 services, among others.
- The multilateral development bank releases a series of reports every year that analyses laws and regulations affecting women's economic opportunity in 190 economies. The paper presented indepth analysis of the challenges obstructing women's entry into the global workforce, hindering their ability to contribute to prosperity for themselves, their families, and their communities.
- The new index measured performance on legal frameworks across 10 indicators: Safety, mobility, workplace, pay, marriage, parenthood, childcare, entrepreneurship, assets, and pension. Two of these indicators were crucial, World Bank pointed out safety from violence and access to childcare services.
- The report underscored the obstacles women face in entrepreneurship, pay disparities and retirement age inequalities. Urgency is emphasized in reforming laws and enacting public policies to empower women to work and engage in business, it added.

Lessons from Economics

Invisible Hand in Economics

The term "invisible hand" first appeared in Adam Smith's famous work, *The Wealth of Nations*, to describe how free markets can incentivize individuals, acting in their own self-interest, to produce what is societally necessary. In other words, the approach holds that the market will find equilibrium without government or other interventions forcing it into unnatural patterns. He assumed that an economy can work well in a free-market scenario where everyone will work for his/her own interest.

The invisible hand metaphor distills two critical ideas. First, voluntary trades in a free market produce unintentional and widespread benefits. Second, these benefits are greater than those of a regulated, planned economy.

In a free economy, an economy will comparatively work and function well if the government will leave people alone to buy and sell freely among themselves. Adam Smith suggested that if people were allowed to trade freely, self-interested traders present in the market would compete, leading markets towards the positive output with the help of an invisible hand.

Benefits of an Invisible Hand -

- When supply and demand find equilibrium naturally, oversupply and shortages are avoided.
- The best interest of society is achieved via self-interest and freedom of production and consumption.
- It leads to specialization in production as self-interested individuals produce what is socially necessary and required by all.
- Market forces and competition will incentivize producers to make what is most profitable at the lowest cost, also encouraging technological progress and innovation, for the benefit of all.

Limitations of Invisible Hand-

- One of the main drawbacks of the invisible hand is that by pursuing their own self-interests, people and businesses can create external costs. Such examples include pollution or overproduction such as over-fishing. This leads to costs to society which are not accounted for in the final cost of the goods.
- In a monopoly market, as a result of limited competition, firms can become stagnant and inefficient, whilst increasing costs to customers.
- The invisible hand works in theory and in a lot of markets, but it can also create individual problems. For example, if demand falls, it may cause people to lose their jobs. Without those jobs,

people will have to live without that income for a period. We would assume that under the invisible hand, people would move to where labour is needed. However, this is not always the case. People often stay in the local vicinity to where they grew up – especially near family. Labour forces tend to be quite immobile, as 'liquid' labour does not exist in the real world.

The invisible hand concept is thus closely related to laissez-faire economics, which proposes that government interference in the economy should be minimal and should run its own course. Based on these ideas, as people act based on their own self-interest, it creates a need for supply and demand and can create a competitive and robust marketplace.

Smith's invisible hand theory shows that an optimal distribution of goods and services among several producers and consumers can be achieved without a 'visible hand' directing them to do so.

However, the relevance of invisible hand is questioned, as with the prevalence of Great Recession and financial crisis of 2008, the pandemic, economic fluctuations, and crypto boom, it needs to be checked whether the consumers can really create the best results for the economy when there is no government interference.

Oil Market

Crude Oil Price – Monthly Review

Benchmark crude oil prices were range bound in early March, as the market had already priced in the announced extension of OPEC+ voluntary production cuts through 2Q24. North Sea Dated rose by \$2.13/bbl to \$84.66/bbl during February as continued tanker attacks in the Red Sea lengthened supply routes and global on-land oil inventories fell for a seventh consecutive month to reach their lowest level since at least 2016.

Crude oil futures prices were higher in February, amid persistent volatility fuelled by uncertainties surrounding geopolitical developments, and uncertainty concerning monetary policies from major central banks. The optimism surrounding global economic growth in 2024, short covering from speculators, and indications of strengthening physical oil market fundamentals provided support to oil futures. The crude market structure strengthened further in February in all markets and the nearest months' time spreads moved into stronger backwardation, reflecting the market perception of stronger global supply and demand fundamentals specifically for the short term. Several planned and unplanned oil supply outages along with geopolitical developments in some producing regions raised concerns about global oil supply outlooks.

Crude spot prices maintained their upward trajectory in February, consolidating gains from the previous month as market fundamentals continued to strengthen, reflected in steepening futures forward curves. The market saw support from short covering in the futures market, further bolstering prices. Persistent geopolitical tensions remained a driver, prompting concerns about potential disruptions to oil supply, thus providing sustained support to the oil risk premium. Spot prices also found support from the reduced supply of light sweet crude in the Atlantic Basin that was exacerbated by supply outages in various regions in recent months, including the US, North Sea, and North Africa. The sweet/sour crude differential continued to widen in all markets in February on better performance of light sweet crudes compared to heavier crudes, specifically in Europe. Light sweet crude value was supported by a robust demand for light sweet crude and a high Brent-related risk premium that continued to make the sweet crude value higher compared to sour. Higher margins of light distillate products compared to weaker heavy sour products also contributed to widening the sweet/sour crude differential.

Hedge funds and other money managers remained bullish about oil prices in February, raising their futures and options net-long positions in crude. The rise in net long positions was mainly in the NYMEX WTI contract which saw an increase of 16.3%. Money managers continued to reduce short positions amid persistent geopolitical tensions and signs of strong market fundamentals that should prices.

Brent crude ranged an average to \$84.33 a barrel and WTI ranged to \$80.02 per barrel in the month of March 2024.

125 100 75 50 25 0 Brent Spot Price (\$/bbl) WTI Spot Price (\$/bbl) Dubai spot price (\$/bbl)

Figure 12: Benchmark price of Brent, WTI and Dubai crude

Source- World Bank

- Brent crude price averaged \$84.33 per bbl in March 2024, up by 3.1% on a month on month (MoM) and by 6.2% on year on year (YoY) basis, respectively.
- WTI crude price averaged \$80.02 per bbl in March 2024, up by 4.5% on a month on month (MoM) and down by 8.9% on year on year (YoY) basis, respectively.
- Dubai crude price averaged \$83.45 per bbl in March 2024, up by 3.3% on a month on month (MoM) and down by 6.3% on year on year (YoY) basis, respectively.

