

FIPI



Federation of Indian Petroleum Industry



POLICY & ECONOMIC REPORT

OIL & GAS MARKET

August 2024

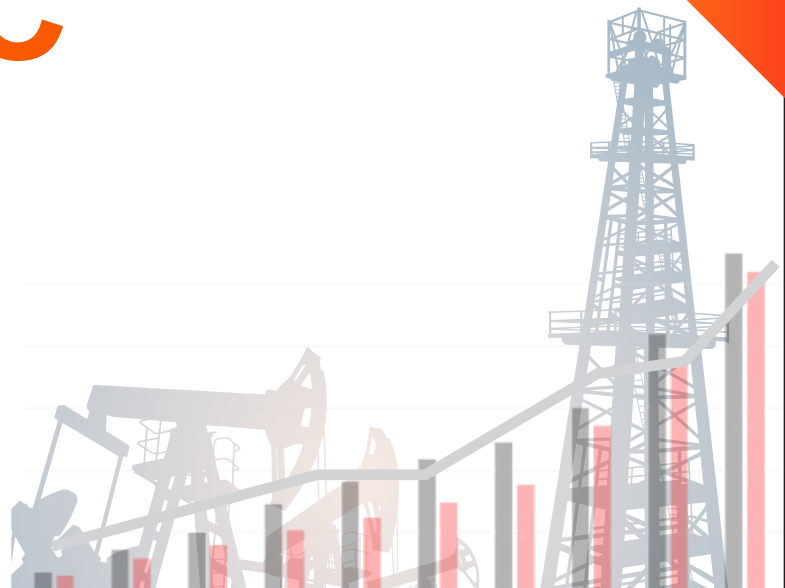


Table of Contents

Executive Summary	3
Economy in Focus.....	5
Lessons from Economics.....	23
Oil Market	25
Crude oil price – Monthly Review	25
Indian Basket Crude oil price	27
Oil production situation	27
Oil demand situation.....	28
Global petroleum product prices	29
Petroleum products consumption in India	31
Natural Gas Market.....	33
Natural Gas Price – Monthly Review.....	33
Monthly Report on Natural gas production, imports, and consumption – July 2024	36
Key developments in Oil & Gas sector.....	38
Key Policy developments/Significant news in Energy sector	39

List of Figures & Tables

Figure 1: Real GDP Growth rate (% change)	5
Figure 2: Real GDP Growth rate (% change)	6
Figure 3: OECD, year-on- year inflation rate	7
Figure 4: G7 economies & OECD, year-on- year inflation rate	8
Figure 5:z Flash PMI output of G4 developed economies	9
Figure 6: Crypto & data centers account for a growing no. of emissions.....	10
Figure 7: Inflation trend based on All India CPI	15
Figure 8: Overall Trade during July 2024	17
Figure 9: Total Trade during April- July 2024	18
Figure 10: Capacity Utilization (CU) and Seasonally adjusted CU	19
Figure 11: Growth in New orders.....	20
Figure 12: Benchmark price of Brent, WTI and Dubai crude	26
Figure 13: Indian crude oil basket price in \$ per bbl.....	27
Figure 14: Refining Margins (\$/bbl)	30
Figure 15: Singapore crack Spreads vs. Dubai (\$/bbl)	30
Figure 16: Global natural gas price trends (\$/mmbtu)	34
Figure 17: Domestic natural gas price August'23–24 (\$/mmbtu)	35
Figure 18: Domestic natural gas Gross production (Qty in MMSCM)	36
Figure 19: LNG imports (Qty in MMSCM)	37
Figure 20: Sectoral Consumption of Natural Gas (Qty in MMSCM) in April-July 2024.....	37
<hr/>	
Table 1: Trade during July 2024	17
Table 2: Crude oil price in August, 2024	26
Table 3: Non-DoC liquids production in 2024, mb/d	28
Table 4: World Oil demand, mb/d	29
Table 5: Singapore FOB, refined product prices (\$/bbl) in July 2024	31
Table 6: Petroleum products consumption in India, July 2024 and Year till Date (YTD) 2024	32
Table 7: Gas price, July 2024.....	34
Table 8: Gas price, GCV Basis	34

Executive Summary

According to S&P Global, annual global real GDP growth is projected at 2.7% for both 2024 and 2025, unchanged from their July 2024 forecast. However, S&P Global estimates a softer patch for quarter-over-quarter global growth rates. A subsequent pick-up is expected during 2025-26 as more accommodative financial conditions gradually filter through.

According to IMF, in the United States, projected growth rate is estimated at 2.6 percent in 2024, and further expected to slow down to 1.9 percent in 2025 as the labor market cools and consumption moderates, with fiscal policy starting to tighten gradually. In the euro area, activity appears to have bottomed out as growth is forecasted at 0.9 percent for 2024, driven by stronger momentum in services and higher-than-expected net exports in the first half of the year; growth is projected to rise to 1.5 percent in 2025.

In case of India, the Reserve Bank of India (RBI) in its Monetary Policy Committee meeting held in August 2024, expects India's real GDP to grow by 7.2 per cent in 2024-25. The GDP growth is pegged at 7.1 per cent in the June 2024 quarter, and is expected at 7.2 per cent in the September 2024 quarter. The RBI projects a pickup in GDP growth in the December 2024 quarter, to 7.3 per cent. In the March 2025 quarter, India's GDP is expected to grow by 7.2 per cent.

According to the RBI, the GDP growth in 2024-25 is expected to be supported by a recovery in rabi sowing, sustained profitability in manufacturing and underlying resilience of services.

RBI kept its key interest rate unchanged, as it continued its efforts to sustainably lower inflation towards its 4% target. The Monetary Policy Committee (MPC) kept the repo rate unchanged at 6.50% for a ninth straight policy meeting. Retail inflation projection also retained at 4.5% for FY'25. Forex reserves rise to historic high of \$675 billion.

According to data released by Ministry of Statistics & Programme Implementation (MoSPI), there is sharp decline in the year-on-year inflation rate based on All India Consumer Price Index (CPI) number for the month of July, 2024, which is the lowest in the last 59 months. Year-on-year inflation rate based on All India Consumer Price Index (CPI) number is 3.54% (Provisional) for the month of July, 2024. Corresponding inflation rate for rural and urban is 4.10% and 2.98%, respectively.

The HSBC India Manufacturing Purchasing Managers' Index (PMI), conducted by S&P Global, showed that India's manufacturing sector continued to post impressive growth in July. The seasonally adjusted index declined marginally to 58.1 in July 2024 from 58.3 in June. The seasonally adjusted index denotes an expansion when it is above 50, and a contraction when it is below 50. PMI showed a marginal slowdown in the pace of expansion in July, but with most components remaining at robust levels, the small drop was no cause for concern.

The unemployment rate in urban areas for individuals aged 15 years and above was 6.6 per cent in April – June 2024 (Q1 FY25), remaining unchanged from the first quarter of FY24. For males, the unemployment rate slightly decreased from 5.9 per cent in the previous year to 5.8 per cent, and for females, it marginally

declined from 9.1 per cent to 9.0 per cent, as per the latest data. Quarter-on-quarter, unemployment in males fell from 6.1 per cent to 5.8, while it rose from 8.5 per cent to 9 per cent in the females.

According to latest data released by Reserve Bank of India, India's forex reserves increased by \$4.54 billion to \$674.66 billion as of August 16, 2024. India's foreign currency assets (FCAs) grew by \$3.61 billion to \$591.57 billion. Expressed in dollar terms, the FCAs include the effect of appreciation or depreciation of non-US units like the euro, pound and yen held in the foreign exchange reserves. Gold reserves saw a surge of \$865 million to \$60.1 billion. SDRs for the above-mentioned week were up by \$60 million to stand at \$18.34 billion. Moreover, Reserve position in the IMF was up by \$12 million to \$4.65 billion. India's forex reserves had touched an all-time high of \$675 billion as of August 2, 2024 but had fallen \$4.8 billion on August 9, 2024.

As far as oil and gas industry is concerned, Oil markets exhibited Olympic levels of volatility over recent weeks. Benchmark crude oil prices tumbled sharply lower in July and early August as unexpected economic data threw the market off balance. Questions arise over the health of the global economy re-emerged as Japan increased interest rates sparking a reversal in yen carry trades, China's outlook deteriorated and US hiring slowed in July. Persistent geopolitical tensions in the Middle East and some relatively positive macroeconomic data backstopped weakness in oil futures, with prices rebounding higher in the second week of August.

Hedge funds and other money managers turned increasingly bearish on crude oil, closing a large volume of long futures and options positions and raising short positions, particularly in the ICE Brent market. This fuelled oil price volatility and accelerated the downward trend in oil futures prices in the second half of July. Between the weeks of 2 and 30 July, speculators sold an equivalent of 155 mb in both futures and options for ICE Brent and NYMEX WTI.

The forward curves of oil futures prices strengthened in July 2024. All major crude benchmarks showed steeper backwardation, indicating further improvements in the global oil supply/demand outlook. The nearest-month time spreads moved into stronger backwardation as front-month futures contracts received support from firm short-term physical market fundamentals, amid the ongoing holiday driving season and geopolitical risk premiums.

Natural gas spot prices at the US Henry Hub benchmark averaged \$2.07 per million British thermal units (MMBtu) in July 2024. Henry Hub's natural gas prices retracted in July after advancing for four consecutive months. Prices fell sharply by ~18%, m-o-m, pressured by reports of ample supply, which offset support from cooling demand. According to data from the US Energy Information Administration (EIA), underground storage was 8.4% higher than the same period last year as of July and 15.7% above the five-year average. Moreover, power outages caused by Hurricane Beryl early in July weighed on US LNG exports, inflating domestic storage and thus putting more downward pressure on prices. Prices were down by 18.8%, y-o-y.

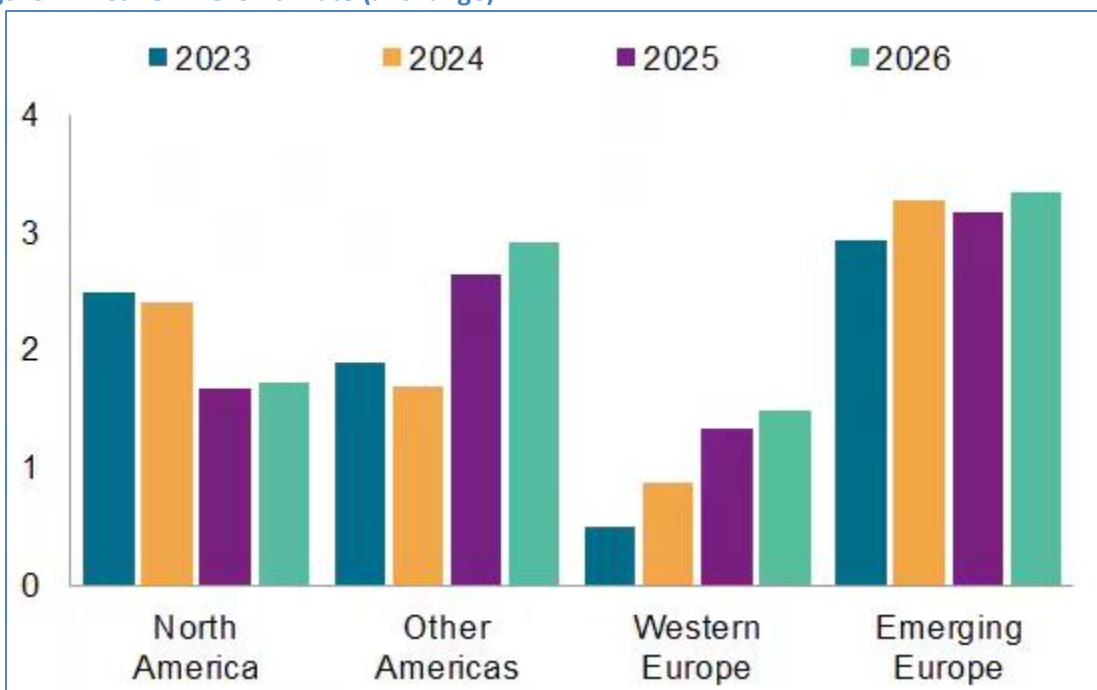
Economy in Focus

1. A snapshot of the global economy

Global economic growth

- According to S&P Global, annual global real GDP growth is projected at 2.7% for both 2024 and 2025, unchanged from their July 2024 forecast.
- However, S&P Global estimates a softer patch for quarter-over-quarter global growth rates. A subsequent pick-up is expected during 2025-26 as more accommodative financial conditions gradually filter through.

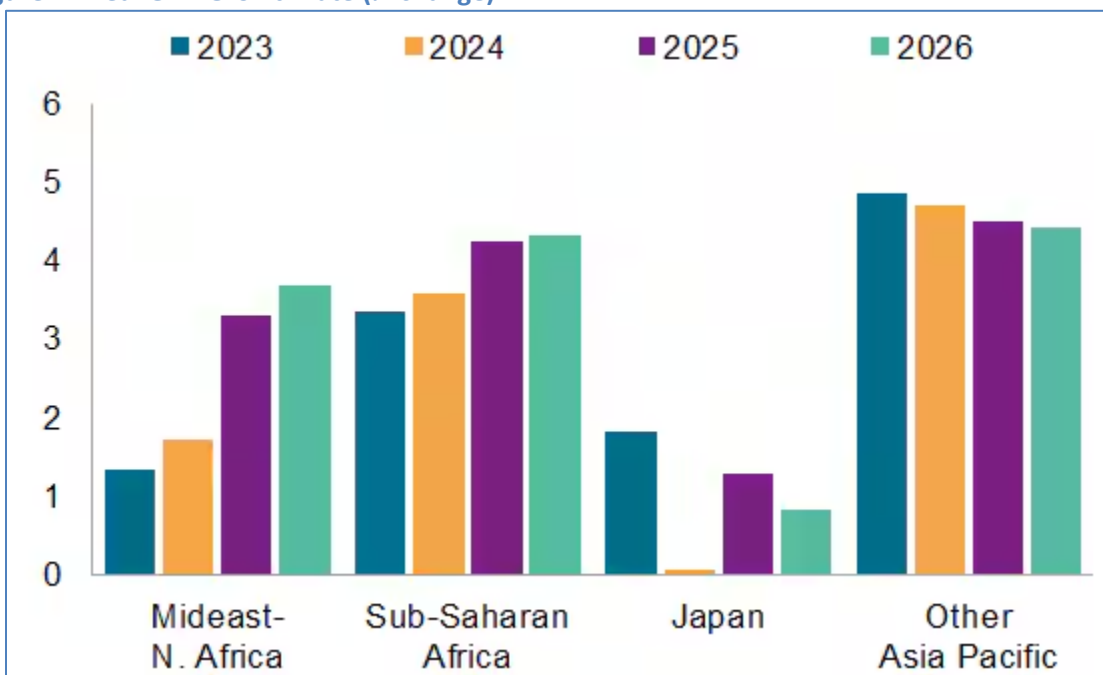
Figure 1: Real GDP Growth rate (% change)



Source- S&P Global

- According to IMF, in the United States, projected growth rate is estimated at 2.6 percent in 2024, and further expected to slow down to 1.9 percent in 2025 as the labor market cools and consumption moderates, with fiscal policy starting to tighten gradually.
- In the euro area, activity appears to have bottomed out as growth is forecasted at 0.9 percent for 2024, driven by stronger momentum in services and higher-than-expected net exports in the first half of the year; growth is projected to rise to 1.5 percent in 2025.

Figure 2: Real GDP Growth rate (% change)



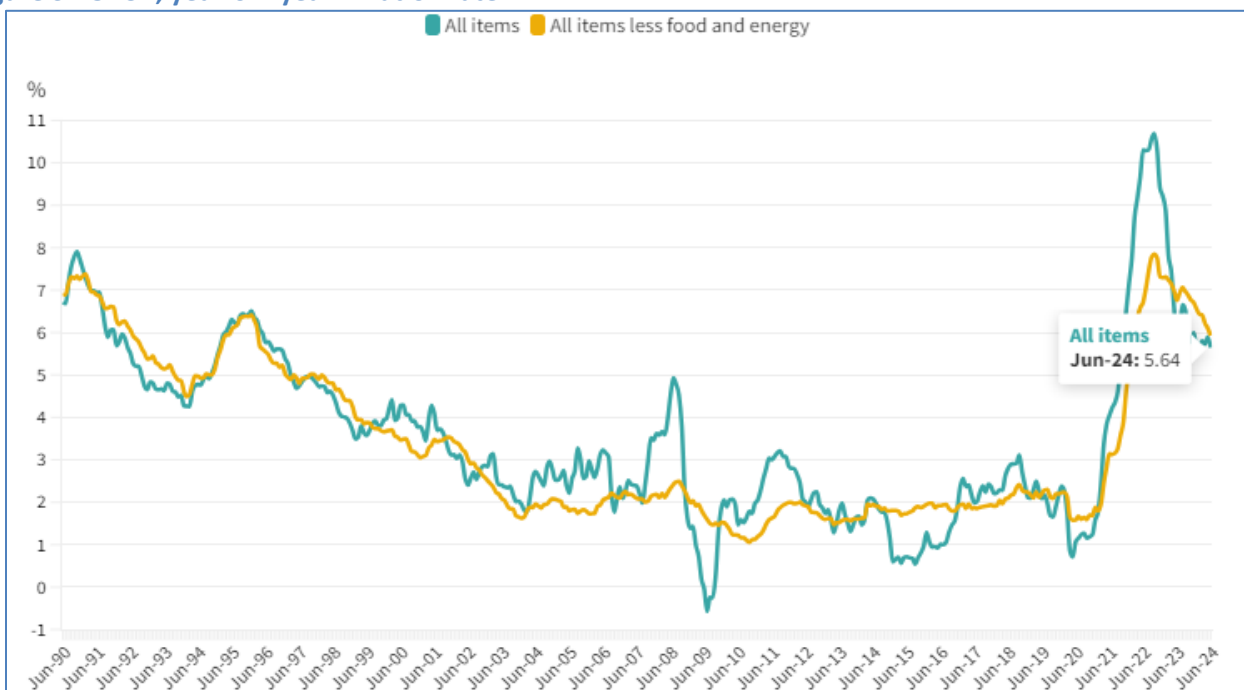
Source- S&P Global

- The forecast for growth in India has also been revised upward, to 7.0 percent, this year, with the change reflecting carryover from upward revisions to growth in 2023 and improved prospects for private consumption, particularly in rural areas.
- For the Middle East and Central Asia, oil production and regional conflicts continue to weigh on prospects. The growth forecast for 2024 in Saudi Arabia has been revised downward by 0.9 percentage point; the adjustment reflects mainly the extension of oil production cuts.

