

POLICY & ECONOMIC REPORT OIL & GAS MARKET

December 2024

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Executive Summary

According to Organization for Economic Co-operation and Development (OECD), global GDP growth is projected to strengthen slightly to 3.3% in 2025 and remain stable at this level through 2026.

In OECD economies, GDP growth is projected to be modest relative to the pre-pandemic period, at 1.9% in both 2025 and 2026. In non-OECD economies, aggregate growth is also anticipated to remain broadly stable around its current pace with emerging Asia continuing to be the biggest contributor to global growth.

Inflation in the OECD is expected to ease further, from 5.4% in 2024 to 3.8% in 2025 and 3.0% in 2026, supported by the still restrictive stance of monetary policy in most countries. Headline inflation has already returned to central bank targets in nearly half of the advanced economies and close to 60% of emerging market economies. It has continued to ease in most countries through 2024, led by further falls in food, energy, and goods price inflation.

As far as India is concerned, according to data released by Ministry of Statistics & Programme Implementation, real GDP, or GDP at Constant Prices in Q2 of 2024-25 is estimated at ₹44.10 lakh crore, against ₹41.86 lakh crore in Q2 of 2023-24, showing a growth rate of 5.4%. Nominal GDP or GDP at Current Prices in Q2 of 2024-25 is estimated at ₹76.60 lakh crore, against ₹70.90 lakh crore in Q2 of 2023-24, showing a growth rate of 8.0%.

Year-on-year inflation rate based on All India Consumer Price Index (CPI) for the month of November, 2024 over November, 2023 is 5.48% (Provisional). Corresponding inflation rates for rural and urban are 5.95% and 4.83%, respectively.

Year-on-year inflation rate based on All India Consumer Food Price Index (CFPI) for the month of November, 2024 over November, 2023 is 9.04% (Provisional). Corresponding inflation rate for rural and urban are 9.10% and 8.74%, respectively.

The HSBC Flash India Composite Output Index – a seasonally adjusted index that measures the month onmonth change in the combined output of India's manufacturing and service sectors registered 60.7 at the end of the 2024 calendar year. Rising from a final reading of 58.6 in November, the latest reading highlighted the strongest growth rate for four months. There were quicker increases in output at both goods producers and service providers. Demand for Indian goods and services continued to improve in December, as seen by a sharp increase in new orders that was the most pronounced since July 2024.

On the external front, India's foreign exchange reserves fell by nearly \$2 billion to an almost six-month low of \$652.87 billion as of Dec. 13, according to data from the Reserve Bank of India (RBI). The central bank stated that the forex reserves increased by USD 6.4 billion during 2024-25 so far to USD 652.87 billion on December 13, 2024. In the week that ended December 13, the foreign exchange reserves declined by USD 1.988 billion to USD 652.87 billion. According to RBI, India's foreign exchange reserves (Forex) are sufficient to meet the more than 11 months of imports and about 96 per cent of external debt outstanding at end-June 2024.

Further, India's total exports (Merchandise and Services combined) for November 2024 is estimated at USD 67.79 Billion, registering a growth of 9.59 percent vis-à-vis November 2023. Total imports (Merchandise and Services combined) for November 2024 are estimated at USD 87.63 Billion, registering a growth of 27.47 percent vis-à-vis November 2023.

As far as oil and gas industry is concerned, the decision by OPEC+ to delay the unwinding of its additional voluntary production cuts by another three months and extend the ramp-up period by nine months through September 2026 has materially reduced the potential supply overhang that was set to emerge next year. Even so, persistent overproduction from some OPEC+ members, robust supply growth from non-OPEC+ countries and relatively modest global oil demand growth leaves the market looking comfortably supplied in 2025.

Hedge funds and other money managers adopted a less bearish outlook on crude oil compared to late October, although their positions showed mixed trends throughout the month, contributing to increased volatility in oil futures prices.

The premium of light sweet crude over medium sour crude showed mixed trends across regions but remained largely little changed m-o-m. In Europe, the sweet-sour differential widened due to weak demand for sour crude and lower high-sulphur fuel oil margins. In Asia, the spread was little changed. However, in the USGC, the spread narrowed as sour crude gained support from higher fuel oil margins while light sweet crude faced pressure due to high availability and lower margins for naphtha and gasoline.

Natural gas spot prices at the US Henry Hub benchmark averaged \$2.12 per million British thermal units (MMBtu) in November 2024. Henry Hub's natural gas prices experienced a consecutive monthly decline in November, falling by ~4.0%, m-o-m. Prices rose earlier in the month on the back of higher heating demand. However, the absence of an expected winter storm reduced heating demand, therefore putting downward pressure on prices. Reports of robust storage levels added more downward pressure on prices. According to data from the US Energy Information Administration (EIA), weekly average underground storage rose in November by 5.7%, m-o-m, and it is around 8% above the five-year average (2019–2023). Henry Hub prices were down by ~22.0%, y-o-y.

Economy in Focus

1. A snapshot of the global economy

Global economic growth

According to Organization for Economic Co-operation and Development (OECD), global GDP growth is projected to strengthen slightly to 3.3% in 2025 and remain stable at this level through 2026.

In OECD economies, GDP growth is projected to be modest relative to the pre-pandemic period, at 1.9% in both 2025 and 2026.

In non-OECD economies, aggregate growth is also anticipated to remain broadly stable around its current pace with emerging Asia continuing to be the biggest contributor to global growth.