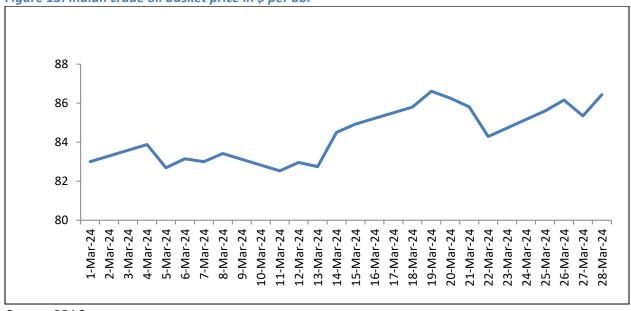
Table 2: Crude oil price in March, 2024

Crude oil	Price (\$/bbl)	MoM	YoY
		(%) change	(%) change
Brent	84.33	3.1%	6.2%
WTI	80.02	4.5%	8.9%
Dubai	83.45	3.3%	6.3%

Source- World Bank

Indian Basket Crude oil price

Figure 13: Indian crude oil basket price in \$ per bbl



Source- PPAC

• Indian crude basket price averaged \$84.49 per barrel in March 2024, up by 3.6% on Month on Month (M-o-M) and by 7.6% on a year on year (Y-o-Y) basis, respectively.

Oil production situation

- Non-OPEC liquids production in 2024 is forecast to grow by 1.1 mb/d to average 70.5 mb/d, including 50 tb/d in processing gains. This reflects 120 tb/d downward revision, compared with the previous month's assessment, due to the extension of additional voluntary adjustments in 2Q24 by some countries participating in Declaration of Cooperation (DoC) resulted in downward growth revisions this year. For 2024, the key drivers of non-OPEC supply growth are forecast to be the US, Canada, Brazil and Norway, while oil production is projected to see the largest decline in Russia and Mexico.
- OPEC NGLs and non-conventional liquids production is expected to increase by around 60 tb/d to average 5.5 mb/d in 2024 and additional growth of 110 tb/d is forecast for 2025 to average 5.6 mb/d.

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

Non-OPEC liquids production	2023	1Q24	2Q24	3Q24	4Q24	2024
Americas	28.71	29.07	29.23	29.58	29.89	29.44
of which US	20.90	21.03	21.37	21.60	21.78	21.45
Europe	3.66	3.79	3.74	3.72	3.88	3.78
Asia Pacific	0.44	0.45	0.42	0.43	0.42	0.43
Total OECD	32.81	33.31	33.40	33.74	34.19	33.66
China	4.52	4.60	4.59	4.46	4.46	4.53
India	0.77	0.79	0.79	0.79	0.78	0.79
Other Asia	2.28	2.31	2.24	2.22	2.22	2.25
Latin America	6.69	7.30	7.27	7.31	7.37	7.31
Middle East	3.27	3.24	3.24	3.27	3.28	3.26
Africa	2.42	2.43	2.38	2.42	2.45	2.42
Russia	10.93	10.83	10.44	10.85	10.87	10.75
Other Eurasia	2.93	2.90	2.91	2.99	3.01	2.95
Other Europe	0.10	0.10	0.10	0.10	0.10	0.10
Total Non-OECD	34.18	34.49	33.96	34.40	34.53	34.35
Total Non-OPEC production	66.99	67.80	67.36	68.14	68.72	68.01
Processing gains	2.47	2.52	2.52	2.52	2.52	2.52
Total Non-OPEC liquids production	69.46	70.32	69.88	70.66	71.24	70.53

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

- From the above table, it can be inferred, that the total non-OPEC liquids production is expected to reach 70.53 mb/d by 2024.
- OPEC NGLs and non-conventional liquids production is expected to increase by around 60 tb/d to an average of 5.5 mb/d.

Oil demand situation

- The 2024 global oil demand growth forecast remains unchanged at 2.2 mb/d, y-o-y. Oil demand growth in OECD Asia Pacific is revised down slightly for 1Q24, due to expected lower performance in the manufacturing and petrochemical sectors of Japan and South Korea. However, this is offset by upward adjustments for India and Other Asia, reflecting anticipated improvements during the same period. With this, the OECD is forecast to expand by around 0.2 mb/d, and non-OECD by 2.0 mb/d this year.
- In 2025, global oil demand is forecast to grow by 1.8 mb/d, y-o-y, unchanged from last month's assessment, with the OECD growing by 0.1 mb/d and non-OECD by 1.7 mb/d.

Table 4: World Oil demand, mb/d

	2023	1Q24	2Q24	3Q24	4Q24	2024	Growth	%
Total OECD	45.82	45.60	45.93	46.33	46.39	46.06	0.25	0.54
~ of which US	20.41	20.09	20.67	20.67	20.89	20.58	0.17	0.85
Total Non-OECD	56.39	57.73	57.99	58.55	59.29	58.39	2.00	3.55
~ of which India#	5.34	5.64	5.64	5.40	5.59	<i>5.57</i>	0.22	4.19
~ of which China	16.19	16.13	16.77	17.09	17.29	16.82	0.63	3.89
Total world	102.21	103.33	103.91	104.88	105.69	104.46	2.25	2.20

Source - OPEC monthly report, March 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 extended their upward trend, adding solid gains in February, with refinery turnarounds in the country resulting in lower product output. This drove product prices higher except fuel oil. The positive USGC refining economic performance was mostly driven by naphtha and gasoline despite the notable downturn associated with residual fuel. Naphtha represented the strongest contributor to the recorded gains, with crack spreads ascending into positive territory following ten consecutive months below the zero mark. Naphtha demand for gasoline blending picked up with the transition to summer-grade gasoline. At the same time, gasoline prices continued to increase, reflecting lower production levels, downward pressure on stocks, elevated octane prices and a positive outlook for the coming months.

On the other hand, a steep downturn registered at the bottom section of the barrel was caused by a reduction in high sulphur fuel oil coker feedstock requirements amid extensive refinery maintenance works. This likely prevented further upside to USGC refining economics in February.

In terms of operations, US refinery intake decreased to average 14.91 mb/d in February, showing a monthly drop of 1.0 mb/d. USGC margins against WTI averaged \$26.36/b, up by \$3.20, m-o-m, but down by \$4.05, y-o-y.

Refinery margins in Rotterdam against Brent rebounded from the downturn registered in the previous month to show the largest gains across key regions in February. The largest share of this monthly gain was derived from only two products. The geopolitical tensions and subsequent disruption in the flow of products drove freight costs higher amid lower refinery output. This exacerbated gasoil tightness in the region, pushing up crack spreads for the same product considerably higher. Gasoline, the second positive contributor, was supported by limited supplies, high octane prices and firm exports to West Africa. The combined improvement in both products' performance was sizeable and completely offset the losses registered with all other products across the barrel in NWE. On a yearly basis, margins in Rotterdam showed positive gains for the first time, following eleven months of y-o-y declines, except last October. This points to product market tightness comparable to or even more pronounced than what was seen a year earlier. The related bullish product market sentiment could worsen in the coming months with the

continuation of maintenance works and through the upcoming summer season, exerting additional upward pressure on NWE product prices in the near term.

Refinery throughput in Europe decreased in February, according to preliminary data, and was 310 tb/d lower m-o-m, averaging 9.33 mb/d. Refinery margins against Brent in Europe averaged \$15.45/b in February, which is \$3.46 higher, m-o-m, and \$2.59 higher, y-o-y.