Global Inflation

- Year-on-year inflation in the Organization for Economic Cooperation and Development (OECD) as measured by the Consumer Price Index (CPI) declined in June 2024, to 5.6% from 5.9% in May 2024.
- This is the lowest level since October 2021, although a similar rate was already approached several times since the beginning of 2024, at 5.7%.
- Headline inflation declined in 24 of 38 OECD countries and stood below 2.0% in nine countries in June as opposed to six in May.
- By contrast inflation remained above 5.0% in Colombia and Iceland, and above 7.0% in Türkiye.
- OECD inflation excluding Türkiye is estimated to have declined to 2.9% in June, from 3.1% in May.
- This is mainly because energy inflation declined to 2.3% in June from 2.5% in May, with falls in 24 countries.

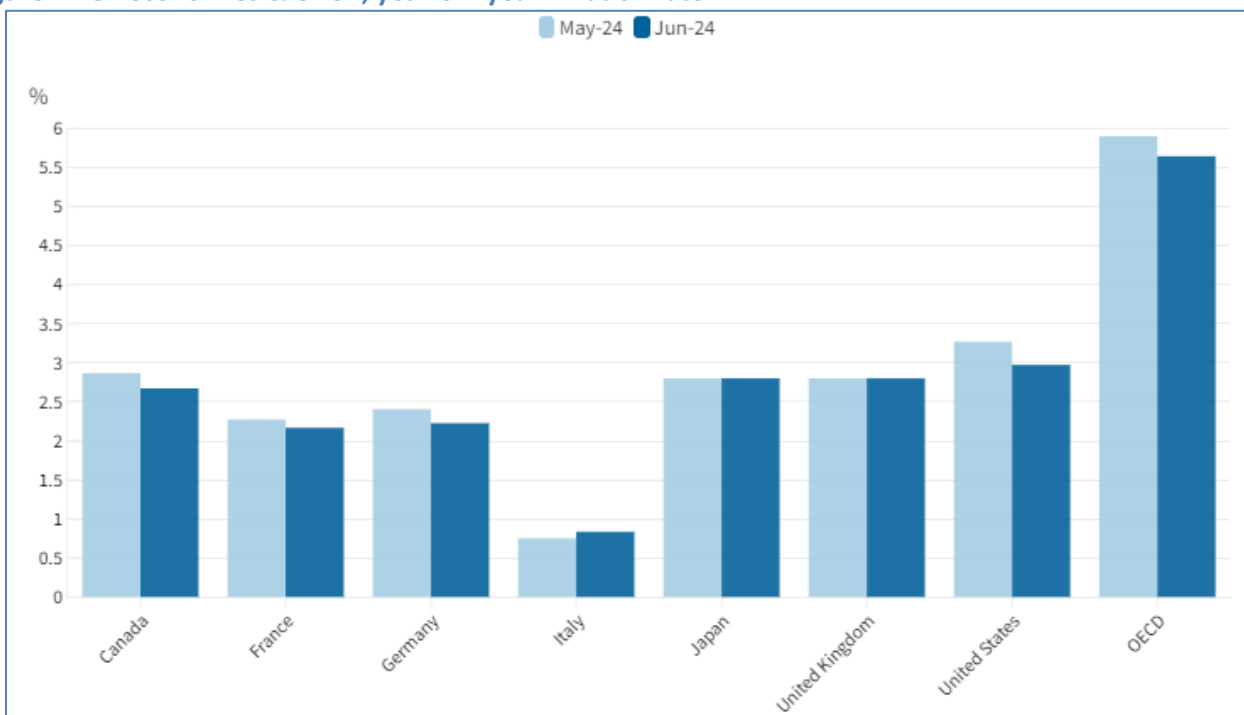
Figure 3: OECD, year-on-year inflation rate



Source- OECD (2024)

- OECD core inflation (inflation less food and energy) fell below 6.0% for the first time since March 2022. OECD food inflation was broadly stable at 4.7% in June 2024 from 4.8% in May 2024.
- In the euro area, year-on-year inflation as measured by the Harmonized Index of Consumer Prices (HICP) was broadly stable at 2.5% in June as compared with 2.6% in May. It has hovered between 2.4% and 2.9% since October 2023.
- In the G20, year-on-year inflation fell to 7.0% in June from 7.3% in May. Headline inflation declined in Argentina and Indonesia, but it increased in Brazil for the second consecutive month. It remained broadly stable in China, Saudi Arabia, and South Africa.

Figure 4: G7 economies & OECD, year-on- year inflation rate

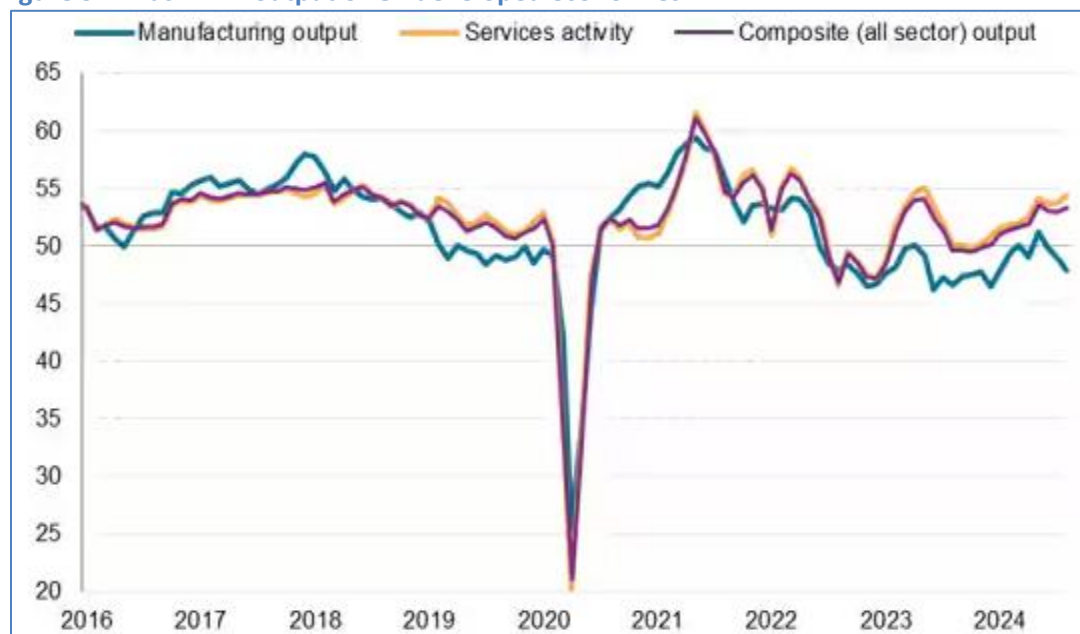


Source-OECD (2024)

Global PMI

- The flash PMI data from S&P Global signaled a strengthening of growth for the world's major developed economies in August 2024, with improving trends seen across the board.
- A sustained robust expansion was seen in the US, with growth also accelerating to solid rates in both the UK and Japan. Even eurozone reported an improved rate of growth, albeit still lagging.
- Although US growth slowed slightly compared to the prior three months, it was still stronger than most of the rates seen in the prior two years. UK growth meanwhile accelerated to the second-fastest seen over the past 15 months, and Japan's rate of expansion hit a 15-month high. While modest in comparison, eurozone growth was the best seen for three months.

Figure 5:z Flash PMI output of G4 developed economies



Source- S&P Global

2. Wind and Solar Overtake Planet-Warming Fossil Fuels in EU Electricity Generation for First Time

Wind and solar energy made up a record share of the European Union’s (EU) electricity generation in the first half of 2024, overtaking fossil fuels for the first time.

According to energy think tank Ember, the two renewable energy sources accounted for 30% of the bloc’s electricity, while planet-warming fossil fuels accounted for 27%, a 17% decrease in the first half of this year compared to the same period in 2023. This is despite a 0.7% rebound in energy demand following two years of downward trends, which Ember said was more than met by wind and solar.

In total, wind and solar surpassed fossil fuel generation in 13 of the 27 EU Member States with Germany, Belgium, Hungary, and the Netherlands hitting the milestone for the first time. All low-carbon sources combined, including hydroelectric and nuclear power, surged this year, and combined made up 73% of all electricity generation. Contrarily, all planet-warming sources dropped. Coal generation alone fell by 24% compared to the same period last year.

According to Ember, the bloc’s emissions so far this year were 31% lower than in the first half of 2022 in what it called “an unprecedented decline over such a short period.” In January 2024, the Centre for Research on Energy and Clean Air’s (CREA) found that carbon dioxide (CO₂) emissions in the EU fell 8% last year. This represented a 60-year low and the second-steepest year-to-year decrease after 2020, a year heavily influenced by Covid19 lockdowns and restrictions.

The research center found that more than half of the decline was attributable to the rapid expansion of renewable energy sources, particularly wind and solar, as well as a rebound in hydropower and nuclear.

3. Carbon Emissions from AI and Crypto Are Surging and Tax Policy Can Help

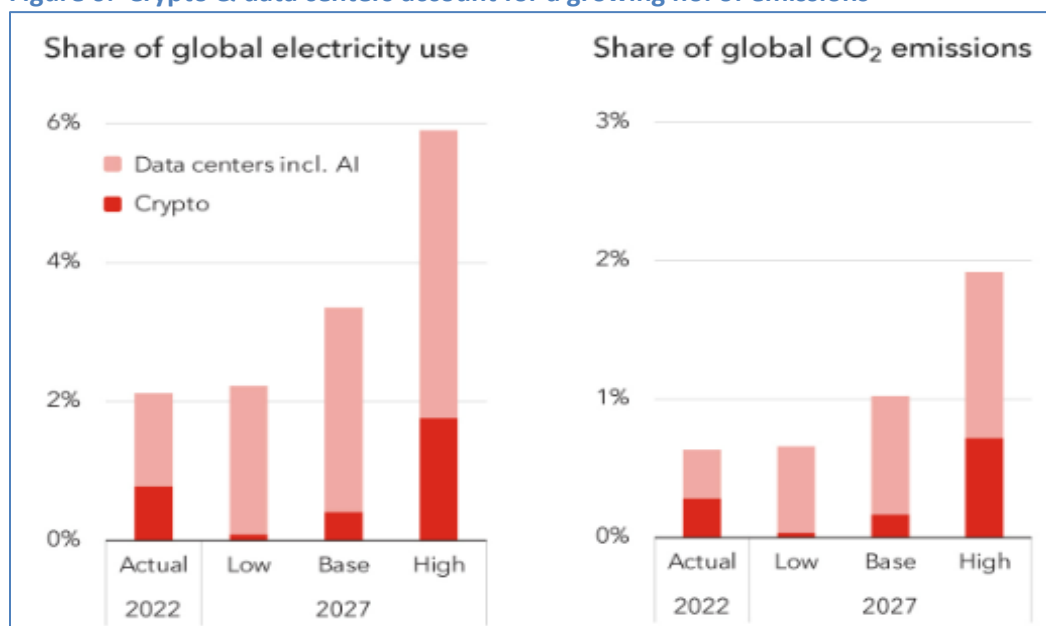
Crypto mining and data centers together accounted for 2 percent of world electricity demand in 2022 and that share is likely to climb to 3.5 percent in three years, according to estimates based on projections from the International Energy Agency. That would be equivalent to current consumption of Japan, the world’s fifth largest electricity user.

The climate impact of these activities—irrespective of their social and economic benefits—is cause for concern. A recent IMF working paper found that crypto mining could generate 0.7 percent of global carbon dioxide emissions by 2027. Extending the analysis to data centers (based on IEA estimates), means their carbon emissions could reach 450 million tons by 2027, or 1.2 percent of the world total.

The tax system is one way to steer companies toward curbing emissions. According to IMF estimates, a direct tax of \$0.047 per kilowatt hour would drive the crypto mining industry to curb its emissions in line with global goals. If considering air pollution’s impact on local health as well, that tax rate would rise to \$0.089, translating into an 85 percent increase in average electricity price for miners. Such a levy would raise annual government revenue of \$5.2 billion globally and reduce annual emissions by 100 million tons (around Belgium’s current emissions).

For data centers, a targeted tax on their electricity use would need to be set at \$0.032 per kilowatt hour, or \$0.052 including air pollution costs. It is slightly lower than for crypto because data centers tend to be in locations with greener electricity. This could raise as much as \$18 billion annually.

Figure 6: Crypto & data centers account for a growing no. of emissions



Source- IEA 2024

For policymakers, a broad carbon price coordinated across countries would be the best way to curb emissions, because it would encourage reduced fossil-fuel consumption, cleaner power sources, and improved energy efficiency. To limit global warming to 2 degrees, countries would need to introduce additional measures equivalent to a carbon price rising to \$85 per ton by 2030.

In the absence of a global carbon price, targeted measures could encourage crypto miners and data centres to use more energy-efficient equipment and may even motivate the adoption of less energy intensive crypto mining. Complementing electricity taxes with credits for zero-emission, bilateral power purchase agreements, and potentially renewable energy certificates would also help. Cross-border coordination also remains important, as stricter measures in one location could encourage relocation to jurisdictions with lower standards.

As the window of opportunity for containing rising temperatures rapidly closes, expanding renewable energy sources and adopting an appropriate carbon price are urgently needed. In the interim, targeted measures, including taxation, can help mitigate increasing emissions from crypto mining and data centres.

4. Reimagining the future: Navigating PPPs in an age of disruption- World Bank

Emerging technologies have the potential to “disrupt” infrastructure public-private partnerships (PPPs) as technological change is expanding with ever-increasing speed across the globe. As a result, governments have to rethink how they plan, design, procure, and implement PPP infrastructure projects.

Disruptive technology, or disruptive innovation, describes technological advancements that lead to transformative change characterized by rapidly advancing technology, a broad potential scope of impact, possibility to affect economic value, and the potential to dramatically change the status quo.

While this offers unprecedented opportunities for infrastructure development and delivery, these fast-paced advances are progressing alongside the risk that long-term PPP infrastructure projects become outdated or inadequate before public or private investors can fully recover the costs of the infrastructure. This new reality is simultaneously a threat for one infrastructure sector or project type—and an opportunity for another.

- **For instance, the cost of solar photovoltaic (PV) energy has dropped dramatically** in recent years due to technological breakthroughs in solar cell technology and economies of scale, making utility-scale solar PV the least costly option for new electricity generation in many countries. On the flipside, this development makes fossil fuel projects less attractive and off takers may not be able to renegotiate contracted tariffs of long-term power purchase agreements (PPAs)—including renewable energy contracts—that may seem overly expensive in the light of these developments.
- **Disruptive technology has also impacted other parts of the energy sector** resulting in business for some and a threat to others. Decentralized renewable energy solutions like solar rooftop and mini grid systems have been growing worldwide at rapid speed. Recent case studies from Nigeria

and India show these fast-changing market dynamics can create new business opportunities for private mini grid operators and result in win-win situations for all market players who embrace the technological change and quickly adopt new business models. However, they also point out that privately financed isolated mini grids that enter the market and serve industrial and commercial centers exclusively under long-term PPAs may slash revenue from existing distribution companies, threatening their financial sustainability.

- **In the transport sector also, some will adapt and prosper and others risk becoming obsolete.** Future mobility options based on a combination of different types of connected vehicles and digital infrastructure technology are bound to revolutionize passenger and freight transportation. The use of self-driving/autonomous vehicles (AVs), for example, coordinating with each other and with a traffic controller algorithm, has the potential to make traffic more efficient, safer, and minimize air pollution.
- Based on above case studies and examples related to disruptive technology and disruptive events, World Bank attempts to create a framework for thinking how to enhance resilience and flexibility of PPP contracts in the face of disruptive innovations.

5. Australia approves world's 'largest' solar hub

Australia approved plans for a massive solar and battery farm that would export energy to Singapore, a project it calls the "largest solar precinct in the world". Authorities announced environmental approvals for Sun Cable's US\$24 billion project in Australia's remote north that is slated to power three million homes.

The project, which will include an array of panels, batteries and, eventually, a cable linking Australia with Singapore, is backed by tech billionaire and green activist Mike Cannon-Brookes. "It will be the largest solar precinct in the world and heralds Australia as the world leader in green energy," according to the Environment Minister Tanya Plibersek. It is hoped that energy production will begin in 2030.

The 12,000-hectare project will provide four gigawatts of energy per hour for domestic use. Two more gigawatts sent to Singapore via undersea cable will supply about 15 percent of the city-state's needs.

Batteries would be able to store about 40 gigawatts of power. Australia is currently one of the world's leading exporters of coal and gas, but has also been ravaged by the effects of climate change from intense heat to floods and bushfires. In 2022, renewables made up 32 percent of Australia's total electricity generation compared to coal, which contributed 47 percent, according to the latest government data.

6. Europe's FDI dips in 2023, UK FDI grows 6%

Foreign direct investment (FDI) into Europe saw a decline in 2023, decreasing by 4% from the previous year and now stands 11% lower than the pre-pandemic levels of 2019, as per the findings of the annual

EY European Attractiveness Survey 2024, which is regarded as the most thorough annual examination of FDI into the continent.

France, the UK, and Germany remain the primary recipients of FDI, collectively accounting for about half of all projects. France experienced a 5% reduction in FDI projects, totaling 1,194, while Germany saw a 12% decline, with 733 projects. Contrarily, the UK experienced a growth, surpassing Germany to take second place with an increase of 6% in FDI projects, bringing the total to 985.

Despite expectations for a post-pandemic recovery of FDI into Europe, factors such as sluggish economic growth, escalating inflation, rising energy costs, and a volatile geopolitical climate have led to the first decrease in European FDI since 2020.

In 2023, global businesses announced 5,694 greenfield and expansion projects across 44 European countries, a decline from 5,962 in 2022, marking a year-on-year decrease of 4%. Investment is now 14% below its peak in 2017, and the total number of jobs created in Europe due to FDI dropped by 7% year-on-year to 319,923.

Europe's leadership in introducing new regulatory measures in fields such as artificial intelligence (AI), sustainability, and data protection has raised concerns about potential restrictions on business growth. Further, the ongoing energy crisis, the uncertainty surrounding the upcoming European elections, and rising social tensions and political radicalism are additional factors worrying investors.