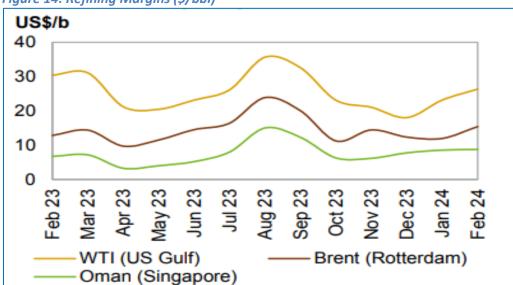


Figure 14: Refining Margins (\$/bbl)

Source- Argus and OPEC

The Southeast Asian gasoline 92 crack posted solid gains and was the strongest positive performer in Singapore, reaching a six-month high in February. In Southeast Asia, gasoline showed the largest monthly gain across the board as firm regional demand, particularly from India and China, backed the products markets. Additionally, lower gasoline availability in the Atlantic basin incentivized East-West volume flows, allowing Asian refiners to capture gains on the growing gasoline deficit in the West. In the coming month, Chinese refiners are expected to increase exports and make more use of the available product export quotas, particularly during the later stages of the heavy refinery maintenance season, when refinery margins climb, for optimal profits. The Singapore gasoline crack spread against Dubai in February averaged \$14.76/b. This was up by \$2.31/b, m-o-m, and by 95¢, y-o-y.

Apr 23

Ang 23

Jul 23

Jul 23

Ang 23

Ang 23

Ang 23

Jet/Kerosene

Jan 24

Feb 24

Feb 24

Feb 24

Premium gasoline

Jet/Kerosene

Feb 24

Feb 24

Figure 15: Singapore crack Spreads vs. Dubai (\$/bbl)

Source- Argus and OPEC

The Singapore gasoil crack spread continued to increase for the third consecutive month as regional demand remained supportive while export opportunities to Europe provided further backing. In the near term, gasoil balances are expected to contract globally with refinery run cuts, including in Southeast Asia, which points to added support going forward. The Singapore gasoil crack spread against Oman averaged \$24.05/b, up by \$1.62/b, m-o-m, and by \$2.39, y-o-y.

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

Singapore product prices		MoM (%)	YoY (%)
Singapore product prices	Price (\$/b)	change	change
Naphtha	72.48	-0.8%	-5.8%
Premium gasoline (unleaded 95)	100.07	4.3%	0.7%
Regular gasoline (unleaded 92)	95.58	4.8%	-0.3%
Jet/Kerosene	103.26	1.7%	-3.3%
Gasoil/Diesel (50 ppm)	106.10	3.6%	-1.0%
Fuel oil (180 cst 2.0% S)	103.97	3.2%	2.9%
Fuel oil (380 cst 3.5% S)	65.92	-1.5%	7.7%

Source- OPEC

Petroleum products consumption in India

Monthly Review:

 Overall consumption of all petroleum products in February 2024 with a volume of 19.72 MMT registered a growth of 6.63% on volume of 18.49 MMT in February 2023.

- MS (Petrol) consumption during the month of February 2024 with a volume of 3.03 MMT recorded a growth of 8.88% on volume of 2.77 MMT in February 2023.
- HSD (Diesel) consumption during the month of February 2024 with a volume of 7.44 MMT recorded a growth of 6.26% on volume of 6.99 MMT in the month of February 2023.
- LPG consumption during the month of February 2024 with a volume of 2.59 MMT registered growth of 8.48% over the volume of 2.39 MMT in the month of February 2023.
- ATF consumption during February 2024 with a volume of 0.704 MMT registered a growth of 13.03% over the volume of 0.623 MMT in February 2023.
- Bitumen consumption during February 2024 with a volume of 0.907 MMT registered growth of 13.17% over volume of 0.801 MMT in the month of February 2023.
- Kerosene consumption registered growth of 9.42% during the month of February 2024 as compared to February 2023.

Table 6: Petroleum products consumption in India, February 2024

Consumption of Petroleum	Consumption in '000	MoM (%)	YoY (%)
Products (P)	MT	change	change
LPG	2,594	-3.9%	8.5%
Naphtha	1,192	-8.6%	12.4%
MS	3,023	-2.5%	8.9%
ATF	704	-1.7%	13.0%
SKO	36	0.9%	9.4%
HSD	7,436	0.1%	6.3%
LDO	63	-7.8%	12.0%
Lubricants & Greases	322	-0.5%	-7.5%
FO & LSHS	512	-9.7%	-10.1%
Bitumen	907	14.6%	13.2%
Petroleum coke	1,531	-8.9%	2.5%
Others	1,404	5.7%	4.2%
TOTAL	19,722	-1.6%	6.6%

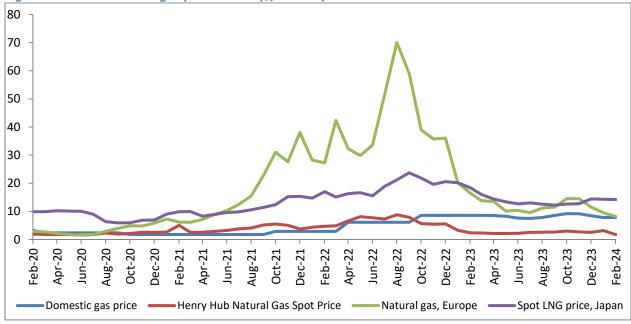
Source- PPAC

Natural Gas Market

Natural Gas Price - Monthly Review

- Natural gas spot prices at the US Henry Hub benchmark averaged \$1.72 per million British thermal units (MMBtu) in February 2024. Henry Hub's natural gas prices receded by 45.9% m-o-m in February. Prices experienced a correction following a short-lived winter freeze. Moreover, recent announcements about capacity additions in the US and incremental LNG supply outside the US exacerbated the bearish sentiment of prices. Prices were down by 27.8% y-o-y. Additionally, due to record-high gas production, strong hydropower output, and ample beginning stocks drove current natural gas storage to be more than 41% above the five-year average in late March.
- The natural gas spot price at the Title Transfer Facility (TTF) in the Netherlands in Europe traded at an average of \$8.15 per MMBtu. Natural gas prices in Europe fell for the fourth consecutive month. The average Title Transfer Facility (TTF) price went from \$9.56/mmbtu in January to \$8.15/mmbtu in February. Warmer-than average weather across the EU continued to weigh on the demand for gas and sustain robust storage levels. According to data from Gas Infrastructure Europe, EU gas storages were at 62.63% as of 29 February.
- Japan Liquefied Natural Gas Import Price averaged at \$14.21 per MMBtu for February 2024. There is a change of -0.90% from last month and -22.9% 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 USD 6.5 per MMBTU. The price such arrived at will also have a floor of USD 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.

Figure 16: Global natural gas price trends (\$/mmbtu)



Source- EIA, World Bank

Table 7: Gas price, February 2024

Natural Gas	Price (\$/MMBTU)	MoM (%) change	YoY (%) change
India, Domestic gas price (Mar'24)	8.17	4.08%	-4.67%
India, Gas price ceiling – difficult areas (Oct'23-Mar'24)	9.96	-17.82%	-20.06%
GIXI (Gas index of India) price*	10.7	-11%	-37%
Henry Hub	1.72	-45.9%	-27.7%
Natural Gas, Europe	8.15	-14.7%	-50.7%
Liquefied Natural Gas, Japan	14.21	-0.9%	-22.9%

Source- EIA, PPAC, World Bank, IGX

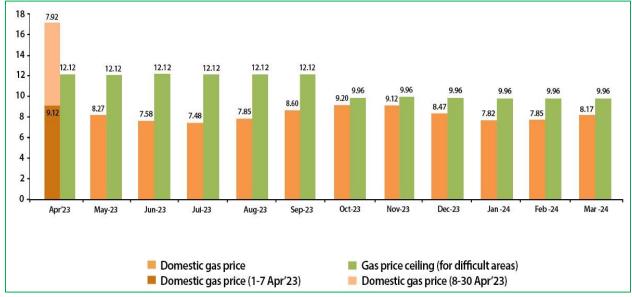
^{*}Prices are weighted average prices (excluding ceiling price gas)

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	
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	

Source- PPAC

Figure 17: Domestic natural gas price April 2023 – March 2024 (\$/mmbtu)



Source- PPAC

Indian Gas Market

• Gross production of natural gas for the month of February 2024 was 2947 MMSCM which was higher by 11.1% compared with the corresponding month of the previous year.

- Total import of LNG (provisional) during the month of February 2024 was 2552 MMSCM (P) (increase of 37.5% over the corresponding month of the previous year).
- Natural gas available for sale during February 2024 was 4935 MMSCM (increase of 22.5% over the corresponding month of the previous year).
- Total consumption during February 2024 was 5650 MMSCM (provisional). Major consumers were fertilizer (28%), City Gas Distribution (CGD) (20%), Power (12%), Refinery (10%) and Petrochemicals (4%).

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

1. Domestic Natural Gas Gross Production:

Domestic natural gas gross production for the month of February 2024 was 2947 MMSCM (increase of 11.1% over the corresponding month of the previous year).

Qty in **11.1%** MMSCM 2947 2651 31.4 % 1191 907 **■** OIL 233 246 ■ ONGC **▲5.8%** 1512 1510 0.2 % February 2023 February 2024 (P)

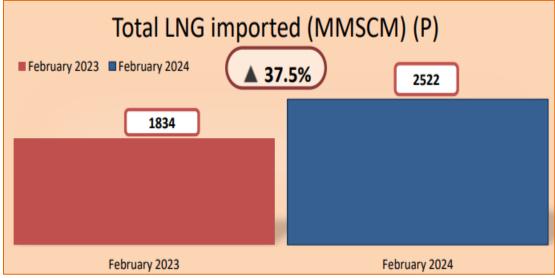
Figure 18: Domestic natural gas Gross production (Qty in MMSCM)

Source- PPAC

2. LNG imports:

Total imports of LNG (provisional) during the month of February 2024 was 2522 (P) (increase of 37.5%) over the corresponding month of the previous year 1834 MMSCM.

Figure 19: LNG imports (Qty in MMSCM)

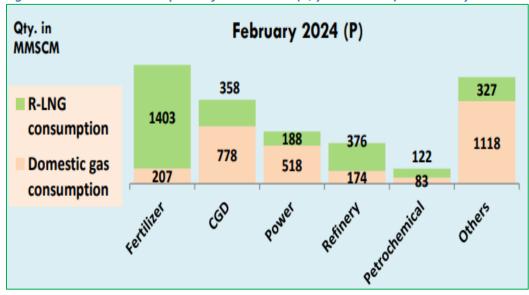


Source- PPAC

3. Sectoral Consumption of Natural Gas:

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

Figure 20: Sectoral Consumption of Natural Gas (Qty in MMSCM) in February 2024



Source- PPAC

Key developments in Oil & Gas sector

Monthly Production Report for February, 2024

1. Production of Crude Oil

Indigenous crude oil and condensate production during February 2024 was 2.3 MMT. OIL registered a production of 0.3 MMT, ONGC registered a production of 1.4 MMT whereas PSC/RSC registered production of 0.6 MMT during February 2024. There is a growth of 7.9% in crude oil and condensate production during February 2024 as compared to February 2023.

2. Production of Natural Gas

Gross production of natural gas for the month of February 2024 (P) was 2947 MMSCM which was higher by 11.1% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 33299 MMSCM for the current financial year till February 2024 was higher by 5.7% compared with the corresponding period of the previous year.

3. Crude Oil Processed (Crude Throughput)

Total Crude oil processed during February 2024 was 20.9 MMT which is 0.14% higher than February 2023, where PSU/JV refiners processed 14.4 MMT and private refiners processed 6.5 MMT of crude oil. Total indigenous crude oil processed was 2.1 MMT and total Imported crude oil processed was 18.8 MMT by all Indian refineries (PSU+JV+PVT). There was a growth of 2.6% in total crude oil processed in April February FY 2023 – 24 as compared to same period of FY 2022 – 23.

4. Production of Petroleum Products

Production of petroleum products was 22.4 MMT during February 2024 which is 2.6% higher than that of February 2023. Out of 22.4 MMT, 22.1 MMT was from refinery production & 0.3 MMT was from fractionator. There was a growth of 3.8% in production of petroleum products during April February FY 2023 – 24 as compared to same period of FY 2022 – 23. Out of total POL production in February 2024, share of major products, HSD is 42.3%, MS 16.4%, Naphtha 7.3%, ATF 6.5%, Pet Coke 5.3%, LPG 4.5% and balance is Bitumen, FO/LSHS, LDO, Lubes & others.

Key Policy developments/significant news in Energy sector

Govt. increases windfall tax on crude petroleum to Rs. 4,900/tonne

The government announced a hike in the windfall tax on crude oil by Rs. 300 to Rs. 4,900 per tonne effective March 16, 2024, from the previous rate of Rs. 4,600 per tonne. The adjustment in the windfall tax comes as the government aims to capitalize on the profits from the energy sector amid fluctuating global oil prices.

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.

Minister Hardeep S Puri inaugurated 201 CNG stations and India's first Small Scale LNG Unit of GAIL

The Minister Hardeep Singh Puri dedicated to the nation 201 CNG Stations and India's first Small Scale LNG Unit of GAIL. The dedication of the stations was done through video conferencing at a function in the presence of Union Minister of State, Petroleum and Natural Gas & Labour and Employment Shri Rameshwar Teli, Secretary, Ministry of Petroleum & Natural Gas (MoP&NG) Shri Pankaj Jain, Chairman and Managing Director, GAIL (India) Limited, Shri Sandeep Kumar Gupta, Additional Secretary, MoP&NG Shri Praveen Mal Khanooja, GAIL Director (Finance) Shri R K Jain, Director (Projects) Shri Deepak Gupta, Director (Marketing) Shri Sanjay Kumar, Director (Business Development) Shri R K Singhal and senior officials of oil and gas sector companies including CGD entities.