While the services sectors saw a decline in FDI, manufacturing remained resilient, decreasing by only 1%. Businesses continued to invest in manufacturing to meet rising consumer demand and the ongoing efforts to reorganise supply chains and relocate production bases to Europe have supported investment levels in this sector.

Despite a generally bleak outlook, there is a basis for optimism as 72% of the businesses surveyed plan to establish or expand operations in Europe within the next year, up from 67% in 2022. This indicates that Europe continues to hold significance in current and future business strategies.

Investors remain positive about Europe's long-term prospects as the economic situation is expected to gradually improve. However, the increased regulatory framework, energy price and supply issues, and political instability are seen as the top three threats to Europe's attractiveness over the next three years, particularly with the upcoming European elections and rising local social tensions and political radicalism.

7. Indian Economy

India's economic growth

The Reserve Bank of India (RBI) in its Monetary Policy Committee meeting held in August 2024, expects India's real GDP to grow by 7.2 per cent in 2024-25.

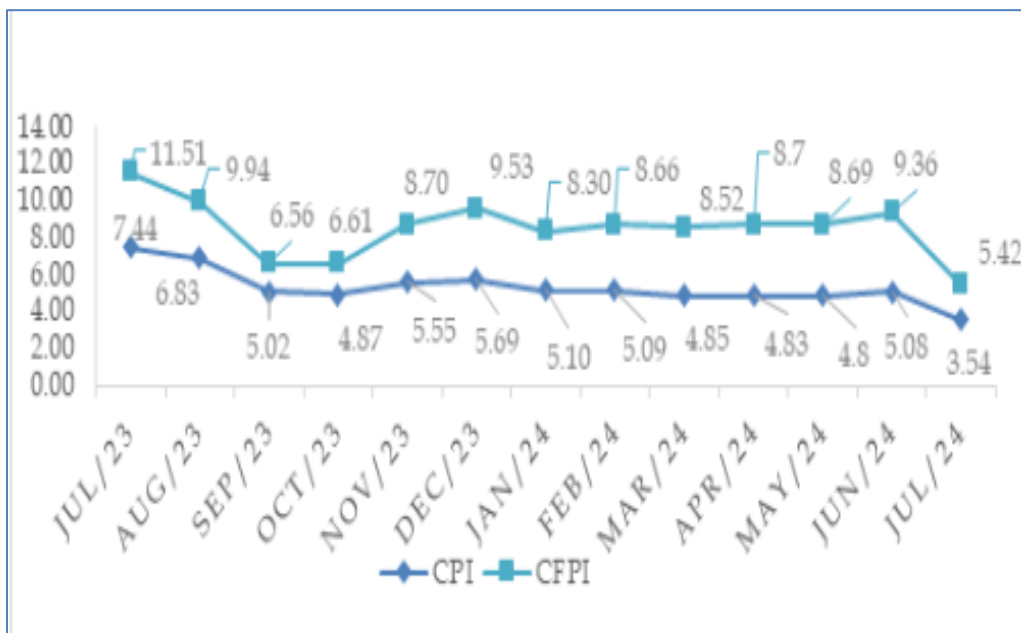
The highlights of the bi-monthly monetary policy announced by the Reserve Bank of India are as follows:

- The GDP growth is pegged at 7.1 per cent in the June 2024 quarter, and is expected at 7.2 per cent in the September 2024 quarter. The RBI projects a pickup in GDP growth in the December 2024 quarter, to 7.3 per cent. In the March 2025 quarter, India's GDP is expected to grow by 7.2 per cent.
- According to the RBI, the GDP growth in 2024-25 is expected to be supported by a recovery in rabi sowing, sustained profitability in manufacturing and underlying resilience of services.
- On the demand side, household consumption is expected to improve. Prospects of fixed investment is anticipated to be bright owing to an upturn in private capex cycle, improved business sentiments, healthy balance sheets of banks and corporates, as well as the government's thrust on capex.
- RBI kept its key interest rate unchanged, as it continued its efforts to sustainably lower inflation towards its 4% target. The Monetary Policy Committee (MPC) kept the repo rate unchanged at 6.50% for a ninth straight policy meeting. Retail inflation projection also retained at 4.5% for FY'25
- Forex reserves rise to historic high of \$675 billion.
- RBI to set up public repository of digital lending apps to check unauthorized players.
- To introduce 'Delegated Payments' through UPI.

Inflation in India

- According to data released by Ministry of Statistics & Programme Implementation (MoSPI), there is sharp decline in the year-on-year inflation rate based on All India Consumer Price Index (CPI) number for the month of July, 2024, which is the lowest in the last 59 months.
- Year-on-year inflation rate based on All India Consumer Price Index (CPI) number is 3.54% (Provisional) for the month of July, 2024.
- Corresponding inflation rate for rural and urban is 4.10% and 2.98%, respectively.

Figure 7: Inflation trend based on All India CPI



Source- MoSPI

- Food inflation for July 2024 is the lowest since June 2023. Year-on-year inflation rate based on All India Consumer Food Price Index (CFPI) number is 5.42%(Provisional) for the month of July, 2024. Corresponding inflation rate for rural and urban is 5.89% and 4.63%, respectively.
- During the month of July 2024 there is a decline in inflation for all the groups. Significant decline is in the vegetables, fruits, and spices subgroup.
- RBI has kept repo rate unchanged for the ninth time in a row to 6.50%.
- This is in consonance with the objective of achieving the medium-term target for consumer price index (CPI) inflation of 4 per cent within a band of +/- 2 per cent, while supporting growth.
- Assuming a normal monsoon, in August monetary policy, RBI projected CPI inflation for 2024-25 at 4.5 per cent with Q2 at 4.4 per cent; Q3 at 4.7 per cent; and Q4 at 4.3 per cent. CPI inflation for Q1:2025-26 is projected at 4.4 per cent.

Manufacturing PMI – India

- The HSBC India Manufacturing Purchasing Managers’ Index (PMI), conducted by S&P Global, showed that India’s manufacturing sector continued to post impressive growth in July.
- The seasonally adjusted index declined marginally to 58.1 in July 2024 from 58.3 in June. The seasonally adjusted index denotes an expansion when it is above 50, and a contraction when it is below 50.

- PMI showed a marginal slowdown in the pace of expansion in July, but with most components remaining at robust levels, the small drop was no cause for concern.
- Buoyant demand exerted pressure on prices. Input costs rose at one of the quickest rates in nearly two years. Selling prices rose at strongest rate in nearly 11 years.

Unemployment in India

- The unemployment rate in urban areas for individuals aged 15 years and above was 6.6 per cent in April – June 2024 (Q1 FY25), remaining unchanged from the first quarter of FY24.
- For males, the unemployment rate slightly decreased from 5.9 per cent in the previous year to 5.8 per cent, and for females, it marginally declined from 9.1 per cent to 9.0 per cent, as per the latest data.
- Quarter-on-quarter, unemployment in males fell from 6.1 per cent to 5.8, while it rose from 8.5 per cent to 9 per cent in the females.
- The survey shows an encouraging increase in the Labor Force Participation Rate (LFPR) in urban areas among individuals aged 15 years and above, rising from 48.8 per cent in Q1 FY24 to 50.1 per cent in Q1 of FY25. The LFPR for males increased from 73.5 per cent to 74.7 per cent and for females from 23.2 per cent to 25.2 per cent, marking an upward trend of participation across genders.
- Lastly, Worker Population Ratio (WPR) also improved, moving from 45.5 per cent in April – June 2023 to 46.8 per cent in April – June 2024.
- Specifically, the WPR for males increased from 69.2 per cent to 70.4 per cent, while for females, it rose from 21.1 per cent to 23.0 per cent, the survey findings showed.

India's external position

India's forex reserves

- According to latest data released by Reserve Bank of India, India's forex reserves increased by \$4.54 billion to \$674.66 billion as of August 16, 2024.
- India's foreign currency assets (FCAs) grew by \$3.61 billion to \$591.57 billion. Expressed in dollar terms, the FCAs include the effect of appreciation or depreciation of non-US units like the euro, pound and yen held in the foreign exchange reserves.
- Gold reserves saw a surge of \$865 million to \$60.1 billion. SDRs for the above-mentioned week were up by \$60 million to stand at \$18.34 billion.
- Moreover, Reserve position in the IMF was up by \$12 million to \$4.65 billion.

- India's forex reserves had touched an all-time high of \$675 billion as of August 2, 2024 but had fallen \$4.8 billion on August 9, 2024.

India's foreign trade position

- India's total exports (Merchandise and Services combined) for July 2024 is estimated at USD 62.42 Billion, registering a growth of 2.81 percent vis-à-vis July 2023.
- Total imports (Merchandise and Services combined) for July 2024 is estimated at USD 72.03 Billion, registering a growth of 7.14 percent vis-à-vis July 2023.

Table 1: Trade during July 2024

		July 2024 (USD Billion)	July 2023 (USD Billion)
Merchandise	Exports	33.98	34.49
	Imports	57.48	53.49
Services	Exports	28.43	26.22
	Imports	14.55	13.74
Overall Trade (Merchandise + Services)	Exports	62.42	60.71
	Imports	72.03	67.23
	Trade Balance	-9.61	-6.52

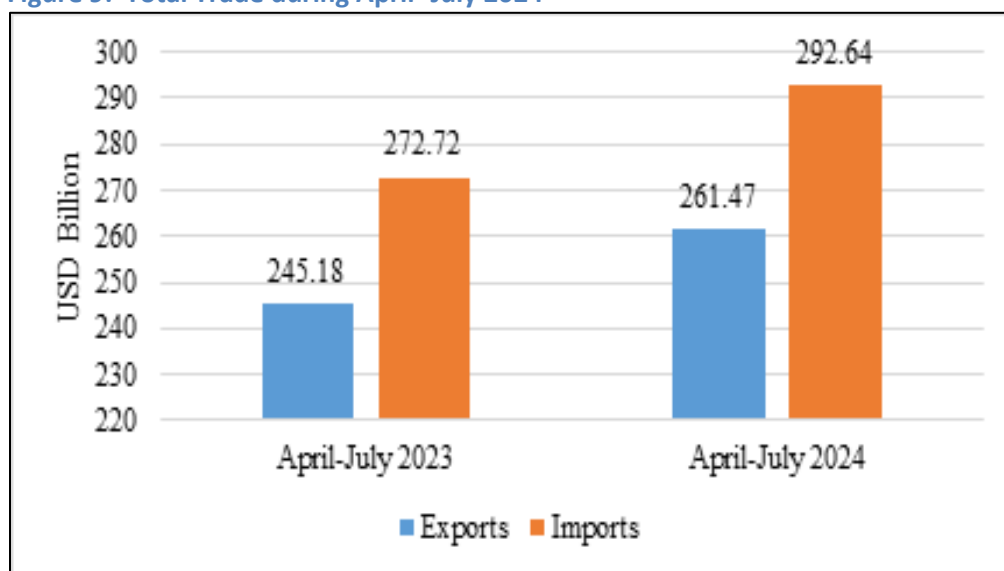
Source- Ministry of Commerce & Industry

Figure 8: Overall Trade during July 2024



Source- RBI

Figure 9: Total Trade during April- July 2024



Source- RBI

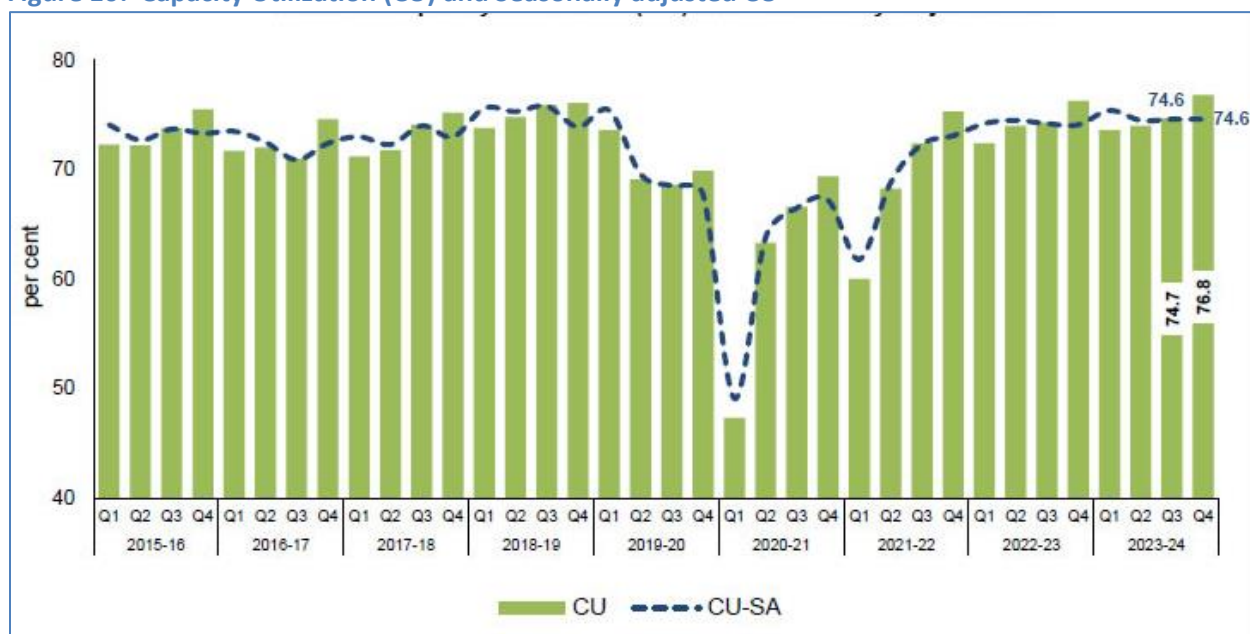
- India's total exports during April-July 2024 is estimated at USD 261.47 Billion registering a growth of 6.65 percent.
- Total imports during April-July 2024 is estimated at USD 292.64 Billion registering a growth of 7.30 percent.
- Exports of Meat, Dairy & Poultry Products (56.18%), Tobacco (39.9%), Electronic Goods (37.31%), Oil Meals (22.01%), Tea (21.79%), Handicrafts Excl. Hand Made Carpet (13.23%), Spices (13%), Rmg Of All Textiles (11.84%), Carpet (10.53%), Plastic & Linoleum (8.84%), Drugs & Pharmaceuticals (8.36%), Iron Ore (7.73%), Cereal Preparations & Miscellaneous Processed Items (5.06%), Man-Made Yarn/Fabs./Made-Ups Etc. (3.91%), Engineering Goods (3.66%), Leather & Leather Products (2.29%), Fruits & Vegetables (2.19%) and Mica, Coal & Other Ores, Minerals Including Processed Minerals (1.49%) record positive growth during July 2024 over the corresponding month of last year.
- Imports of Project Goods (-73.06%), Pearls, Precious & Semi-Precious Stones (-32.85%), Fertilizers, Crude & Manufactured (-31%), Dyeing/Tanning/Coloring Materials (-29.03%), Chemical Material & Products (-26.9%), Gold (-10.65%), Transport Equipment (-9.65%), Pulp And Waste Paper (-7.57%), Cotton Raw & Waste (-2.74%), Wood & Wood Products (-0.71%) and Textile Yarn Fabric, Made-Up Articles (-0.23%) record negative growth during July 2024 over the corresponding month of last year.
- Services exports is estimated to grow by 9.89percent during April-July 2024 over April-July 2023.
- Top 5 export destinations, in terms of change in value, exhibiting growth in July 2024 vis a vis July 2023 are Netherland (29.18%), U S A (3.15%), Tanzania Rep (53.14%), Singapore (14.28%) and Mexico (25.91%).

- Top 5 export destinations, in terms of change in value, exhibiting growth in April-July 2024 vis a vis April-July 2023 are Netherland (38.32%), U S A (9.06%), U Arab Emts (13.48%), Malaysia (51.86%) and Singapore (24.4%).
- Top 5 import sources, in terms of change in value, exhibiting growth in July 2024 vis a vis July 2023 are U Arab Emts (84.87%), China P Rp (13.05%), Russia (22.56%), Qatar (34.61%) and Indonesia (15.05%).
- Top 5 import sources, in terms of change in value, exhibiting growth in April-July 2024 vis a vis April-July 2023 are U Arab Emts (47.07%), Russia (20.33%), China P Rp (9.66%), Iraq (19.4%) and Indonesia (17.19%).

8. Capacity utilisation improves to 76.8% in Q4FY24: RBI OBICUS Survey

- According to RBI’s 65th round of Quarterly Order Books, Inventories and Capacity Utilisation Survey (OBICUS) survey, capacity utilization of manufacturing companies inched up to 76.8 per cent in the quarter ended March 2024 from 74.7 per cent recorded in the December 2023 quarter and 74 per cent in the September 2023 quarter.
- The survey covered 900 companies and provides a snapshot of demand conditions in India’s manufacturing sector during January-March 2024.

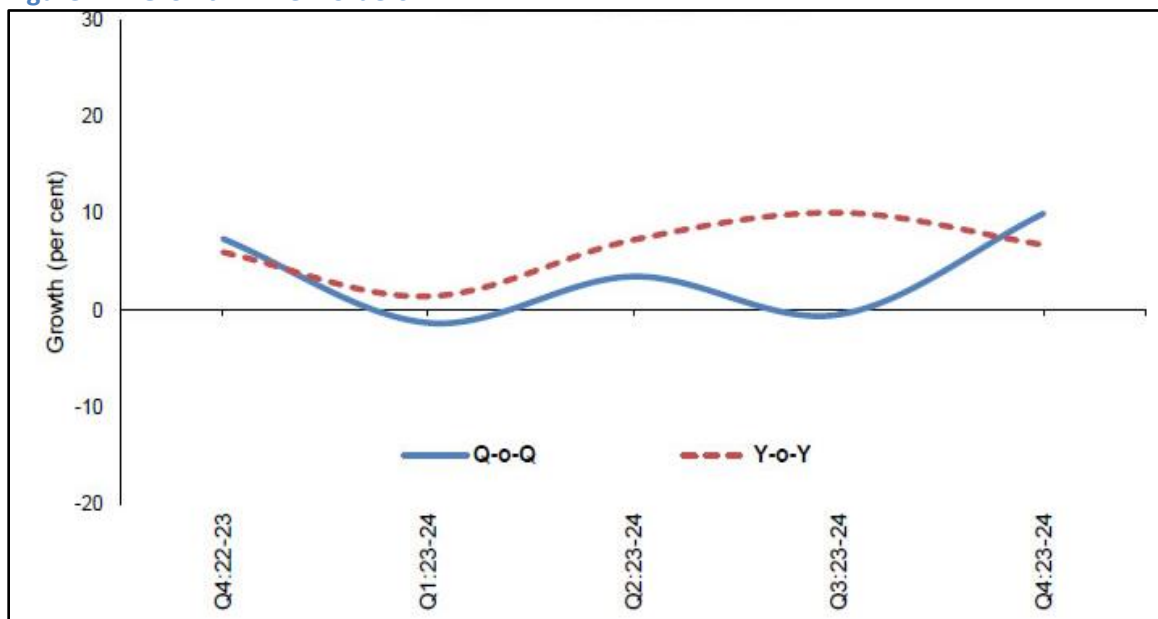
Figure 10: Capacity Utilization (CU) and Seasonally adjusted CU



Source- RBI

- According to the survey, new orders received by the companies were higher than both in the corresponding quarter as well as the corresponding year ago period.