The 201 CNG stations dedicated to the Nation have been set up by 15 City Gas Distribution (CGD) entities of GAIL group in 52 Geographical Areas (Gas) across 17 states while India's first small-scale LNG unit has been set up by GAIL at its Vijaipur LPG plant.

Out of these 15 CGD entities, 53 stations belong to GAIL Gas Limited, 50 to Indraprastha Gas Limited, 43 to GAIL and 20 to Mahanagar Gas Limited. Moreover, four belong to Avantika Gas Limited, two to Bengal Gas Company Limited, three to Central UP Gas Limited, one to Goa Natural Gas Pvt. Limited, three to Green Gas Limited, one to Haridwar Natural Gas Limited, two to Purba Bharati Gas Limited, one to Rajasthan State Gas Pvt. Limited, one to Tripura Natural Gas Company Limited and one to Vadodara Gas Limited.

Speaking on the occasion, the Minister said that India is committed to continuously improve the policy and regulatory environment to support the development and make cleaner and sustainable fuel accessible and available to public at large. Addition of GAIL group's 201 CNG stations spread across 52 Geographical Areas is a step closer toward achieving this vision and it also portrays the company's commitment towards sustainability and environmental responsibility. The inauguration of these CNG stations is a testament to our collective efforts to reduce carbon footprint and mitigate the adverse effects of climate change.

Commending GAIL for its innovation in setting up India's first Small Scale LNG unit at Vijaipur (Madhya Pradesh) with project cost of 150 crores, Shri Puri said that this Small Scale Liquified Natural Gas

technology, has the potential to play a crucial role in connecting the isolated gas sources with market and consumers; thereby, helping in monetization of these resources.

As per Minimum work plan submitted by CGD entities, the Minister noted that the country will have around 17,500 CNG stations and around 120 million PNG (Domestic) connections by 2030. It will help in development of ancillary industries in various segments (CGD meters, Compressors, Dispensers etc) for fulling the dream of Atmanirbhar Bharat, he said.

With inauguration of the CNG stations and the Small-Scale LNG unit, the Minister reaffirmed government's commitment to sustainable energy practices.

Cabinet approved continuation of Rs.300 targeted subsidy to PM Ujjwala Yojana Consumers

The Union Cabinet chaired by Prime Minister Shri Narendra Modi approved the continuation of targeted subsidy of Rs.300 per 14.2 kg cylinder (and proportionately pro-rated for 5 kg cylinder) for up to 12 refills per year to be provided to the beneficiaries of Pradhan Mantri Ujjwala Yojana (PMUY) during FY 2024-25. As on 1st March, 2024 there are more than 10.27 crore PMUY beneficiaries.

The total expenditure will be Rs.12,000 crore for financial year 2024-25. The subsidy is credited directly to bank accounts of the eligible beneficiaries.

To make Liquified Petroleum Gas (LPG), a clean cooking fuel, available to the rural and deprived poor households, Government launched Pradhan Mantri Ujjwala Yojana in May 2016, to provide deposit free LPG connections to adult women of poor households.

India imports about 60% of it's LPG requirement. To shield PMUY beneficiaries from the impact of sharp fluctuations in international prices of LPG and to make LPG more affordable to PMUY consumers thereby ensuring sustained usage of LPG by them, Government started a targeted subsidy of Rs.200/- per 14.2 kg cylinder for up to 12 refills per annum (and proportionately pro-rated for 5 kg connections) to the PMUY consumers in May 2022. In October 2023, Government increased targeted subsidy to Rs.300 per 14.2 kg cylinder for up to 12 refills per annum (and proportionately pro-rated for 5 kg connections). As on 01.02.2024, the effective price of domestic LPG for PMUY consumers is Rs.603 per 14.2 kg LPG cylinder (Delhi).

Average LPG consumption of PMUY consumers has increased by 29% from 3.01 refills in 2019-20 to 3.87 refills (till January 2024) prorated for 2023-24. All PMUY beneficiaries are eligible for this targeted subsidy.

Cabinet approved signing of Memorandum of Understanding (MoU) between India and Bhutan on General Supply of Petroleum, Oil, Lubricants (POL) and related products from India to Bhutan

The Union Cabinet chaired by the Prime Minister, Shri Narendra Modi, has given its approval of signing of Memorandum of Understanding between the Government of India and the Royal Government of Bhutan on General Supply of Petroleum, Oil, Lubricants (POL) and related products from India to Bhutan.

It aims to benefit India and its citizens with improved economic and commercial linkages with Bhutan irrespective of any gender, class or income bias, particularly in the area of hydrocarbon sector. The Memorandum of Understanding will promote bilateral trade in the hydrocarbon sector and will ensure secured and long-term supply of petroleum products to Bhutan.

Since, exports play crucial role in realizing Aatmanirbhar Bharat. The MoU will give thrust towards self-reliant India. The MoU will be a strategic fit as Energy Bridge in India's Neighborhood First Policy.

Petroleum Minister Hardeep S Puri launched ETHANOL 100 fuel

Shri Hardeep Singh Puri, Union Minister for Petroleum & Natural Gas and Housing and Urban Affairs, launched 'ETHANOL 100, a revolutionary automotive fuel at IndianOil Retail Outlet M/s. Irwin Road Service Station. Now, customers can avail ETHANOL 100 at select 183 retail outlets across five states – Maharashtra, Karnataka, Uttar Pradesh, New Delhi, and Tamil Nadu.

Shri Pankaj Jain, Secretary, Ministry of Petroleum & Natural Gas; Shri Shrikant Madhav Vaidya, Chairman, senior officials from MoP&NG, functional Directors of IndianOil also participated in the launch ceremony.

Launching the path breaking fuel, Shri Hardeep Singh Puri said that the launch of ETHANOL 100 was inspired by the vision of the Prime Minister of India to transform Annadatas to Urjadatas. Calling it a revolutionary fuel, the Minister said that ETHANOL 100 fuel has the potential to transform our transportation sector and reduce our dependence on fossil fuels.

"It reflects the government's commitment to reducing import dependency, conserving foreign exchange, and boosting the agriculture sector. Since the Prime Minister's announcement on E20 (20% ethanol blended fuel) in 2023, the E20 availability has increased to 12,000 outlets in under a year, and now, with the launch of ETHANOL100 at 183 outlets of IndianOil, we are close to achieving the target of 20% ethanol blending by 2025-26. During the last 10 years these ethanol blending initiatives have enhanced farmer incomes, increased rural employment, reduced CO2 emissions equivalent to planting 1.75 crore trees and resulted in savings of Rs 85,000 crore worth of foreign exchange" he stated.

Speaking about the strides made by the country towards realizing vision of PM to reach 20% blending of Ethanol in Petrol by 2025-26, Shri Puri, said that Oil Marketing Companies (OMCs) have been at the forefront of this endeavor, introducing various blends of Ethanol with Petrol across the country. He said that OMCs have signed long term offtake agreements with 131 dedicated ethanol plants. These plants are expected to add an annual production design capacity of 745 crore litres. OMCs have also invested in increasing storage capacity and allied infrastructure for handling higher blending percentages, he added.