Figure 11: Growth in New orders



Source- RBI

- Average new orders rose by 6.8 per cent on a y-o-y basis in the quarter ended March 2024 compared to 10.1 per cent increase in the December 2023 quarter. Average backlog of orders and average pending orders recorded 18.9 per cent and 10.4 per cent y-o-y growth, respectively.
- Total inventories as a proportion of sales declined to 65.4 per cent in the March 2024 quarter from 67.7 per cent in the December 2023 quarter. Raw materials inventory to sales ratio declined to 24.3 per cent from 24.8 per cent in the December 2023 quarter. Finished goods inventory to sales ratio was at 26.6 per cent in the March 2024 quarter.

9. Union Budget estimates gross tax revenues to rise by 10.8% in FY25

- The Union Budget 2024-25 has budgeted for a 10.8 per cent increase in gross tax revenues to Rs.38.4 trillion during the current fiscal as compared to the provisional actual for the last fiscal 2023-24.
- Collections of income tax and corporation tax are budgeted to increase by around 13.6 per cent and 12 per cent to Rs.11.9 trillion and Rs.10.2 trillion, respectively.
- Among indirect taxes, GST collections are budgeted to rise by 11 per cent to Rs.10.6 trillion and customs duty collection by 2 per cent to Rs.2.4 trillion.
- Excise duty collections during 2024-25 are pegged at Rs.3.2 trillion, 4.5 per cent higher than the provisional actuals for 2023-24.

- After parting with Rs.12.5 trillion as devolution of central taxes to the state governments, the central government is expected to earn net tax revenue of Rs.25.8 trillion, which is 11.1 per cent higher than the provisional actuals for 2023-24.
- The gross tax revenues estimate was higher by 0.2 per cent compared to that in the interim budget presented on February 1, 2024.

10. India's EV market set to hit \$48.6 billion by 2030; 1.32 million EV chargers needed

- India's electric vehicle (EV) market is projected to reach \$48.6 billion by 2030, according to a report by Forvis Mazars.
- This significant growth is driven by the rapid expansion of public Battery Electric Vehicle (BEV) charging stations, which increased nearly ninefold from 1,800 in February 2022 to 16,347 in March 2024. This expansion highlights India's efforts to meet the rising demand for EVs.
- India needs to scale up public charging infrastructure to meet the growing demand and reduce range anxiety. By 2030, electric vehicles are projected to make up almost one-third of India's passenger vehicle market.
- By 2030, India is projected to have around 50 million EVs on its roads, with a market size expected to reach \$48.6 billion. To meet this demand, India will need to install over 400,000 chargers annually, totaling 1.32 million chargers by 2030. The Ministry of Heavy Industries has approved 2,877 EV charging stations across multiple states and 1,576 stations on 16 highways and 9 expressways.
- Globally, electric car sales surged by 27 percent from 2022 to 2023, reaching 13.09 million vehicles. This growth underscores the critical need for a robust charging infrastructure to support the increasing number of EVs, which totaled more than 40 million by 2024.
- In India, EV sales tripled in the last fiscal year, particularly in the two-wheeler (2W) and three-wheeler (3W) segments. The market for four-wheelers (4W) also shows potential with new model launches anticipated. Factors such as lower total cost of ownership, ease of use, sustainable choices, a growing supplier network, product customization, and government incentives like the FAME-II scheme are driving EV adoption and charging infrastructure growth.
- The Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME) scheme provides incentives for EV adoption and charging infrastructure growth. The Ministry of Housing and Urban Affairs targets semi-public charging at 20 percent of all vehicle holding capacity, with additional power load requirements for premises.

11. India's FDI Soars by 26.4% in Q1 2024-25

- Foreign direct investment (FDI) in India surged by 26.4 percent, reaching US\$22.4 billion, during the period from April to June, 2024 reflecting the strongest growth in over five quarters. Key sectors such as manufacturing, financial services, communication, and energy drew significant interest, with Singapore, the US, Mauritius, and Belgium among the top contributors.
- Net foreign direct investment (FDI) in April to June of the current fiscal year (FY 2024-25) reached US\$ 6.9 billion, up from US\$4.7 billion during the same period the previous year, as per the Reserve Bank of India 's latest report. This rise was fueled by a 26.4 percent year-on-year growth in gross inward FDI, which totaled US\$22.4 billion in Q1 of 2024-25.
- Despite the overall decline in FDI over the past two years, gross inflows had already shown a 23 percent increase in the prior quarter, supported by strengthening global cross-border investments. In June, FDI inflows rose by 37.6 percent, though this was lower than the 49 percent increase observed in the previous month.
- The RBI's bulletin noted that about 80 percent of these FDI inflows went into the manufacturing, financial services, communications, and energy sectors, with Singapore, Mauritius, the Netherlands, the US, and Belgium being the leading source countries, contributing around 75 percent of the inflows. Equity investments, which grew by 46 percent in the first quarter to US\$16.5 billion, were a key driver, with US\$ 4.2 billion directed towards share acquisitions—2.5 times more than in the same period of 2023.

FDI trend in India's energy sector

- According to data from the Ministry of Commerce and Industry, Foreign Direct Investment (FDI) in India's renewable energy sector increased by 50 percent in the 2023-24 financial year, reaching US\$3.76 billion compared to US\$2.5 billion in 2022-23. Since FY 2010-11, cumulative FDI in the renewable sector has totaled US\$17.07 billion.
- The sector permits 100 percent FDI under the automatic route, meaning no prior government approval is required.
- FDI in the power sector also saw substantial growth, rising by 144 percent to US\$1.7 billion in FY 2023-24, up from US\$697.92 million the previous year.
- However, investments in the petroleum and natural gas sectors experienced a sharp decline, with FDI in the non-renewable energy sector plummeting by 81 percent year-over-year to US\$32.57 million in 2023-24, down from US\$171.65 million the previous year.
- The overall net FDI in FY 2023-24 dropped significantly to US\$9.8 billion, down from US\$28 billion in the previous year and US\$38.6 billion in FY 2021-22. Net FDI refers to the difference between the total amount of FDI inflows into a country and the total amount of FDI outflows from that country over a specific period.

Lessons from Economics

Natural Capital

- Natural capital is a reference to the inventory of natural resources held by companies, such as water, gold, natural gas, silver, or oil. Natural capital must also be managed on a company's financial statements which requires natural capital accounting.
- Natural capital typically must be certified before a derivative contract, like a futures or forward contract, can be written on it.

Importance of Natural Capital -

- If we keep drawing down stocks of natural capital without allowing or encouraging nature to recover, we run the risk of local, regional, or even global ecosystem collapse.
- Poorly managed natural capital therefore becomes not only an ecological liability, but a social and economic liability too. Working against nature by overexploiting natural capital can be catastrophic not just in terms of biodiversity loss, but also catastrophic for humans as ecosystem productivity and resilience decline over time and some regions become more prone to extreme events such as floods and droughts.
- Therefore, nature is priceless. There are many studies that have calculated natural capital's value in financial terms. For example, street trees in California provide \$1 billion per year in ecosystem services, through atmospheric regulation and flood prevention, and Mexico's mangrove forests provide an annual \$70 billion to the economy through storm protection, fisheries support, and ecotourism.
- In 2013, The Economics of Ecosystems and Biodiversity (TEEB) for Business Coalition published a famous report which estimated that the world's primary production and processing sectors are responsible for 'environmental externality' costs totaling a staggering US\$7.3 trillion annually.
- Further, The World Bank estimates that the global economy could lose \$US 2.7 trillion by 2030 if certain ecosystem services collapse (pollination, carbon sequestration and storage, fisheries, and timber provision). In low-income countries, GDP could decline 10% annually on average, with higher losses in countries particularly dependent on ecosystem services.

These challenges cannot be effectively addressed unless we bring nature into the center of economic decision making. One effective approach is by assigning monetary values to nature's direct and indirect contributions to economies and human wellbeing through what is known as "natural capital accounting" and using such data to establish the economic case for protecting and restoring nature.

Natural Capital Accounting (NCA)

Natural capital accounting (NCA), which is part of broader wealth accounting, integrates natural resources, economic valuation, and analysis, providing a better understanding of development progress and its impacts on society and environment than standard measures such as Gross Domestic Product (GDP).

Significance of NCA

- They can provide detailed statistics for better management of the economy, like accounts for the sectoral inputs of water and energy, and outputs of pollution that are needed to model green growth scenarios.
- Land and water accounts can help countries interested in increasing hydropower capacity to assess the value of competing land uses and the optimal way to meet this goal.
- UN Statistical Commission of the System for Environmental and Economic Accounts (SEEA) in 2012 provides an internationally-agreed method to account for material natural resources like minerals, timber, and fisheries.
- When faced with critical decisions like whether to build a road through a forest or clear mangroves to build a port, countries need data on the value of the services provided by the forest and the mangroves that will potentially be lost in this process of conversion. These figures need to be comparable to the economic data related to infrastructure development. This enables more informed decision making that is rooted in understanding the trade-offs around natural resource management.

Oil Market

Crude oil price – Monthly Review

Oil markets exhibited Olympic levels of volatility over recent weeks. Benchmark crude oil prices tumbled sharply lower in July and early August as unexpected economic data threw the market off balance. Questions arise over the health of the global economy re-emerged as Japan increased interest rates sparking a reversal in yen carry trades, China's outlook deteriorated and US hiring slowed in July. Persistent geopolitical tensions in the Middle East and some relatively positive macroeconomic data backstopped weakness in oil futures, with prices rebounding higher in the second week of August. Moreover, OPEC+ cuts are also tightening physical markets, lifting North Sea Dated to a \$2/bbl premium against the front-month ICE contract.

Hedge funds and other money managers turned increasingly bearish on crude oil, closing a large volume of long futures and options positions and raising short positions, particularly in the ICE Brent market. This fuelled oil price volatility and accelerated the downward trend in oil futures prices in the second half of July. Between the weeks of 2 and 30 July, speculators sold an equivalent of 155 mb in both futures and options for ICE Brent and NYMEX WTI.

The forward curves of oil futures prices strengthened in July 2024. All major crude benchmarks showed steeper backwardation, indicating further improvements in the global oil supply/demand outlook. The nearest-month time spreads moved into stronger backwardation as front-month futures contracts received support from firm short-term physical market fundamentals, amid the ongoing holiday driving season and geopolitical risk premiums. The forward curve of NYMEX WTI strengthened on a decline in US commercial crude oil stocks in July, contributing to the steepening of the front end of the forward curve.

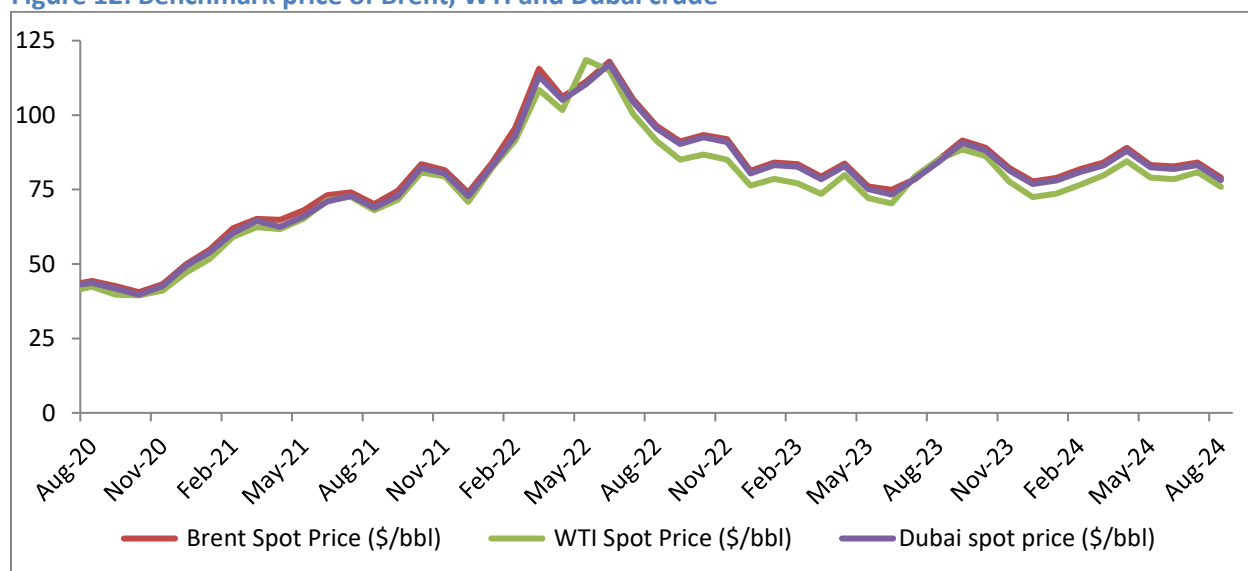
Brent crude futures tumbled by \$6/bbl during July, as a string of weak macro-economic data prompted a broad risk-off sentiment across financial markets, outweighing escalating hostilities in the Middle East. Front-month time spreads remained resilient in the face of falling flat prices, reflecting a tight Atlantic Basin market.

The premium of light sweet crude over medium sour crude widened across all major trading hubs in July. This increase was driven by the higher performance of light sweet crudes compared to heavy/medium sour crudes. Stronger refining margins for light and middle-distillate products provided further support. In contrast, gains for sour crude were limited due to weaker high-sulfur fuel oil (HSFO) crack spreads in Europe and Asia.

In July, the OPEC Reference Basket (ORB) value rose by \$1.21, or 1.5%, m-o-m, to stand at \$84.43/b, as ORB component-related crude benchmarks rose, specifically light sweet benchmarks, amid improving market sentiments.

Brent crude ranged an average to \$78.94 a barrel and WTI ranged to \$75.80 per barrel in the month of August 2024.

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



Source- World Bank

- Brent crude price averaged \$78.94 per bbl in August 2024, down by 6.1% on a month on month (MoM) and by 7.2% on year on year (YoY) basis, respectively.
- WTI crude price averaged \$75.80 per bbl in August 2024, down by 6.3% on a month on month (MoM) and by 10.9% on year on year (YoY) basis, respectively.
- Dubai crude price averaged \$78.08 per bbl in August 2024, down by 6.1% on a month on month (MoM) and by 7.3% on year on year (YoY) basis, respectively.

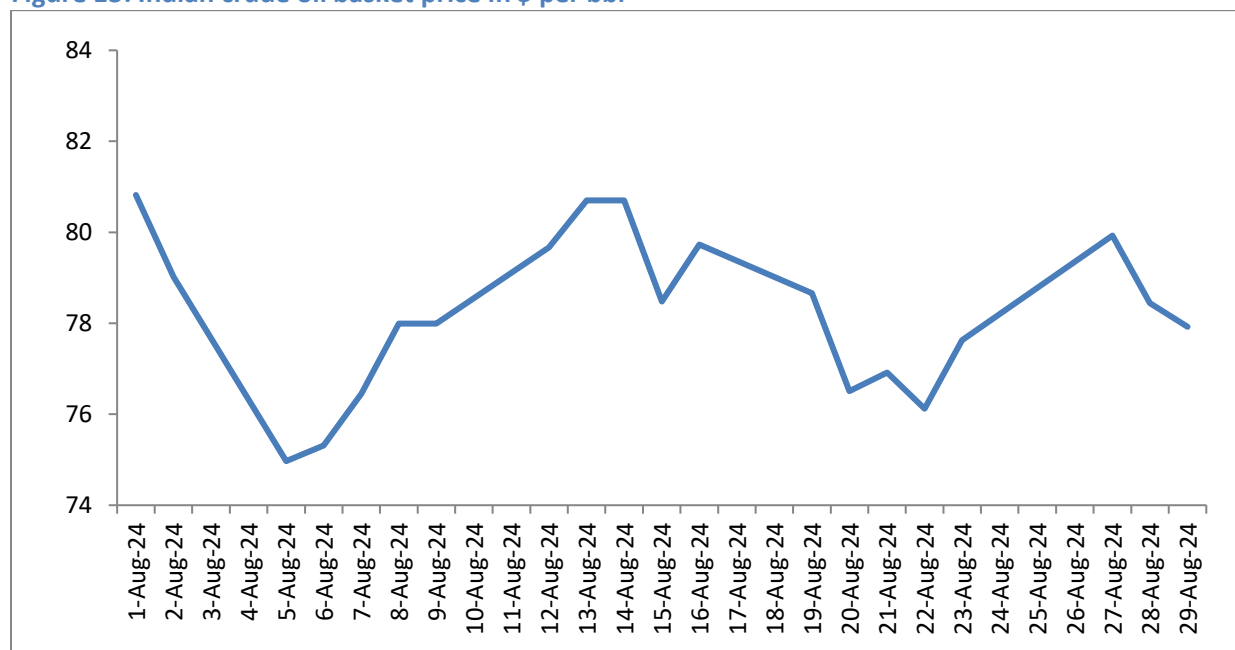
Table 2: Crude oil price in August, 2024

Crude oil	Price (\$/bbl)	MoM (%) change	YoY (%) change
Brent	78.94	-6.1%	-7.2%
WTI	75.80	-6.3%	-10.9%
Dubai	78.08	-6.1%	-7.3%

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 \$78.25 per barrel in August 2024, down by 7.2% on Month on Month (M-o-M) and by 9.5% on a year on year (Y-o-Y) basis, respectively.