On the occasion, Shri Jain, Secretary MoP&NG, said "The initiative underscores a significant shift towards embracing sustainable technologies, instilling confidence in manufacturers to invest in ethanol-based vehicles. The transition of high-volume vehicles to alternative fuels is a testament to our commitment. Moreover, the consistent supply of ethanol, backed by our robust ethanol industry, addresses concerns over its availability. This move also affirms our commitment to decarbonization. I extend my compliments

to IndianOil for spearheading this initiative. Their support signifies the permanence of ethanol and flex fuels in our energy landscape".

Addressing the gathering, Shri Vaidya, Chairman, IndianOil highlighted that India is among the few countries of the world to have ETHANOL 100 fuel. He said "This marks a significant milestone in India's journey towards sustainability and clean mobility".

ETHANOL 100 stands as a cleaner, greener alternative to gasoline, boasting lower emissions of greenhouse gases and pollutants, thus aiding in combating climate change and enhancing air quality in our communities. With its high-octane rating, typically between 100-105, ETHANOL100 proves ideal for high-performance engines, ensuring improved efficiency and power output all while minimizing environmental impact. Moreover, ETHANOL 100's versatility shines through, as it can be used in a wide array of vehicles, including flex-fuel vehicles (FFVs) designed to run on gasoline, ethanol, or any blend of the two, showcasing its practicality and potential to become a mainstream fuel option with the right infrastructure in place.

Government amends Electricity (Late Payment Surcharge and Related Matters) Rules, 2022 to ensure optimum utilization of available power generating capacity

The Government of India has amended the Electricity (Late Payment Surcharge and Related Matters) Rules of 2022 in order to ensure adequate supply of electricity to meet the growing demand in the country. The amendments will enhance the reliability of power supply for all consumers.

Speaking about the amendments, the Union Minister for Power and New & Renewable Energy Shri R. K. Singh stated that a key amendment which has been made is related to surplus power which is within the declared generation capacity but not requisitioned by distribution companies. The Minister said that some power generators were not offering this surplus power in the market, thus resulting in unused power capacity at national level.

To address this issue and optimize the use of available power, power generators who do not offer their surplus power will now not be eligible to claim capacity or fixed charges corresponding to that surplus quantum. Additionally, this surplus power cannot be offered for sale in the power exchange, at a price of more than 120% of energy charge plus applicable transmission charge. This will increase the likelihood of the surplus electricity getting purchased and utilized.

Furthermore, amendments have been made to align the Rules with statutory provisions related to accessing the national power grid. These amendments facilitate distribution companies facing curtailment of access due to payment defaults, in getting quicker restoration of access to the national grid once they settle their outstanding dues.

The Power and New & Renewable Energy Minister stated that the Electricity (Late Payment Surcharge and Related Matters) Rules were introduced in 2022 to tackle cash flow challenges faced mainly by generation companies and transmission companies and to promote timely payments across the power sector. Since their notification, there has been significant progress in recovering outstanding dues, with most

distribution companies now adhering to regular payment schedules. The total unpaid bills have reduced from around Rs. 1.4 lakh crores in June 2022 to around Rs. 48,000 crores in February 2024.

Prime Minister dedicated to nation and lays foundation stone for multiple power projects across the country

The Prime Minister, Shri Narendra Modi inaugurated, dedicated to the nation and laid the foundation stone of multiple developmental projects related to power, rail and road sectors worth more than Rs. 56,000 crores in Adilabad, Telangana.

Addressing the gathering, the Prime Minister said that the land of Adilabad is becoming a witness to development projects related not only to Telangana but to the entire country as more than 30 development projects worth more than Rs 56,000 crores are either being dedicated to the nation or their foundation stones are being laid. These projects include many projects related to energy, environment sustainability and road connectivity in the state.

The Prime Minister informed that the 800 MW capacity NTPC Unit 2 which has been inaugurated will further boost the electricity generation capacity of Telangana.

The Prime Minister reiterated the mantra of nation's development through the development of the states. He said that with a better economy, trust in the country grows and states also benefit from that as they get investment. He mentioned the global buzz around the high growth rate of the Indian economy as India is the only major economy that has grown by 8.4 percent in the last quarter. "With this speed, India will become the world's third-largest economy", said the Prime Minister, which will also mean high growth for the economy of Telangana also, he added.

Governor of Telangana, Dr Tamilisai Soundararajan; Chief Minister of Telangana, Shri Revantha Reddy and Union Minister, Shri G Kishan Reddy were present on the occasion among others.

The list of projects which the Prime Minister inaugurated, dedicated to the nation and for which he laid the foundation stone are as given below.

SI. No	State	District	Type of Event	Project Name	Project Cost	Organization
1	Telangana	Pedapalli	Dedication to the Nation	Unit-02(800 MW) of Telangana STPP, Phase-I	8007	NTPC
2	Uttar Pradesh	Sonebhadra	Foundation Stone Laying	Singrauli Super Thermal Power Project, Stage- III (2x800 MW)	17000	NTPC
3	Jharkhand	Chatra	Dedication to the Nation	Unit-02 (660 MW) of North Karanpura STPP	4609	NTPC

4	Chhattisgarh	Raigarh	Foundation	Flue gas CO2 to	294	NTPC
			Stone Laying	4G Ethanol Plant		
5	Chhattisgarh	Korba	Foundation Stone Laying	Fly Ash Based FALG (Fly Ash - Lime - Gypsum) Aggregate Plant	22	NTPC
6	Andhra Pradesh	Simhadri	Foundation Stone Laying	Sea Water to Green Hydrogen plant	30	NTPC
7	Chhattisgarh	Sipat	Dedication to the Nation	Fly Ash Based Light Weight Aggregate Plant	51	NTPC
8	Uttar Pradesh	Gautam Buddha Nagar	Dedication to the Nation	STP Water to Green Hydrogen Plant	10	NTPC
9	Uttar Pradesh	Sambhal	Inauguration	Establish 765/400/220 kV Gas insulated Substation (GIS), Rampur and 400/220/132 kV Substation, Sambhal Substation with associated transmission lines under PRSTL Project	1165	PGCIL
10	Uttar Pradesh	Meerut	Inauguration	Meerut- Simbhavali Transmission Limited	1050	PGCIL
11	Uttar Pradesh	Kanpur Dehat	Inauguration	Gujrai SPP	342	SJVN
12	Uttar Pradesh	Jalaun	Inauguration	Gurhah SPP	408	SJVN
13	Uttar Pradesh	Jalaun	Inauguration	Parasan SPP	342	SJVN
14	Uttar Pradesh	Lalitpur	Foundation Stone Laying	Lalitpur Solar Power Project	3000	TUSCO / THDC

15	Andhra Pradesh	Kurnool	Foundation Stone Laying	Transmission System for Kurnool Wind Energy Zone/ Solar Energy Zone (AP) – Part-A & Part-B	3547	PGCIL
16	Chandigarh	Chandigarh	Inauguration	Establishment of 220/22KV GIS at UT Chandigarh along with 220KV D/C line from Chandigarh GIS to 400/220KV Panchkula (PG) Sub station.	322	PGCIL
17	Haryana	Bhiwani	Inauguration	Northern Region System Strengthening Scheme - XXXV	122	PGCIL
18	Himachal Pradesh	Bilaspur	Foundation Stone Laying	Nangal Floating Solar Project (FSP)	90	SJVN
19	Himachal Pradesh	Mandi & Shimla	Foundation Stone Laying	Sunni Dam HEP	2615	SJVN
20	Jharkhand	Koderma	Inauguration	Retrofitting Pollution Control System-FGD Unit-I (500 MW) of Koderma Thermal Power Station (2x500 MW)	676	DVC
21	Karnataka	Bagalkot	Inauguration	Evacuation of power from RE sources in Koppal Wind Energy Zone (Karnataka) (2500MW) (SPV	750	ReNew

				- Koppal- Narendra Transmission Limited)		
22	Maharashtra	Beed / Dharashiv	Inauguration	Transmission System for evacuation of power from RE Projects in Osmanabad area (1 GW) in Maharashtra	282	IndiGrid
23	Punjab	Ludhiana	Inauguration	Northern Region System Strengthening – XL	360	PGCIL
24	Rajasthan	Fatehgarh, Jaisalmer	Inauguration	380 MW Solar Power Project under REIA Tranche-1 in Fatehgarh, Rajasthan	2115.0	O2 Power/ NHPC
25	Uttarakhand	Pithoragarh	Inauguration	System Strengthening Scheme in Northern Region - XXXVII	380	PGCIL
26	Uttarakhand	Uttar Kashi	Inauguration	Naitwar Mori Hydro Electric Project	648	SJVN
27	Nagaland	Dimapur	Inauguration	North Eastern Region Strengthening Scheme – XII (NERSS-XII)	576.0	PGCIL
28	Assam	Dhubri	Foundation Stone Laying	70 MW SPP in Assam	360	SJVN
29	Telangana	Adilabad	Foundation Stone Laying	NH-353B-2L+PS of Adilabad – Bela-2L+PS of Km 0+00 to km 32+970	490	MoRTH

30	Telangana	Mulugu	Foundation Stone Laying	NH-163 km 279/150 to 290/500 (excluding from km 287/200 to 288/240) section of NH- 163 of Hyderabad- Bhupalapatnam road	136	MoRTH
31	Telangana / Maharashtra	Multi Dist	Dedication to the Nation	Ambari- Adilabad Pimpalkutti Electrification	70	MoR
32	Uttar Pradesh	Jalaun	Foundation Stone Laying	1200 MW Jalaun Ultra Mega Renewable Energy Power Park	6196	BSUL (JV of NHPC & UPNEDA)

The total cost of the 32 projects comes out to be Rs. 56,065 crores.

The Union Minister for Power and New & Renewable Energy Shri R. K. Singh joined the programme from the Power Grid substation in Maharani Bagh, New Delhi. Addressing the gathering before the commencement of the event in Adilabad, the Power and New & Renewable Energy Minister recalled that many mega projects in generation, transmission and distribution have been successfully undertaken in the last decade, to fulfil the aspirations of a rapidly growing nation. "The government has addressed the critical issue of power deficiency by adding more than 196 GW of generation capacity since April 2014, transforming our country from power deficit to power sufficient. The government has increased the generation capacity from 248554 MW in March 2014 to 428299 MW in December 2023. As a result of these measures, the availability of power supply in rural areas has increased from 12.5 Hours in 2015 to 20.6 Hours in 2023. The power supply in urban areas has increased to 23.78 Hours in 2023."

Complimenting Power Grid employees and the power sector PSUs and stakeholders, the Power Minister said that this growth has been possible because of their contribution. Highlighting the synergistic relationship between the growth of the power sector and of the economy, the Minister said that the nation would not have been able to grow as fast without strengthening of the power sector. "In order to accommodate the substantial capacity addition, the Government of India planned and added 1,89,052 circuit kilometers (ckm) of transmission lines, between 2013-14 to 2022-23, connecting the whole country into one grid running on one frequency with the capability of transferring 1,16,540 MW from one corner of the country to another, also further integrating the whole country into one national market."

The Minister added that Government has made concerted efforts to make Power Sector viable. "The AT&C losses have come down from 25.72% in 2014-15 to 15.40% in 2022-23. All current payment of Gencos are up-to-date and the legacy dues of Gencos have come down from Rs. 1,39,947 crores in June 2022 to Rs.

49,451 crores on 31st January, 2024. The subsidy payment to DISCOMS on account of subsidies announced by State Government are up-to-date."

Prime Minister of India laid foundation stone for 2,880 MW Dibang Multipurpose Hydroelectric Project of Arunachal Pradesh

The Prime Minister of India Shri Narendra Modi laid the foundation stone of 2,880 MW Dibang Multipurpose Hydropower Project of NHPC Limited in Lower Dibang Valley district of Arunachal Pradesh, at a Viksit Bharat Viksit North East Program in Itanagar, Arunachal Pradesh, March 9, 2024. The Prime Minister inaugurated, dedicated to the nation and laid the foundation stone for multiple development projects worth about Rs. 55,600 crores in Manipur, Meghalaya, Nagaland, Sikkim, Tripura and Arunachal Pradesh. The development projects encompass sectors like rail, road, health, housing, education, border infrastructure, IT, Power, oil and gas, among others. The function was also graced by Governor of Arunachal Pradesh, Lt. Gen Kaiwalya Trivikram Parnaik; Chief Minister of Arunachal Pradesh Shri Pema Khandu; and Deputy Chief Minister of Arunachal Pradesh Shri Chowna Mein.

Addressing the gathering, the Prime Minister mentioned work commencing in Dibang Multipurpose Hydropower Project in Arunachal Pradesh and Solar Power project in Tripura. "Dibang dam will be India's highest dam", he said, noting the dedication of the highest bridge and the highest dam to Northeast.

To be built at a cost of more than Rs. 31,875 crores, the Dibang project will be the highest dam structure in the country. It will generate electricity, help in flood moderation and lead to employment opportunities and socioeconomic development in the region.

The 2,880 MW Dibang Multipurpose project would come up near Munli village in Lower Dibang Valley District, Arunachal Pradesh. The project will have a 278-metres-high dam, which would be the highest Concrete-Gravity Dam of India. The Dam is planned to be constructed with Roller Compacted Concrete (RCC) technique and it will be the highest RCC Dam of the World. The Dibang Dam aims to place a peak of more than 5 lakh cubic metres of concrete in one month, which will be the first in the world.

The Project will generate 11,223 million units of Hydropower every year, providing clean and green energy which will be fed into the Northern Grid. With a construction period of 108 months, the project is scheduled to be commissioned in February 2032. It has the potential of providing direct employment to 500 people during construction phase and to 300 people during operation.

The Dibang Project will provide 12% free power and an additional 1% free power for Local Area Development Fund for development of the state of Arunachal Pradesh. The project will enable the state and the country to progress towards the target of Net Zero.