Oil production situation

- Non-Declaration of Cooperation (Non-DoC) liquids supply (i.e. liquids supply from countries not participating in the DoC) is expected to grow by 1.2 mb/d in 2024, unchanged from the previous month's assessment. The main growth drivers are expected to be the US, Canada and Brazil. The non-DoC liquids supply growth forecast for 2025 is also unchanged at 1.1 mb/d. The growth is anticipated to be mainly driven by the US, Brazil, Canada and Norway.
- Natural gas liquids (NGLs) and non-conventional liquids from DoC Participating Countries are forecast to grow by about 0.1 mb/d to average 8.3 mb/d in 2024, followed by an increase of about 40 tb/d, reaching 8.4 mb/d in 2025. Crude oil production by the countries participating in the DoC increased by 117 tb/d in July compared with the previous month, averaging about 40.91 mb/d, as reported by available secondary sources.

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

Non-OPEC liquids production	2023	1Q24	2Q24	3Q24	4Q24	2024
Americas	26.91	27.50	27.34	27.58	27.33	26.91
<i>of which US</i>	21.02	21.72	21.41	21.50	21.41	21.02
Europe	3.68	3.61	3.66	3.79	3.68	3.68
Asia Pacific	0.46	0.44	0.44	0.43	0.44	0.46
Total OECD	31.05	31.55	31.44	31.79	31.46	31.05
China	4.62	4.63	4.47	4.47	4.55	4.62
India	0.80	0.79	0.80	0.79	0.80	0.80
Other Asia	1.62	1.63	1.58	1.58	1.60	1.62
Latin America	7.28	7.18	7.40	7.50	7.34	7.28
Middle East	2.00	2.00	2.01	2.02	2.01	2.00
Africa	2.24	2.25	2.25	2.27	2.25	2.24
Other Eurasia	0.37	0.37	0.37	0.37	0.37	0.37
Other Europe	0.10	0.10	0.10	0.10	0.10	0.10
Total Non-OECD	19.03	18.95	18.99	19.10	19.02	19.03
Total Non-DoC production	50.08	50.50	50.43	50.90	50.48	50.08
Processing gains	2.52	2.52	2.52	2.52	2.52	2.52
Total Non-DoC liquids production	52.60	53.02	52.95	53.42	53.00	52.60

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

Source- OPEC monthly report, August 2024

- From the above table, it can be inferred, that the total non-DoC liquids production is expected to reach 52.60 mb/d by 2024.
- 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 to average 53.0 mb/d.

Oil demand situation

- The world oil demand growth forecast for 2024 is revised down slightly by 135 tb/d from the previous month's assessment. It now stands at a healthy 2.1 mb/d, well above the historical average of 1.4 mb/d seen prior to the COVID-19 pandemic. This slight revision reflects actual data received for 1Q24 and in some cases 2Q24, as well as softening expectations for China's oil demand growth in 2024. Within the main regions, OECD oil demand is expected to grow by around 0.2 mb/d in 2024, while non-OECD oil demand is expected to increase by around 1.9 mb/d.
- In 2025, world oil demand is also revised slightly down by 65 tb/d, reaching about 1.8 mb/d. OECD demand is expected to expand by about 0.1 mb/d in 2025, with OECD Americas contributing the largest increase. Non-OECD demand is set to drive next year's growth, increasing by about 1.7 mb/d, led by contributions from China, the Middle East, Other Asia, and India.

Table 4: World Oil demand, mb/d

	2023	1Q24	2Q24	3Q24	4Q24	2024	Growth	%
Total OECD	45.65	45.00	45.81	46.26	46.18	45.81	0.16	0.36
~ of which US	20.36	19.92	20.67	20.67	20.85	20.53	0.17	0.81
Total Non-OECD	56.56	58.15	57.89	58.59	59.39	58.51	1.95	3.44
~ of which India#	5.34	5.66	5.66	5.40	5.59	5.58	0.23	4.36
~ of which China	16.36	16.66	16.88	17.28	17.38	17.06	0.70	4.25
Total world	102.21	103.15	103.70	104.85	105.57	104.32	2.11	2.07

Source- OPEC monthly report, August 2024

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

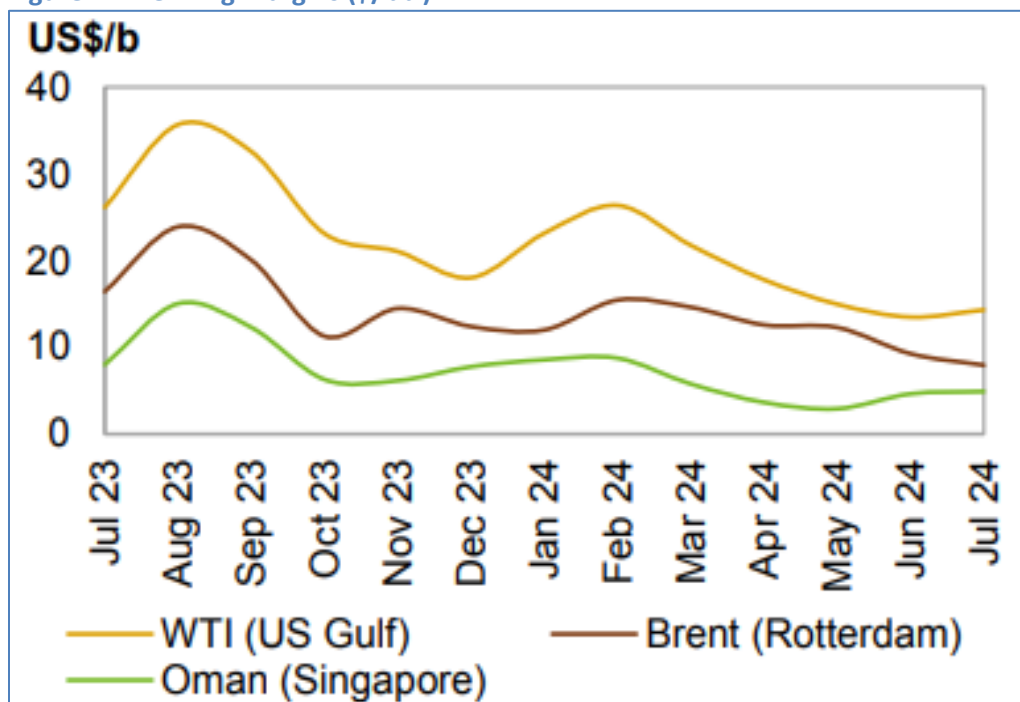
Global petroleum product prices

USGC refining margins against WTI rebounded from the loss seen in the previous month to show limited upside. Strength was registered all across the barrel – with the exception of jet/kerosene – and was mostly driven by naphtha and gasoil, with more limited gains seen in gasoline and residual fuel margins. Hurricane Beryl making landfall in Texas in early July caused heavy rainfall and strong winds, which resulted in flooding, widespread power outages, and temporary refinery shutdowns and run cuts. A significant portion of refineries in the affected state – the largest US oil and gas producing state, which hosts 40% of oil and 20% of gas output – are prepared to continue operations during heavy rain. This, amid the quick recession of the flooded water, allowed refiners in the state to promptly restore processing activities.

Refinery intakes in the USGC were 270 tb/d lower, m-o-m, averaging 16.92 mb/d. USGC margins against WTI averaged \$14.32/b in July, up by 83¢, m-o-m, but down by \$11.81, y-o-y.

Refinery margins in Rotterdam against Brent retracted further in July, albeit by a notably lower magnitude compared to the loss seen in the previous month. Strong product output levels contributed to weakness all across the barrel. At the end of the month, total Amsterdam-Rotterdam-Antwerp product inventories showed a significant rise of 5.0%, m-o-m, in July. The strongest negative crack spread performer was gasoil, followed by jet/kerosene and gasoline. Nonetheless, across the barrel losses were somewhat limited and were capped at \$1.82/b, m-o-m, with the highest loss, in this case, associated with gasoil. This was a result of a softer domestic middle distillate market, amid lower European products exports from Rotterdam.

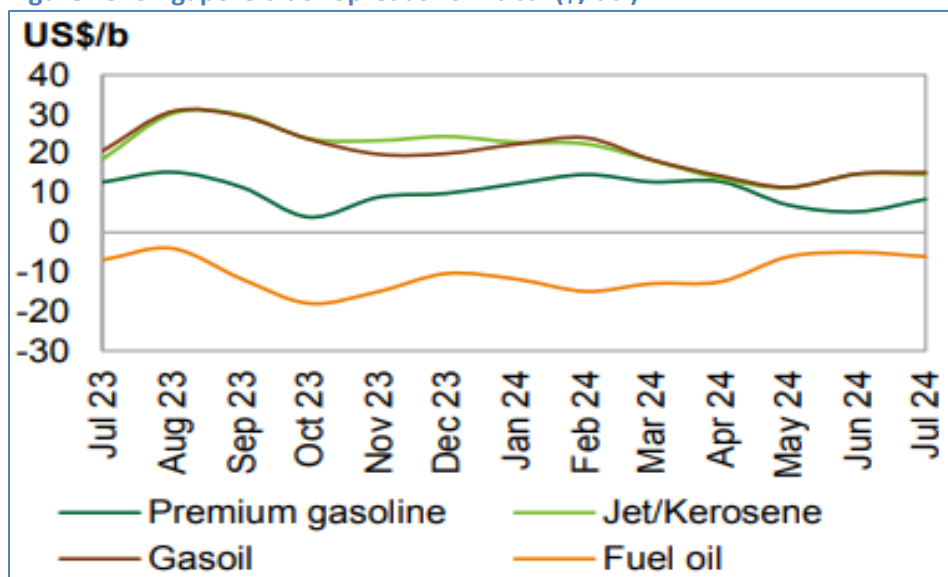
Figure 14: Refining Margins (\$/bbl)



Source- Argus and OPEC

The Southeast Asian gasoline 92 crack spread against Dubai experienced a solid gain with support stemming from limited gasoline output attributed to refinery outages. In July, gasoline showed the largest monthly increase across the barrel and recovered the ground lost in the previous month. The product’s margin rose to a two-month high, averaging \$8.48/b. This was up \$3.17, m-o-m, but down \$4.32, y-o-y.

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



Source- Argus and OPEC

The Singapore gasoil crack spread experienced a small increase, registering the second consecutive month of gains. Gasoil availability remains limited, with suppressed gasoil exports from China amid refinery outages in the wider Asian region. Healthy demand from the agricultural sector amid the harvesting season in some countries in Asia likely added support. However, downside risks to the regional gasoil margins lie ahead should China decide to increase export volumes. Further downside risks are linked to the monsoon season if it escalates, leading to excessive rains and flooding, which, in turn, could disrupt agricultural activities and reduce mobility. The Singapore gasoil crack spread against Dubai averaged \$15.29/b, up 33¢, m-o-m, but down \$5.40/b, y-o-y.

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

Singapore product prices	Price (\$/b)	MoM (%) change	YoY (%) change
Naphtha	74.77	3.0%	19.8%
Premium gasoline (unleaded 95)	96.42	3.7%	-2.2%
Regular gasoline (unleaded 92)	92.16	4.8%	-1.0%
Jet/Kerosene	98.36	1.0%	-0.5%
Gasoil/Diesel (50 ppm)	99.07	1.4%	-2.3%
Fuel oil (180 cst 2.0% S)	98.61	1.9%	-0.9%
Fuel oil (380 cst 3.5% S)	77.61	0.0%	5.8%

Source- OPEC

Petroleum products consumption in India

Monthly Review:

- Overall consumption of all petroleum products in July 2024 with a volume of 19.65 MMT registered a growth of 8.50% on volume of 18.11 MMT in July 2023.
- MS (Petrol) consumption during the month of July 2024 with a volume of 3.30 MMT recorded a growth of 10.52% on volume of 2.98 MMT in July 2023.
- HSD (Diesel) consumption during the month of July 2024 with a volume of 7.20 MMT recorded a growth of 4.45% on volume of 6.89 MMT in the month of July 2023.
- LPG consumption during the month of July 2024 with a volume of 2.63 MMT registered growth of 10.07% over the volume of 2.40 MMT in the month of July 2023.
- ATF consumption during July 2024 with a volume of 0.727 MMT registered a growth of 9.58% over the volume of 0.663 MMT in July 2023.
- Bitumen consumption during July 2024 with a volume of 0.507 MMT registered de-growth of 4.41% over volume of 0.531 MMT in the month of July 2023.

- Kerosene consumption registered de-growth of 25.20% during the month of July 2024 as compared to July 2023.

Table 6: Petroleum products consumption in India, July 2024 and Year till Date (YTD) 2024

Consumption of Petroleum Products (P)	Monthly			Year till Date	
	Consumption in '000 MT	MoM (%) change	YoY (%) change	Consumption in '000 MT	YoY (%) change
LPG	2,630	14.1%	10.1%	9,713	6.46%
Naphtha	1,162	8.1%	8.0%	4,545	6.18%
MS	3,297	0.0%	10.5%	13,341	7.93%
ATF	727	2.8%	9.6%	2,919	10.94%
SKO	41	12.4%	-25.2%	134	-24.61%
HSD	7,196	-9.9%	4.4%	31,517	2.19%
LDO	61	-6.4%	-3.0%	239	-6.73%
Lubricants & Greases	362	-0.8%	18.2%	1,575	31.43%
FO & LSHS	526	-2.4%	-6.6%	2,209	-1.68%
Bitumen	507	-34.9%	-4.4%	3,062	10.27%
Petroleum coke	1,717	6.1%	8.2%	6,865	12.90%
Others	1,426	16.2%	41.6%	4,770	16.20%
TOTAL	19,653	-1.7%	8.5%	80,889	6.32%

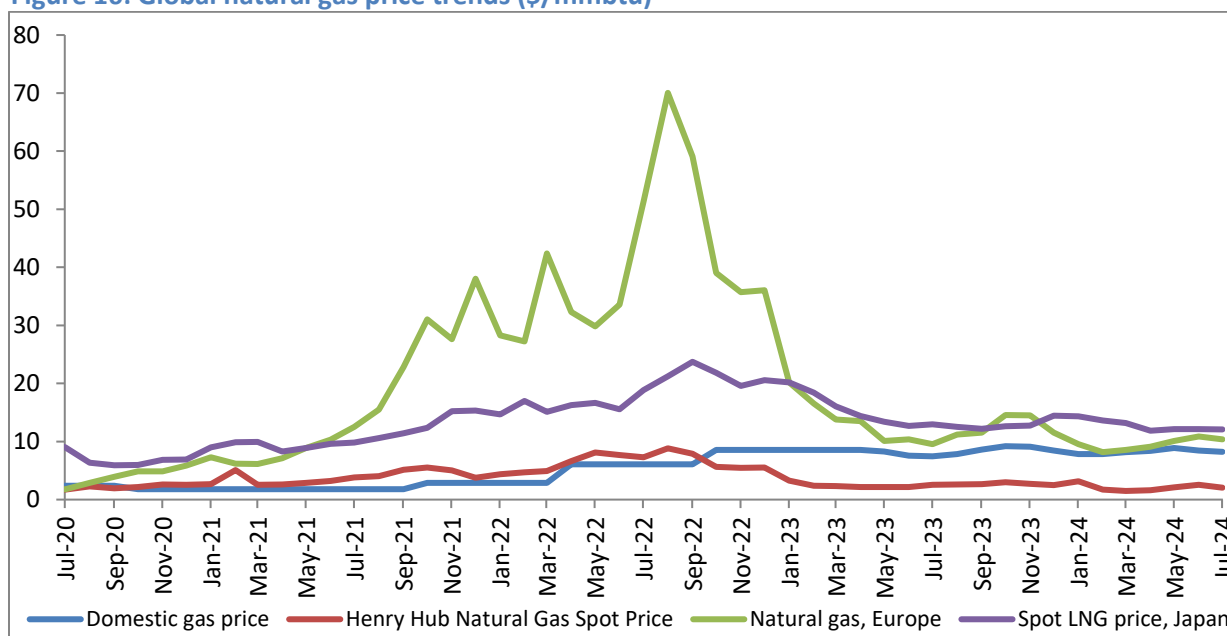
Source- PPAC

Fiscal Year: 1st April 2024 – 31st March 2025

Natural Gas Market

Natural Gas Price – Monthly Review

- Natural gas spot prices at the US Henry Hub benchmark averaged \$2.07 per million British thermal units (MMBtu) in July 2024. Henry Hub's natural gas prices retracted in July after advancing for four consecutive months. Prices fell sharply by ~18%, m-o-m, pressured by reports of ample supply, which offset support from cooling demand. According to data from the US Energy Information Administration (EIA), underground storage was 8.4% higher than the same period last year as of July and 15.7% above the five-year average. Moreover, power outages caused by Hurricane Beryl early in July weighed on US LNG exports, inflating domestic storage and thus putting more downward pressure on prices. Prices were down by 18.8%, y-o-y.
- The natural gas spot price at the Title Transfer Facility (TTF) in the Netherlands in Europe traded at an average of \$10.35 per MMBtu. Natural gas prices in Europe declined in July after four consecutive months of gains. The average Title Transfer Facility (TTF) price went from \$10.9/MMBtu (million British thermal units) in June to \$10.4/MMBtu in July 2024. Prices fell after the US Freeport LNG export facility restarted operations, which offset concerns over supply risk from maintenance outages at key Norwegian facilities. Prices were further pressured by a strong restocking season, which kept EU storage at comfortable levels ahead of the winter heating season. According to data from Gas Infrastructure Europe, EU storage levels were at 85.1% capacity as of 31 July 2024. Prices were up by 8.4%, y-o-y.
- Japan Liquefied Natural Gas Import Price averaged at \$12.09 per MMBtu for July 2024. There is a change of -0.3% from last month and -6.9% 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 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 – 30th September, 2024 was notified as US\$ 9.87/MMBTU on Gross Calorific Value (GCV) basis as per notification dated 31st March 2024.

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


Source- EIA, World Bank

Table 7: Gas price, July 2024

Natural Gas	Price (\$/MMBTU)	MoM (%) change	YoY (%) change
India, Domestic gas price (Aug'24)	8.51	3.28	8.41
India, Gas price ceiling – difficult areas (Apr-Sep'24)	9.87	-0.90%	-18.56%
GIXI (Gas index of India) price*	13.3	4%	29%
Henry Hub	2.07	-18.2%	-18.8%
Natural Gas, Europe	10.35	-4.8%	8.4%
Liquefied Natural Gas, Japan	12.09	-0.3%	-6.9%

Source- EIA, PPAC, World Bank, IGX

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

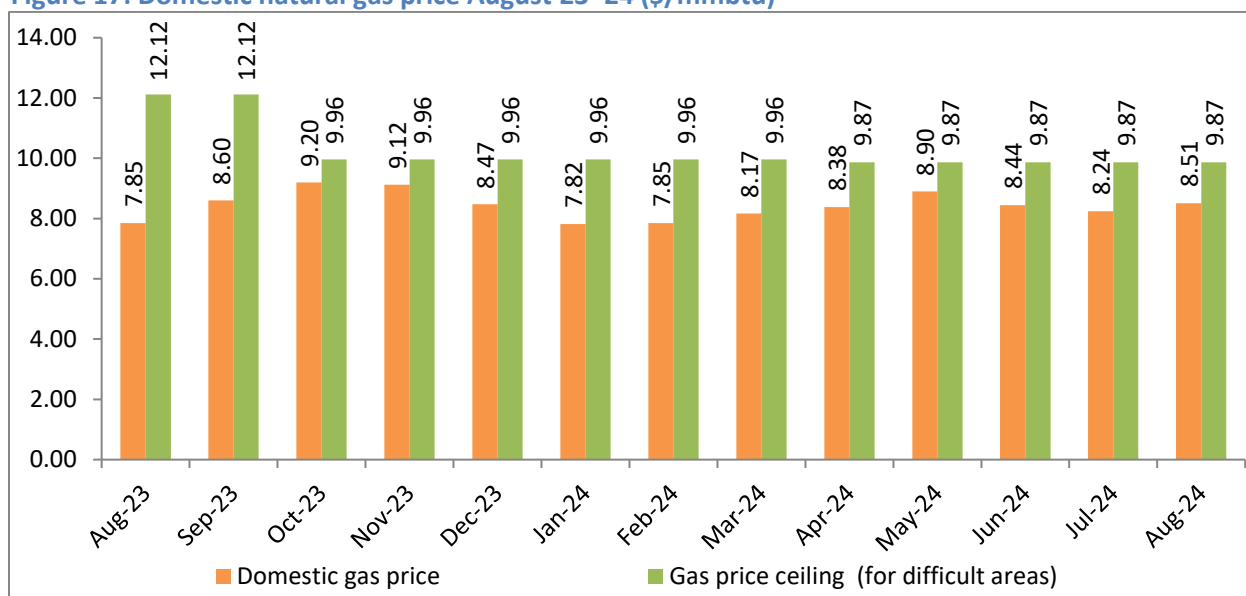
Table 8: Gas price, GCV Basis

Period	Domestic Gas calculated price in US\$/MMBTU	Gas price ceiling – difficult areas price in US\$/MMBTU
1-31 May 2023	8.27	12.12
1-30 June 2023	7.58	12.12
1-31 July 2023	7.48	12.12
1-31 August 2023	7.85	12.12
1-30 September 2023	8.60	12.12
1-31 October 2023	9.20	9.96
1-30 November 2023	9.12	9.96

Period	Domestic Gas calculated price in US\$/MMBTU	Gas price ceiling – difficult areas price in US\$/MMBTU
1-31 December 2023	8.47	9.96
1-31 January 2024	7.82	9.96
1-29 February 2024	7.85	9.96
1-31 March 2024	8.17	9.96
1-30 April 2024	8.38	9.87
1-31 May 2024	8.90	9.87
1-30 June 2024	8.44	9.87
1-31 July 2024	8.24	9.87
1-31 August 2024	8.51	9.87

Source- PPAC

Figure 17: Domestic natural gas price August'23–24 (\$/mmbtu)



Source- PPAC

Indian Gas Market

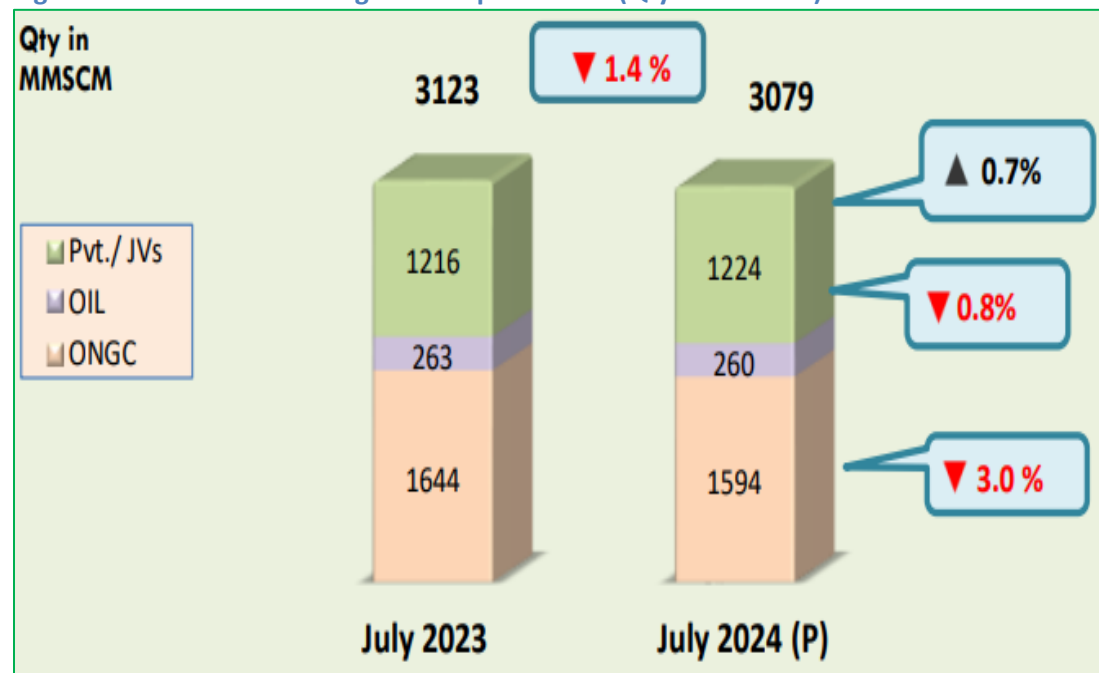
- Gross production of natural gas for the month of July 2024 (P) was 3079 MMSCM which was lower by 1.4% compared with the corresponding month of the previous year.
- Total imports of LNG (provisional) during the month of July 2024 were 2794 MMSCM (P) (increase of 18.6% over the corresponding month of the previous year).
- Natural gas available for sale during July 2024 was 5355 MMSCM (increase of 8.14% over the corresponding month of the previous year).
- Total consumption during July 2024 was 6120 MMSCM (provisional). Major consumers were fertilizer (29%), City Gas Distribution (CGD) (21%), Power (12%), Refinery (9%) and Petrochemicals (5%).

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

1. Domestic Natural Gas Gross Production:

Domestic natural gas gross production for the month of July 2024 was 3079 MMSCM (decrease of 1.4% over the corresponding month of the previous year).

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

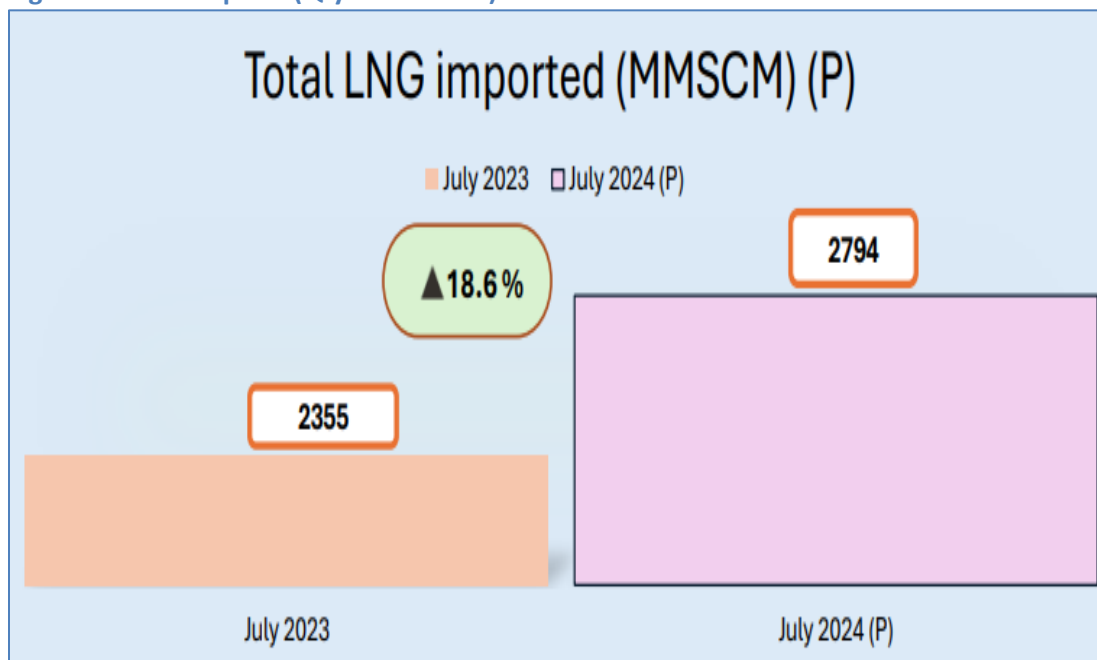


Source- PPAC

2. LNG imports:

Total imports of LNG (provisional) during the month of July 2024 were 2794 MMSCM (increase of 18.6% over the corresponding month of the previous year).

Figure 19: LNG imports (Qty in MMSCM)

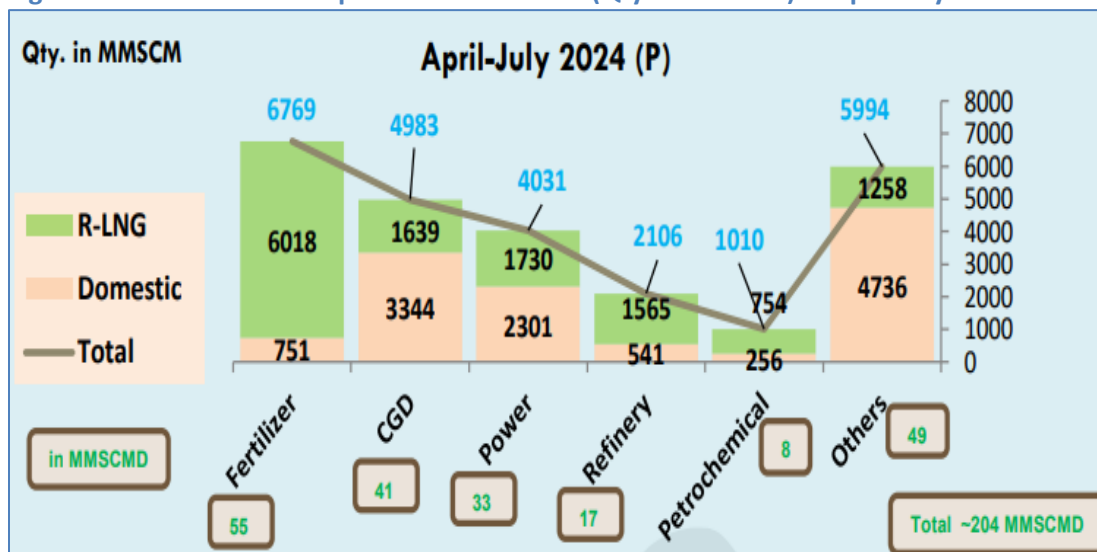


Source- PPAC

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 April-July 2024



Source- PPAC

Key developments in Oil & Gas sector

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

1. **Production of Crude Oil**

Indigenous crude oil and condensate production during July 2024 was 2.4 MMT. OIL registered a production of 0.3 MMT, ONGC registered a production of 1.6 MMT whereas PSC/RSC registered production of 0.5 MMT during July 2024. There is a degrowth of 2.9% in crude oil and condensate production during July 2024 as compared to July 2023.

2. **Production of Natural Gas**

Gross production of natural gas for the month of July 2024 (P) was 3079 MMSCM which was lower by 1.4% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 12135 MMSCM for the current financial year till July 2024 was higher by 3.8% compared with the corresponding period of the previous year.

3. **Crude Oil Processed (Crude Throughput)**

Total Crude oil processed during July 2024 was 22.6 MMT which is 3.2% higher than July 2023, where PSU/JV refiners processed 15.3 MMT and private refiners processed 7.3 MMT of crude oil. Total indigenous crude oil processed was 1.9 MMT and total Imported crude oil processed was 20.7 by all Indian refineries (PSU+JV+PVT). There was a growth of 2.8% in total crude oil processed in April-July FY 2024 - 25 as compared to same period of FY 2023 - 24.

4. **Production of Petroleum Products**

Production of petroleum products was 24.4 MMT during July 2024 which is 7.1% lower than June 2023. Out of 24.4 MMT, 24.1 MMT was from refinery production & 0.3 MMT was from fractionator. There was a growth of 2.5% in production of petroleum products in April-July FY 2024 - 25 as compared to same period of FY 2023 - 24. Out of total POL production, in July 2024, share of HSD is 42.4%, MS 15.7%, Naphtha 7.3%, ATF 6.1%, Pet Coke 5.3%, LPG 4.5% 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. reduced windfall tax on crude petroleum to Rs. 2,100/tonne

The government announced a decrease in the windfall tax on domestically crude oil to Rs. 2,100 per tonne from Rs. 2,400 per tonne effective August 17, 2024.

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.

Cabinet approved Amendment in “Pradhan Mantri JI-VAN Yojana” for providing financial support to Advanced Biofuel Projects using lignocellulosic biomass and other renewable feedstock

To keep pace with the latest developments in the field of biofuels and to attract more investment, the Union Cabinet, chaired by the Prime Minister Shri Narendra Modi, approved the modified Pradhan Mantri JI-VAN Yojana.

The modified scheme extends timeline for implementation of scheme by Five (5) year i.e. till 2028-29 and includes advanced biofuels produced from lignocellulosic feedstocks i.e. agricultural and forestry residues, industrial waste, synthesis (syn) gas, algae etc. in its scope. “Bolt on” plants & “Brownfield projects” would also now be eligible to leverage their experience and improve their viability.

To promote multiple technologies and multiple feedstocks, preference would now be given to project proposals with new technologies and innovations in the sector.

The scheme aims to provide remunerative income to farmers for their agriculture residue, address environmental pollution, create local employment opportunities, and contribute to India's energy security and self-reliance. It also supports the development of advanced biofuel technologies and promotes the Make in India Mission. It also helps in achieving India's ambitious target for net-zero GHG emissions by 2070.

The Government of India's commitment to promoting advanced biofuels through the Pradhan Mantri JI-VAN Yojana reflects its dedication to a sustainable and self-reliant energy sector.

The Oilfields (Regulation and Development) Amendment Bill, 2024

The Oilfields (Regulation and Development) Amendment Bill, 2024 was introduced in Rajya Sabha on August 5, 2024. The Bill amends the Oilfields (Regulation and Development) Act, 1948. The Act regulates the exploration and extraction of natural gas and petroleum.

1. **Definition of mineral oils expanded:** The Act defines mineral oils to include petroleum and natural gas. The Bill expands the definition to include: (i) any naturally occurring hydrocarbon, (ii) coal bed methane, and (iii) shale gas/oil. It clarifies that mineral oils will not include coal, lignite or helium.
2. **Introduction of petroleum lease:** The Act provides for a mining lease. The lease provides for various activities such as exploration, prospecting, production, making merchantable, and disposal of mineral oils. Prospecting is the initial stage in the search for oil and gas fields, involving assessment of potential petroleum accumulations across large areas. The Bill replaces the mining lease with a petroleum lease, which also covers similar set of activities. Existing mining leases granted under the Act will continue to be valid.
3. **Rule making powers of the central government:** The Act empowers the central government to make Rules on several matters. These include: (i) regulating the grant of leases, (ii) terms and conditions of leases including the minimum and the maximum area and the period of lease, (iii) conservation and development of mineral oils, (iv) methods for producing oil, and (v) manner of collection of royalties, fees, and taxes. The Bill retains these provisions. It adds that the central government may also make Rules on: (i) merger and combination of petroleum leases, (ii) sharing of production and processing facilities, (iii) obligations of lessees towards protecting environment and reducing emissions, (iv) alternative mechanisms for resolving disputes in relation to the grant of petroleum leases.
4. **Decriminalisation of offences:** The Act provides that violation of Rules will be punishable with imprisonment up to six months, a fine of Rs 1,000, or both. The Bill instead provides that the above offence will be punishable with a penalty of Rs 25 lakh. The Bill also adds following offences: (i) undertaking activities related to mineral oils such as exploring, prospecting, and production without a valid lease, and (ii) non-payment of royalty. These are also punishable with a penalty of Rs 25 lakh. Continued violation in case of all above offences will attract a penalty of up to Rs 10 lakh per day.
5. **Adjudication of penalties:** The central government will appoint an officer of the rank of Joint Secretary or above for adjudication of penalties. Appeals against the decisions of the Adjudicating Authority will lie before the Appellate Tribunal specified in the Petroleum and Natural Gas Board Regulatory Board Act, 2006. The 2006 Act designates the Appellate Tribunal for Electricity, constituted under the Electricity Act, 2003, as the Appellate Tribunal.

Central Electricity Authority (CEA) accords concurrence to two Hydro Pumped Storage Plants

India needs Hydro Pumped Storage Projects (PSPs) to support faster energy transition with large scale integration of renewable capacity in the country and also ensuring energy security.

In order to ensure that Hydro PSPs get commissioned on a fast track, thereby accelerating the growth of India's renewable energy and energy storage capacity, Central Electricity Authority (CEA) has accorded concurrence to two Hydro PSPs namely, 600 MW Upper Indravati in Odisha being developed by OHPC Ltd (A Government of Odisha Undertaking) and 2000 MW Sharavathy in Karnataka being developed by KPCL (A Government of Karnataka Undertaking) in record time. CWC, GSI, CSMRS and the stakeholders have jointly fully supported CEA on mission mode.

CEA has also received huge number of proposals of Hydro PSPs (worth around 60 GW), under Survey & Investigation, which are at various stages of preparation of DPR. After preparation of DPRs, these PSPs will be uploaded by the developers on ONLINE Portal (<https://ceaclearance.gov.in/hydro/>) for concurrence by CEA under section 8 of Electricity Act, 2003. CEA assures for faster concurrence of these PSPs, which is need of the hour to fulfil energy storage demand of the country.