The Project is designed as an energy storage project, with flood moderation as one of the key objectives, besides power generation. For the purpose of flood moderation, a capacity of 1,282.60 Million Cubic Meters will be created by keeping the reservoir below the Full Reservoir Level in monsoon.

Cabinet approved signing of an MoU between India and Bhutan on co-operation in the field of Energy Efficiency and Energy Conservation Measures

The Union Cabinet chaired by Prime Minister Shri Narendra Modi approved the signing of Memorandum of Understanding (MoU) between India and Bhutan on extending co-operation in the field of Energy Efficiency and Energy Conservation Measures.

The MoU was signed between Bureau of Energy Efficiency, Ministry of Power, Government of India and Department of Energy, Ministry of Energy and Natural Resources, Royal Government of Bhutan.

As part of this MoU, India aims to assist Bhutan to enhance energy efficiency in the household sector by promoting star labeling programme developed by Bureau of Energy Efficiency. The formulation of building codes, to suite the climate condition of Bhutan, will be facilitated based with India's experience. Creation of a pool of energy professionals at Bhutan is envisaged by institutionalizing training of energy auditors.

The training of retailers would help in dissemination of energy efficient products with consumer audience regarding savings from star rated appliances. India aims to support Bhutan in its endeavor to develop and implement the Standards and Labelling scheme.

Energy intensive Appliances are the main products leading to higher consumption at household or at commercial establishments. In view of the rapid growth in energy intensive consumer goods, the demand for electrical energy has been increasing every year. This rising demand can be optimized, if the consumers prefer high efficiency appliances. BEE is spearheading the country's Star-labelling program that now covers 37 appliances used in daily life.

The MoU has been prepared by Ministry of Power in consultation with Ministry of External Affairs (MEA) and Department for Promotion of industry and internal Trade (DPIIT). The MoU will enable exchange of Information, data and technical experts related to Energy Efficiency and energy conservation between India and Bhutan. It will help Bhutan to ensure availability of energy efficient products in the market. The MoU will analyze energy efficiency policies and cooperation in the field of energy efficiency research and technology deployment.

Government approved E- Vehicle policy to promote India as a manufacturing destination for EVs

The Union Government has approved a scheme to promote India as a manufacturing destination so that e-vehicles (EV) with the latest technology can be manufactured in the country. The policy is designed to attract investments in the e-vehicle space by reputed global EV manufacturers.

This will provide Indian consumers with access to latest technology, boost the Make in India initiative, strengthen the EV ecosystem by promoting healthy competition among EV players leading to high volume of production, economies of scale, lower cost of production, reduce imports of crude Oil, lower trade deficit, reduce air pollution, particularly in cities, and will have a positive impact on health and environment.

The policy entails the following: -

- Minimum Investment required: Rs 4150 Cr (~USD 500 Mn)
- No limit on maximum Investment
- Timeline for manufacturing: 3 years for setting up manufacturing facilities in India, and to start commercial production of e- vehicles, and reach 50% domestic value addition (DVA) within 5 years at the maximum.
- Domestic value addition (DVA) during manufacturing: A localization level of 25% by the 3rd year and 50% by the 5th year will have to be achieved
- The customs duty of 15% (as applicable to CKD units) would be applicable on vehicle of minimum CIF value of USD 35,000 and above for a total period of 5 years subject to the manufacturer setting up manufacturing facilities in India within a 3-year period.
- The duty foregone on the total number of EV allowed for import would be limited to the
 investment made or Rs.6484 Cr (equal to incentive under PLI scheme) whichever is lower. A
 maximum of 40,000 EVs at the rate of not more than 8,000 per year would be permissible if the
 investment is of USD 800 Mn or more. The carryover of unutilized annual import limits would be
 permitted.
- The Investment commitment made by the company will have to be backed up by a bank guarantee in lieu of the custom duty forgone
- The Bank guarantee will be invoked in case of non-achievement of DVA and minimum investment criteria defined under the scheme guidelines.

Ministry of Heavy Industries announces Electric Mobility Promotion Scheme 2024

Electric Mobility Promotion Scheme 2024 (EMPS 2024) scheme is being introduced by Ministry of Heavy Industries, Government of India with the approval of Department of Expenditure, Ministry of Finance to further accelerate the adoption of EVs in the country. This is a fund limited scheme with a total outlay of Rs. 500 crores for the period of 4 months, w.e.f. 1st April 2024 till 31st July 2024, for faster adoption of electric two-wheeler (e-2W) and three-wheeler (e-3W) to provide further impetus to the green mobility and development of electric vehicle (EV) manufacturing eco-system in the country.

Eligible EV categories

- a) Two Wheelers (electric) (e-2W)
- b) Three-wheeler (electric) including registered e-rickshaws & e-carts and L5 (e-3W)

With greater emphasis on providing affordable and environment friendly public transportation options for the masses, scheme will be applicable mainly to those e-2W and e-3Ws registered for commercial purposes. Further, in addition to commercial use, privately or corporate owned registered e-2W will also be eligible under the scheme.

Components of EMPS 2024

Components	Description	Total Fund requirement
		(INR in crore)
Subsidies/Demand Incentive	incentive for electric 2W (e-2W) and	493.55
	electric 3 W including registered e-	
	rickshaws & e-carts and L5 (e-3W)	
Administration of scheme	including IEC (Information, Education &	6.45
	Communication) activities and fee for	
	Project Management Agency	
Total		500

Target numbers

The Scheme aims to support 3,72,215 EVs including e-2W (3,33,387) and e-3W (38,828 including 13,590 rickshaws & e-carts and 25,238 e-3W in L5 category). To encourage advance technologies, the benefits of incentives, will be extended to only those vehicles which are fitted with advanced battery.

Aatma Nirbhar Bharat

The Scheme promotes an efficient, competitive and resilient EV manufacturing industry in the country thereby promoting the Prime Minister's vision of Aatma-Nirbhar Bharat. For this purpose, Phased Manufacturing Programme (PMP) has been adopted which encourages domestic manufacturing and strengthening off EV supply chain. This shall also create significant employment opportunities along the value chain.

National Power Training Institute and PTC India to perform joint R&D in Energy Domain, with focus on Sustainable Development Goals

National Power Training Institute (NPTI) and PTC India Ltd. have entered into a Memorandum of Understanding to establish a Centre of Excellence (CoE) for Research & Development in the Energy Domain, with a focus on promoting sustainable development goals. The outcomes of the CoE's Research and Development endeavours will be disseminated to the power sector through Training and Capacity building. Under the MoU, NPTI and PTC India Limited will collaborate to undertake research, development, and knowledge sharing through the CoE.

The MoU was signed in the office of Ministry of Power, New Delhi, on 28th March, 2024 by Director General, NPTI, Dr. Tripta Thakur and by Senior Vice President (HR), PTC India Ltd., Ms. Koel Singhal on behalf of CMD, PTC India Ltd., Dr. Rajib K Mishra; in the presence of Secretary, Ministry of Power, Government of India, Shri Pankaj Agarwal.

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