To fast track the concurrence process of PSPs in line with ease of doing business drive of Govt. of India, CEA has further revised the guidelines to simplify the process for preparation of DPRs of PSPs and its concurrence.

The major highlights of the revised guidelines are:

1. Inclusion of Checklist of Documents required for examination of various aspects of DPRs. The earlier checklist has been shortened.
2. The developers are now allowed to submit the DPR online with completion of first 12 design chapters. The some of the chapters have been dispensed with. So, the DPR has been made shorter.
3. No mandatory requirement of approval of Cost & Financial Chapters. These chapters to be submitted only for reference and record to meet the requirement of the Act.
4. For Off stream Hydro PSP, there is no requirement to submit the alternative location plan for reservoirs.
5. Inclusion of an undertaking from developer stating that the DPR submitted is in line with pre-DPR clearances issued by the appraising groups of CEA, CWC, GSI, CSMRS. This obviates the requirement of again sending the DPR for re-examination. This is expected to save around 4 to 5 months' time in concurrence process.
6. The process for giving the early excavation permission at the risk and cost of the developers have been streamlined so that advance action can be taken by the developers to start the work at the site. This is expected to save around 6 to 8 months' time in execution of the project.
7. The developers have also been advised to carry out the investigations in time and submit the investigation reports to all the appraising agencies so that parallel activities can be done by the appraising agencies. This is also expected to save around 1 to 2 months' time.

The government has prioritized the development of Energy Storage Systems, particularly PSPs to ensure the energy security of the country. As per Nation Electricity Plan (Generation), the installed capacity of Energy Storage Systems including BESS is projected as 74 GW by 2031-32. It is worth to mention that there is potential of about 176 GW of Hydro PSPs in the country, out of which 4.7 GW are under operation, 4 GW under construction, 3.6 GW concurred (construction to be started) and around 60 GW under survey and investigation.

CEA with support of CWC, GSI, CSMRS, MoEF&CC and the Hydro PSP developers will endeavour to achieve this requirement in Mission mode.

Online portal DRIPS (Disaster Resilient Infrastructure for Power Sector)

The Union Minister of Power and Minister for Housing and Urban Affairs, Shri Manohar Lal, launched online portal DRIPS (Disaster Resilient Infrastructure for Power Sector) in New Delhi.

The string of natural disasters across India in the past few years, i.e. Cyclone Fani in Odisha, severe floods in Jammu & Kashmir, extensive flooding in Kerala—has starkly highlighted the vulnerability of our infrastructure, particularly in the power sector. Coastal states/UTs, viz., Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha, West Bengal and Puducherry face unique challenges due to their geographic location. These catastrophic events have underscored the urgent need for comprehensive disaster preparedness and response strategies. Disaster Resource Inventory for power sector (DRIPS) portal would allow for rapid identification and deployment of necessary resources, ensuring that power sector disruptions are addressed promptly and efficiently in a disaster situation.

Union Minister Shri Manohar Lal at the launch ceremony said “The launch of the online portals DRIPS; will enable transparent, coordinated and effective working of the power sector in the country during any adverse situation”. Union Minister also emphasized that the online system is need of the hour to reduce the human error at the time of exigency. He also highlighted the fact that the portal will be helpful not only for generators and distributors but also for consumers.

DRIPS will serve as a single point of contact for all the designated nodal officers of all the departments of power sector and other agencies in the affected districts, states for managing the inventory of specific Power System equipment’s and critical supplies a much-needed step for an emergency response. CEA was entrusted to develop this inventory in line with IDRN and host it on National Power Portal.

The minister praised CEA team for in house developing the portal, which shall serve as a single Portal for all the three areas of power sector, i.e. Generation, Transmission and Distribution.

For utilizing this portal, the nodal officer would require to undergo the process, i.e, Registration of Entities (GENCOs, TRANSCO, DISCOMs), verification & approval by CEA and timely updating of spare inventory by entities etc. At present, 61 stakeholders are registered with this portal.

The establishment of a well-organized Disaster Resource Inventory for the power sector is not merely a precaution; it is a necessity to safeguard lives, property, and critical services during and after natural

disasters. DRIPS can significantly contribute towards building of a more resilient and effective response system.

The success of this portal also relies on participating utilities timely updating their resource inventory so that at the time of crisis the same can be accessed by all stakeholders to minimize the impact of disaster and restore the system to its original condition in shortest possible time.

Compendium of CEA Regulations under the Electricity Act, 2003

The Union Minister of Power and Minister for Housing and Urban Affairs, Shri Manohar Lal, launched a comprehensive compendium of regulations notified by the Central Electricity Authority (CEA) under the Electricity Act, 2003. The launch event, held in New Delhi, marks a significant milestone in the ongoing efforts to create a reliable, efficient, and sustainable electricity sector in India.

The CEA regulations provide a robust framework for the generation, transmission, distribution, and trading of electricity across the country. These regulations are crucial in ensuring grid stability, promoting efficient resource use, maintaining safety standards in electricity operations, and facilitating the integration of renewable energy into the national grid. The compendium covers a wide range of topics, including technical standards, safety measures, grid connectivity, and more, reflecting the evolving needs of India's power sector.

At the launch, Union Minister Shri Manohar Lal stated, "The release of this compendium of CEA regulations is a crucial step towards ensuring transparency in the power sector in India. The regulations encapsulated in this compendium will bring uniformity of rules and will provide a centralised and easily accessible source of information at one place for ease of compliances by the power sector stakeholders."

Key Highlights of the CEA Regulations Compendium:

Grid Standards:

Establishes a framework governing the operation and maintenance of the electricity grid, including standards for voltage, frequency, and system security, as well as the integration of diverse energy sources.

- 1. Technical Standards for Grid Connectivity:**
Sets technical requirements for connecting generating stations, including renewable energy sources, to the grid, ensuring stability and smooth integration of renewable energy.
- 2. Safety and Electric Supply Measures:**
Provides guidelines to ensure the safety of public, workers, and equipment during the generation, transmission, and distribution of electricity. It also includes additional safety requirements for electric vehicle charging stations.
- 3. Safety Requirements for Construction, Operation, and Maintenance of Electrical Plants and Lines:**
Establishes safety standards to prevent accidents and ensure the safe operation of electrical

installations, including recent amendments mandating safety audits and the setup of early warning systems for hydro projects.

4. **Flexible Operation of Coal-Based Thermal Power Generating Units:**
Ensures that coal-based power plants can operate flexibly, with a minimum power level of 40%, supporting the grid as the energy mix shifts towards renewable sources.
5. **Installation and Operation of Meters:**
Standardizes metering practices to ensure accurate billing, enhance reliability, and promote transparency in the electricity sector.
6. **Furnishing of Statistics, Returns, and Information:**
Mandates the submission of data related to electricity generation, transmission, and distribution to enable the CEA to monitor and analyse the power sector's performance.
7. **Technical Standards for Communication Systems in Power Sector:**
Sets standards for communication systems, enhancing the operational efficiency of the power grid through improved data transfer and real-time monitoring.
8. **Technical Standards for Construction of Electrical Plants and Electric Lines:**
Specifies standards for designing, constructing, and maintaining electrical plants and lines, ensuring safety, reliability, and efficiency.

The compendium is a vital resource for all stakeholders in the power sector, including policymakers, developers, and operators, offering a consolidated reference to ensure compliance with the highest standards in electricity generation, transmission, and distribution.

Launching of Online Portal for Monitoring Survey and Investigation Activities of Hydro Electric Projects and Pumped Storage Projects (JAL VIDYUT DPR)

The Union Minister of Power and Minister for Housing and Urban Affairs, Shri Manohar Lal, launched the Online Portal for Monitoring Survey and Investigation Activities of Hydro Electric Projects and Pumped Storage Projects (JAL VIDYUT DPR) during an event held in New Delhi.

This portal is a strategic initiative by the Central Electricity Authority (CEA) aimed at bolstering the development of hydropower and pumped storage projects (PSPs) in the country, which are critical for providing greater inertia and balancing power to the grid amidst ongoing energy transitions.

At the launch, Union Minister Shri Manohar Lal emphasized the importance of digital solutions in enhancing the power sector's efficiency, stating, "The launch of the three online portals today; DRIPS, PROMPT, and JAL VIDYUT DPR will enable transparent, coordinated, and effective working of the power sector in the country. The minister highlighted the importance of power sector as the key element towards achieving the goal of Viksit Bharat by 2047.

Key Highlights of the JAL VIDYUT DPR Portal:

- Improved Project Management and Coordination:

The portal offers a bird's-eye view of a project's development status, ensuring better management and coordination throughout the DPR preparation process.

- Significant Projects Under Survey & Investigation:

Currently, 11 Hydro Electric projects with a combined capacity of 9 GW and 39 Pumped Storage Projects with a capacity of 57 GW are under Survey & Investigation for the preparation of Detailed Project Reports (DPRs).

- Centralized Digital Platform:

The JAL VIDYUT DPR portal, developed by CEA, offers a centralized digital platform for monitoring survey and investigation activities related to Hydro and PSP projects. It facilitates seamless communication between developers and appraising agencies, including the Central Water Commission (CWC), Geological Survey of India (GSI), Central Soil and Materials Research Station (CSMRS), and the Ministry of Environment, Forest and Climate Change (MOEF&CC).

- Enhanced Efficiency and Transparency:

The portal is designed to enhance efficiency and transparency in the DPR preparation process. By providing real-time tracking and visibility of pending tasks with appraising agencies and developers, it aims to expedite workflows and streamline communication. This aligns with the government's initiatives to promote ease of doing business by reducing timelines for appraisals and approvals of DPRs.

Launching of Portal for Online Monitoring of Projects – Thermal (PROMPT)

The Union Minister of Power and Minister for Housing and Urban Affairs, Shri Manohar Lal, launched Portal for Online monitoring of Projects – Thermal (PROMPT) in New Delhi.

Speaking at the launch, Union Minister Shri Manohar Lal remarked that the electricity is the key driver for the ongoing economic activities in the country. Accordingly, the demand for power is also increasing therefore completion of ongoing schemes and thermal projects in timebound manner is extremely critical. "The launch of the portal PROMPT will enable transparent, coordinated, and effective working of the power sector in the country.

The Central Electricity Authority (CEA) has been actively monitoring the progress of under-construction power projects through regular site visits, interactions with developers, and periodic review meetings with stakeholders. These efforts are aimed at identifying and resolving critical issues to ensure timely commissioning of power projects. Taking a step further in monitoring of these thermal power projects and to facilitate the power project developers towards a digital process of monitoring, this online thermal project monitoring portal is developed. NTPC has helped in developing this portal.

The newly launched PROMPT portal is designed to facilitate real-time tracking and analysis of thermal power projects. This online platform enables project managers and stakeholders to make informed decisions swiftly, ensuring that potential delays and issues are identified early and addressed promptly.

Key Features and Advantages of PROMPT:

- **Real-Time Tracking and Analysis:** The portal provides a centralized platform for monitoring all aspects of project execution, enabling swift identification and resolution of potential issues.
- **Transparency and Accountability:** By digitizing the monitoring process, the portal ensures greater transparency in project management, leading to timely resolution of issues, reduction in time and cost overruns, and enhanced project execution efficiency.
- **Resource Optimization:** The portal supports predictable resource availability, aiding in meeting the country's electricity demand at a reasonable price, ultimately benefiting consumers.

To familiarize stakeholders with the portal's functionality, hands-on training sessions have been conducted for all project developers. As a result, most developers have already begun entering data into the portal on a monthly basis, further enhancing the monitoring process.

India and the United States discussed advancements in Energy Collaboration

In a significant step towards enhancing bilateral cooperation in the energy sector, Union Minister for Power Shri Manohar Lal, accompanied by MoS Power and New & by Renewable Energy Shri Shripad Naik and senior officials from the Ministry of Power, held a productive discussion with the US delegation led by H.E. Mr. John Podesta, Senior Advisor to the President for International Climate Policy.

During the discussions, Shri Manohar Lal emphasized the longstanding bilateral partnership between India and the United States, highlighting the shared commitment to a 'clean' energy future that fosters economic growth and development. The union minister further states that the Ministry of Power are committed to strengthening this partnership.

Union Minister also said that India and US engagements under the 'Power & Energy Efficiency Pillar', which is led by Ministry of Power under the Strategic Clean Energy Partnership (SCEP), are important to realize our goals to achieve energy transition.

H.E. Mr. John Podesta, in his remarks said that India is a valuable partner and both the countries support each other in building resilient supply chains and investment led partnership strategy. He also remarked that India and US can collaborate on areas like clean energy, energy storage systems and energy efficiency. He further said that US can support India in enhancing its manufacturing capacity.

Key areas of focus during the discussions included:

1. **Grid and Transmission Modernization:** Both sides explored the possibility of technical exchanges on efforts to upgrade grid transmission to handle future load growth. Discussions also covered policy consultations and potential financial support to advance these modernization efforts.
2. **Enhancing Manufacturing Capacity:** Opportunities to build out India's manufacturing capacity in critical areas like large transformers were a key topic, aiming to bolster domestic production and reduce dependency on imports.
3. **Energy Storage Systems:** The talks delved into the possibilities of state-to-state partnerships on long-duration energy storage studies, with further collaboration on grid-scale battery storage solutions.
4. **High-Efficiency Cooling Systems:** The discussions highlighted the importance of stimulating manufacturing projects and policies to increase India's capacity to build, deploy, and export high-efficiency air conditioning systems and fans.

The meeting underscored the importance of the India-US partnership in driving the global clean energy transition, with both sides expressing their commitment to deepening cooperation in these critical areas.

Cabinet approved Central Financial Assistance towards Equity Participation by the State Governments of the North Eastern Region for development of Hydro Electric Projects in the North Eastern Region

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved the proposal of the Ministry of Power for providing Central Financial Assistance (CFA) to the State Governments of NER towards their equity participation for development of Hydro Electric Projects in the North Eastern Region (NER) through Joint Venture (JV) Collaboration between State entities and Central Public Sector Undertakings.

This scheme has an outlay of Rs. 4136 crore to be implemented from FY 2024-25 to FY 2031-32. A cumulative hydro capacity of about 15000 MW would be supported under the scheme. The scheme would be funded through 10% Gross Budgetary Support (GBS) for North Eastern Region from the total outlay of the Ministry of Power.

The Scheme formulated by the Ministry of Power provides for formation of a Joint Venture (JV) Company for all the projects of a Central PSU with the State Govt.

The grant towards equity portion of the State Government of NER would be capped at 24% of the total project equity subject to a maximum of Rs.750 crore per project. The cap of Rs.750 crore for each project would be revisited, if required, on a case-to-case basis. The ratio of equity of the CPSU and the State Government in the JV would be maintained at the time of disbursing of the grant.

Central Financial Assistance would be limited to only viable Hydro Electric Projects. States would be required to waive / stagger free power and / or reimburse SGST to make the project viable.

With the introduction of this scheme, participation of the State Governments in the hydro development shall be encouraged and risk and responsibilities shall be shared in a more equitable manner. The issues such as land acquisition, rehabilitation & resettlement and local law & order issues would be reduced with State Governments becoming stakeholders. This would avoid time and cost over-run of the projects.

This scheme shall play a significant role in harnessing the hydro power potential of North East. It would bring huge investment in the North Eastern Region and would provide large number of direct employment to the local people along with indirect employment / entrepreneurial opportunities through transportation, tourism, small-scale business. Development of hydroelectric projects shall also contribute towards realization of India's Nationally Determined Contribution (INDC) of establishing 500 GW renewable energy capacity by 2030 and would help integration of RE sources in the grid thus enhancing flexibility, security and reliability of the national grid.

The Government of India has been taking several policy initiatives to address the issues impeding Hydro Power development. To promote the hydro power sector and to make it more viable, the Cabinet, on 7th March, 2019, approved measures, viz., declaring large hydro power projects as Renewable Energy sources, Hydro Power Purchase Obligations (HPOs), tariff rationalization measures through escalating tariff, budgetary support for flood moderation in storage HEP and budgetary support for the cost of enabling infrastructure, i.e., construction of roads and bridges.

Government of India issued Operational Guidelines for Implementation of 'Model Solar Village' under PM-Surya Ghar: Muft Bijli Yojana

The Scheme Guidelines for implementation of 'Model Solar Village' under PM-Surya Ghar: Muft Bijli Yojana have been notified by Ministry of New and Renewable Energy on 9th August 2024.

Under the scheme component 'Model Solar Village', emphasis has been made on creating one Model Solar Village per district across India, with the goal of promoting solar energy adoption and enabling village communities to become self-reliant in meeting their energy needs. A total financial outlay of ₹800 crore has been allocated for this component, providing Rs. 1 crore per selected Model Solar Village.

In order to be considered a village under the competition mode, a village must be a revenue village with a population size above 5,000 (or 2,000 for special category states). The selection process involves a competitive mode where villages are assessed on their overall distributed renewable energy (RE) capacity installed on 6 months after the declaration of the potential candidate by District Level Committee (DLC).

The winning village in each district, with the highest RE capacity, will receive a central financial assistance grant of Rs. 1 crore. The implementation of this scheme will be done by State/UT Renewable Energy Development Agency under the supervision of District Level Committee (DLC), ensuring that selected villages transition effectively to solar-powered communities, serving as models for other villages across the country.

The Government of India approved the PM-Surya Ghar: Muft Bijli Yojana on 29th February 2024, with the aim to increase the share of solar rooftop capacity and empower residential households to generate their own electricity. The scheme has an outlay of Rs 75,021 crore and is to be implemented till FY 2026-27.

Export of green ammonia from India to Japan

The Union Minister of New and Renewable Energy, Shri Pralhad Joshi, chaired the signing ceremony of the first-ever agreement for the export of Green Ammonia from India to Japan. The project offtake agreement, marks a significant step forward in India's journey to becoming a global leader in green hydrogen and ammonia production.

The signing ceremony for heads of terms (HoT) for the cross-border green ammonia supply from India to Japan was also graced by H.E. Mr Simon Wong, High Commissioner of the Republic of Singapore to India; Mr Yuta Hikichi, First Secretary, Embassy of Japan in India; Mr Ajay Yadav, JS, MNRE; and Mr Vipul Tuli, Chairman – South Asia & CEO – Hydrogen Business, Sembcorp Industries. This agreement represents the first such collaboration between India, Singapore and Japan, underscoring India's growing prominence in the global green energy landscape.

The Heads of Terms (HoT) agreement was signed between Sembcorp Industries, Sojitz Corporation, Kyushu Electric Power Co., and NYK Line, solidifying a cross-border green ammonia supply partnership from India to Japan. This agreement represents the first such collaboration between the two nations, underscoring India's growing prominence in the global green energy landscape.

Singapore-headquartered Sembcorp Industries will lead the production of green ammonia in India, utilizing renewable energy sources. Kyushu Electric Power Co. has committed to integrating this green ammonia into their energy mix, partially replacing coal consumption at their thermal power plants in Japan. Sojitz Corporation will act as the business intermediary, facilitating the connection between the ammonia producer and the offtaker. NYK Line will oversee the maritime transportation of the green ammonia from India to Japan.

Speaking at the event, Shri Pralhad Joshi emphasized the importance of this partnership, stating, "Today is a historic day as we mark the first-ever agreement for the supply of Green Ammonia from India to Japan. This agreement will help establish a robust supply chain from production in India to consumption in Japan, paving the way for future collaborations in the green energy sector."

The Minister highlighted India's rapid progress in green hydrogen and renewable energy under the leadership of Prime Minister Shri Narendra Modi. He reiterated India's commitment to becoming a global leader in green hydrogen and ammonia production, leveraging partnerships, building robust regulatory frameworks, and making substantial investments in the sector.

Shri Pralhad Joshi also announced that a tender for 7.5 lakh TPA of Green Ammonia is currently live, with additional tenders for 4.5 lakh TPA capacity also floated. These efforts are part of India's broader strategy to award incentives for the production of over a million tonnes per annum of Green Hydrogen,

demonstrating India's capability and intent to scale up green energy production at an unprecedented pace.

The Minister further spoke about the deep cultural and people-to-people ties between India, Japan, and Singapore, noting that the three countries are collaborating on energy efficiency and renewable energy technologies. He expressed confidence that this agreement is just the beginning of India's expanding capabilities in the green energy sector, with future endeavors expected to be even more ambitious and impactful.

This agreement not only reinforces India's position as a key player in the global green energy market but also reflects the Government of India's steadfast support for green hydrogen and renewable energy initiatives. The collaboration with Japan is a testament to India's growing expertise and commitment to sustainable development and energy independence.

CIL & GAIL Sign a JV for Setting up Coal to SNG Plant

The Ministry of Coal, in collaboration with the Ministry of Power & Natural Gas, has facilitated a landmark joint venture agreement between two leading Maharatna CPSEs, Coal India Limited (CIL) and GAIL (India) Limited (GAIL). This agreement marks a major step towards setting of a Coal to Synthetic Natural Gas (SNG) plant using surface coal gasification (SCG) technology.

The plant to come up in Raniganj area of Eastern Coalfields Limited, West Bengal is planned to produce 80000 Nm³ per hour of Synthetic Natural Gas (SNG). The annual production is slated at 633.6 Million Nm³ per hour which will require 1.9 million tonnes (mts) of coal. The coal will be supplied by CIL. The synergy and partnership of the two corporate giants is a big step towards National Coal Gasification Mission which facilitates utilization of chemical properties of coal.

Synthetic Natural Gas (SNG) is a fuel gas predominantly consisting of methane, CH₄ which is a feedstock for production of various chemicals and fertilizers. The upcoming plant would help in securing the raw material and reduce import dependency of Natural gas and promoting Atmanirbhar mission.

Shri. Debasish Nanda, Director (Business Development) CIL and Shri. R K Singhal, Director (Business Development) GAIL inked the JVA on behalf of CIL and GAIL respectively.

Shri. M. Nagaraju, Additional Secretary, Coal, while addressing in the signing ceremony mentioned that the commitment of CIL and GAIL with this project will be a role model. "Gasification is the highest priority area for the Ministry of Coal. India has been blessed with huge reserves of coal and these reserves should be utilized gainful and in environment friendly manner. He stressed the need of more coal gasification project to be planned to minimize the carbon emission. He also said that all the possible support from government is in place including financial support for viable gap funding. Request for Proposals (RFPs) for inviting eligible bidders (public and private) for financial incentives of Rs. 8500 crores under three categories for Coal/lignite gasification project have been floated on 15.05.2024 for which last date of submission is 11.11.2024.

Shri. S K Gupta (Chairman & Managing Director), GAIL while complementing the team of CIL and GAIL expressed the need to have more support from Government to take ahead of this project.

Shri. Pankaj Jain, Secretary MoP&NG, said that the alternative uses of coal for environment friendly ventures like coal gasification should be come up in future to cater the emission target of the country. He also emphasized that SCG is a promising technology that converts coal into valuable Syn gas. This on further processing produces synthetic natural gas that can be used as alternative natural gas. It also has use as feedstock for downstream chemicals production which are currently being imported and for power generation as well.

While summing up, Shri Debasish Nanda, Director BD, CIL advised M/s Projects and Development India Limited, which has been assigned the work for preparing a detailed feasibility report of the plant to take up the project on priority. He expressed his thanks to the officials of Ministry of Coal, P&NG, officials of CIL, GAIL and PDIL for attending this signing ceremony.

Coal Ministry Achieves 74.07 Million Tonne Production in July 2024

The Ministry of Coal has achieved a significant upswing in overall coal production during the month of July 2024, reaching 74.07 Million Tonne (MT). This surpasses the figures of 69.42 MT of the corresponding month during the previous year, representing an increase of 6.69%.

The production of Coal India Limited (CIL) has risen to 55.04 MT in the month of July 2024 marking a growth of 2.54% as compared to 53.67 MT in July 2023. The Cumulative Coal Production (up to July 2024) has seen commendable leap of 321.45MT (Provisional) in FY' 24-25 as compared to 292.80 MT during the same period in FY' 23-24, with a growth of 9.78%.

Cumulative Coal dispatch witnessed a significant boost in July 2024, touching 79.54 MT, compared to 76.05 MT recorded in July 2023, with a growth rate of 4.58%. The Cumulative Coal dispatch (up to July 2024) stood at 341.61 MT (Provisional) in FY' 24.25, compared to 316.54 MT during the corresponding period in FY' 23-24, with a commendable growth of 7.92%.

As on 31.07.2024, the coal stock held by coal companies witnessed a notable surge, reaching 86.8 MT. This surge reflects an impressive annual growth rate of 43.85% underscoring the robust performance and efficiency of the coal sector.

Vesting Orders Issued for 10 Mines to Boost Coal Production and Economic Growth

Hon'ble Minister of Coal, Shri G Kishan Reddy, has issued vesting orders for ten strategically important mines, marking a significant advancement in the nation's coal production capabilities. This initiative, which includes one fully explored and nine partially explored mines, is set to enhance energy security and drive economic growth across the states of Jharkhand, Chhattisgarh, West Bengal, and Madhya Pradesh.

These ten mines have potential to substantially contribute to the nation's energy security and industrial growth. Furthermore, these mines hold a substantial 2395 MT geological reserve, indicating a robust

foundation for sustained coal production. These mines are expected to generate an annual revenue of Rs. 166.36 crores and will attract a capital investment of Rs. 150 crores. They will provide employment to about ~1352 people, both directly and indirectly.

In his keynote address, Shri G Kishan Reddy urged successful bidders to focus on increasing coal production and reducing imports. He emphasized the need for prioritizing environmental sustainability and responsible land management. Shri Reddy highlighted the importance of enhancing green cover, adhering to strict safety standards, and actively contributing to the social welfare of local communities, including healthcare, drinking water, and education. He also called on bidders to build strong community relationships and ensure the long-term success of the coal sector through effective environmental conservation practices.

In his remarks on the occasion, Shri Satish Chandra Dubey, MoS, (Coal) emphasized the importance of integrity and diligence in the sector. He also highlighted the need for sustainable mining practices and the welfare of local communities residing near coal mining areas

Shri Amrit Lal Meena, Coal Secretary congratulated all the successful bidders and urged them to expedite the coal block operationalization and assured full support of Ministry. He also urged bidders to prioritize environmental responsibility and sustainability in their operations. He emphasized the need for innovative approaches to reduce ecological impact, while enhancing coal production.

The vesting of these mines aligns with the government's vision of achieving self-reliance in the coal sector, reducing dependency on imports, and ensuring a steady supply of coal to meet the country's growing energy demands. The development of these mines will not only contribute to regional economic development but also support infrastructure growth and community welfare.

Auctioning of Coal Mines for Commercial Mining

Ministry of Coal has recently launched the 10th round of commercial auction of coal mines on 21.06.2024, offering 67 coal mines. This round includes 30 new coal mines and 31 previously offered mines where no response was received. Additionally, 6 coal mines are offered under 2nd attempt of 8th and 9th round. Last date for bid submission is 27.08.2024.

Ministry of Coal has set a target to produce 1.5 BT by FY-2030.

Increasing domestic coal production would reduce reliance on imported coal for various industries, including domestic coal-based power plants. The Ministry of Coal aims to produce 1.39 billion tonnes of coal by FY2028 to meet national demand and achieve self-sufficiency. However, power plants that rely on imported coal may continue to import thermal coal.

Coal Gasification

Government has launched a Scheme with financial outlay of Rs. 8500 Crore to provide viability gap funding (VGF) to promote Coal/Lignite Gasification Projects for both PSUs and the private sector. The approved scheme covers projects under following three categories –

- **Category I**, with a provision of Rs. 4050 Crores, is for Government PSUs. They can submit proposals for funding assistance, and three selected projects will receive a maximum grant of Rs. 1350 Crores or 15% of project cost, whichever is lower.
- **Category II**, with Rs. 3850 crores, is available to both private sector and government PSUs with a maximum grant of Rs. 1000 Crore or 15% of project cost, whichever is lower.
- **Category III**, with Rs. 600 crores for demonstration or small-scale projects with maximum outlay per project of Rs. 100 Crore or 15% of project cost, whichever is lower.

Ministry of Coal has floated Request for Proposals (RFPs) for seeking applications for setting up of Coal/Lignite Gasification projects under all three categories, as mentioned above. RFPs provide a time frame of 5 years from the date of execution of agreement of financial incentive scheme. As per the timelines, the date of submission of bid is 11.11.2024 and the date of execution of Agreement is 13.05.2025. Hence, the commercial scale Coal Gasification Projects are expected by May 2030 in the country.

Ministry of Coal has Accelerated Development of Coal Evacuation Infrastructure for achieving coal production target of Vision 2030 and Viksit Bharat 2047

In a significant move to enhance India's coal evacuation infrastructure, the Ministry of Coal has announced a comprehensive strategy aimed at fast-tracking the development of critical logistics projects. This initiative is in alignment with the Hon'ble Prime Minister's vision for "integrated planning & synchronized time-bound implementation," which is pivotal to achieving the ambitious goal of Viksit Bharat 2047.

Recognizing the vital role of coal in India's energy landscape, the Ministry is committed to reducing logistics constraints that currently hinder efficient coal transportation. To this end, the Ministry is working closely with Ministry of Railways, State Governments and various agencies to address and resolve issues that affect the timely progress of infrastructure projects. This collaborative approach is expected to streamline processes and foster a more conducive environment for development.

Main Objectives of Coal Evacuation Infrastructure Project: -

- Availability: Adequate coal loading and evacuation infrastructure
- Optimization of total logistics cost, loading and transportation, through rationalization of the network
- Modernization: Promote technology with upgraded infrastructure, use of AI, drones, sensors and innovation

- Integration: Promote interconnected multimodal network & greener transportation initiatives
- Efficient: Improve the logistics and transportation systems to ensure timely and cost-effective movement of coal from production sites to consumers
- Inclusivity: Promotion of inclusivity by addressing the needs of all stakeholders

Key Initiatives

Increasing Production Capacity: Support the target of producing 1.5 billion tonnes of coal by FY30 by ensuring that infrastructure keeps pace with production increases.

Modal Shift to Rail Transport: Expand the modal share of rail transport for coal from 64% to 75% by FY 2030, thereby reducing road congestion and enhancing environmental sustainability. The Ministry has identified 38 priority rail projects that will be fast-tracked in close coordination with the Ministry of Railways. These projects are crucial for improving rail connectivity and ensuring timely coal supply to power plants and industries across the country.

Mandatory Mechanized Coal Handling Facilities: All larger coal mines producing more than 2 million tons (MT) per annum will be required to implement mechanized coal handling facilities within the next five years. This move aims to enhance operational efficiency, ensure safer working conditions and reduce the environmental impact of coal transportation

Integrated Infrastructure Development: Foster multi-modal connectivity through the PM Gati Shakti initiative, ensuring coordinated efforts across various ministries for seamless coal evacuation.

Sustainability and Environmental Considerations: The Ministry will focus on minimizing the environmental impact of coal evacuation, adopting cleaner technologies and practices that align with India's climate goals.

Expected Outcomes

The Ministry of Coal is dedicated to transforming India's coal sector through strategic planning and execution. By fast-tracking infrastructure development and fostering collaboration among stakeholders, the Ministry aims to position India as a leader in sustainable coal production and logistics, paving the way for a prosperous and developed nation by 2047.

Ministry of Coal Unveils Ambitious Plan to Boost Coal Production Through Global Mining Operators

The Ministry of Coal has embarked on a transformative initiative to revolutionize coal mining by engaging Mining Developers cum Operators (MDOs) for major coal mine projects under Coal India Limited (CIL) to significantly enhance coal production, reduce reliance on imported coal, and introduce cutting-edge technology into the mining sector.

The primary goal of engaging Mining Developers cum Operators (MDOs) is to significantly increase coal production by streamlining operations, enhancing productivity, and reducing mining costs. These MDOs are tasked with excavating, extracting, and delivering coal to Coal India Limited (CIL) according to approved mining plans, thereby boosting domestic coal output. By partnering with MDOs known for their advanced technological capabilities, CIL aims to modernize mining practices and improve operational efficiency.

Initially, CIL identified 15 coal mine projects with a combined capacity of ~168 MT for MDO implementation. This number has now expanded to 28 projects (18 opencast and 10 underground mines) with a total capacity of ~257 MT. As of today, 18 mines have been awarded to leading private parties, marking a significant milestone in this ambitious endeavour. The engagement of these MDOs promises to make substantial contributions to coal production, ensuring both enhanced output and operational excellence.

These reputed operators, selected through open global tenders, will oversee the entire mining process, from excavation and extraction to the delivery of coal, in line with the agreement. Their involvement is anticipated to inject advanced technology and unparalleled operational efficiency into the system, driving remarkable improvements in production capabilities.

In addition to boosting production, the MDOs will manage crucial aspects such as Rehabilitation and Resettlement (R&R) issues, land acquisitions, and environmental clearances. They will also coordinate with State and Central Pollution Control Boards to guarantee rigorous adherence to environmental standards. Each contract with the MDOs will span 25 years or the life of the mine, whichever is shorter, ensuring long-term stability and consistent advancements in mining operations.

The Ministry of Coal's strategy to engage MDOs represents a significant step towards modernizing India's coal mining sector. By leveraging the expertise of reputable MDOs, CIL aims to enhance coal production capabilities, improve operational efficiencies, and reduce reliance on coal imports, ultimately contributing to India's energy security and economic growth.

Govt. approves 20 pc premium for gas from new wells for ONGC

The government has approved a 20 per cent premium over the regulated or APM price for any natural gas that ONGC will produce from new wells, the company said. Currently, two pricing regimes govern the majority of the domestic production of natural gas, which is used to generate electricity, produce fertilizer, turn into CNG for running automobiles and piped to households for cooking.

Gas produced from legacy or fields given to state-owned Oil and Natural Gas Corporation (ONGC) and Oil India Ltd. (OIL), on nomination basis, is priced at 10 per cent of the prevailing price of crude oil that India imports.

This price, subject to a cap price of USD 6.5 per million British thermal units, is called regulated or APM price. So, at the current Indian basket price of USD 77 per barrel, the APM price for gas produced from

ONGC's Mumbai High and Bassein fields in the western offshore should come to USD 7.7 per mmBtu, but it is paid the cap price of USD 6.5.

Gas produced from difficult fields, such as those in the deep sea, is governed by a different formula and paid a higher rate because of the higher cost involved in its production. That price for six months starting April 1 is USD 9.87 per mmBtu.

When these formulas were adopted last year, it was decided that gas produced from new wells, even in legacy fields, would be paid a premium of 20 per cent over the APM price. Now, that has been notified.

"As per guidelines for domestic gas pricing, domestic natural gas price (APM price) was fixed at 10 per cent of the Indian crude basket price as announced by Petroleum Planning and Analysis (PPAC) on a monthly basis. It was provided in the guidelines that for the gas produced from new wells or well intervention in the nomination fields of ONGC/Oil India Limited, there would be a premium of 20 per cent over APM prices -- a total of 12 per cent of Indian crude basket price for new gas.

"The modalities for the same had to be worked out by the Director General of Hydrocarbon (DGH) for approval of the Ministry of Petroleum and Natural Gas (MOPNG)," ONGC said in a statement.

The ministry, it said, has now notified the allocation of gas produced from new wells or well interventions from nominated fields of ONGC/OIL at a 20 per cent premium over the APM price.

"The enhanced price for new gas will make the new gas development projects viable and help the ONGC to augment the production of natural gas from nominated fields in challenging areas that require higher amounts of capital and technology.

"This will enhance the investment capacity in the company to take up development projects, which are otherwise capital intensive and involve a higher degree of risks requiring commensurate prices," it said.

ONGC Board has recently approved the Daman Upside Development project in its nominated field of Mumbai High for Rs 7,800 crore for increasing domestic gas production, and the job has already been awarded for execution. The peak production envisaged from this project is around 5 million standard cubic metres per day.

The board has also approved another project integrated development of 4 contract areas under DSF-II at a project cost of Rs 6,000 crore with peak production of around 4 mmscmd of gas where the government has already allowed pricing and marketing freedom under the DSF Policy. The job has already been awarded for the execution of this project.

"The implementation of policy decision aligns with the national vision of achieving the target of share of natural gas in the Indian energy basket from 6 per cent to 15 per cent by 2030," ONGC added.

Research, analysis & compilation by:

Economic Policy & Planning Team - FIPI

Email: pankhuri@fipi.org.in

Note: The information contained herein is compiled from various sources considered reliable, but its accuracy and completeness are not warranted, nor are the opinions and analyses that are based on it. FIPI is not responsible for any errors or omissions, nor shall it be liable for any loss or damage incurred by reliance on information or any statement contained herein. While reasonable care has been exercised to ensure that no copyrights are infringed, in case there is any omission or oversight in this regard, we may please be informed immediately.