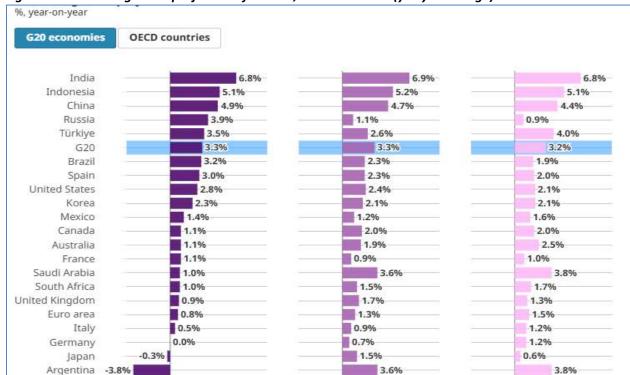


Figure 1: Real GDP growth projections for 2024, 2025 and 2026 (y-o-y % change)

Source- OECD (Color coding for the years given above)

Growth prospects vary significantly across regions.

- GDP growth in the United States is projected to be 2.4% in 2025, before slowing to 2.1% in 2026.
- In the euro area, the recovery in real household incomes, tight labor markets and reductions in
 policy interest rates continue to drive growth. Euro area GDP growth is projected at 1.3% in 2025
 and 1.5% in 2026.

- Growth in Japan is projected to expand by 1.5% in 2025 but then decline to 0.6% in 2026.
- China is expected to continue to slow, with GDP growth of 4.7% in 2025 and 4.4% in 2026.

Global Inflation

Inflation in the OECD is expected to ease further, from 5.4% in 2024 to 3.8% in 2025 and 3.0% in 2026, supported by the still restrictive stance of monetary policy in most countries.

Headline inflation has already returned to central bank targets in nearly half of the advanced economies and close to 60% of emerging market economies. It has continued to ease in most countries through 2024, led by further falls in food, energy, and goods price inflation.

However, services price inflation is still proving persistent, and was approximately 4% in the median OECD economy in September.

Looking ahead, OECD projects annual consumer price inflation in the G20 countries to decline further and, by the end of 2025 or early 2026, inflation is projected to be back to target in almost all remaining major economies.

Argentina Türkiye 17.2% Russia 5.2% G20 India 4.0% Mexico 3.0% South Africa 4.5% Brazil 3.6% Australia 2.6% Spain 2.0% United Kingdom 2.3% Japan 2.1% United States 2.0% 1.9% Germany France 1.8% 2.0% Canada 2.1% 2.0% Euro area Korea 2.0% Indonesia 2.4% Saudi Arabia 1.6% 2.0% Italy 1.2% 2.1% 2.0% China 0:493 1.195 1.4%

Figure 2: Headline inflation projections for 2024, 2025 and 2026 (%, year-on-year)

Source- OECD (Color coding for the years given above)

Global PMI

• The J.P.Morgan Global PMI Composite Output Index - produced by S&P Global - registered 52.4 in November, up from 52.3 in October. The latest reading signaled that the rate of global growth accelerated to a three-month high and is consistent with the global economy growth rate.

- The latest expansion continued to be driven by the service sector. Although manufacturing growth accelerated globally to a five-month high, its expansion was only very modest. Growth in the goods producing sector was underpinned by emerging market expansions.
- By region, the US saw the strongest expansion of the major developed markets for a seventh straight month, with growth reaching the fastest since April 2022 as a surge in services activity offset a fall in factory output. Growth also revived in Canada.
- In contrast, eurozone output fell at the sharpest rate for ten months as a deepening factory downturn spread to services. The UK meanwhile joined Australia and Japan in reporting largely stalled growth.
- India once again led growth among the four BRIC 'emerging' economies by a wide margin, as has been the case since July 2022, but growth perked up to a five-month high in mainland China, fueled by government stimulus and rising export shipments.

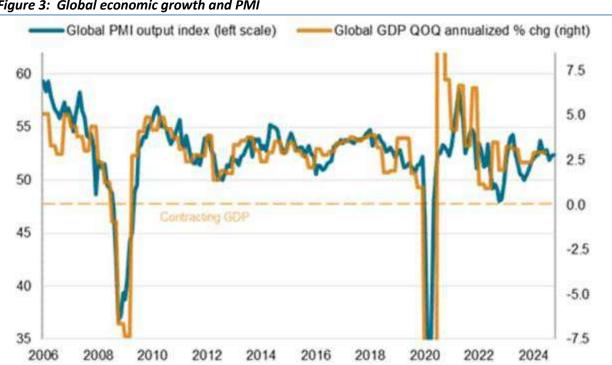


Figure 3: Global economic growth and PMI

Source- S&P Global

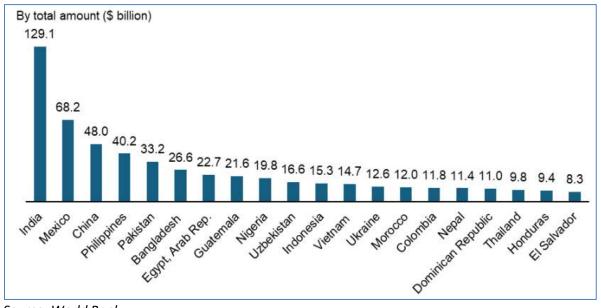
2. In 2024, remittance flows to low- and middle-income countries are expected to reach \$685 billion, larger than FDI and ODA combined

According to World Bank, officially recorded remittances to low- and middle-income countries (LMICs) are expected to reach \$685 billion in 2024. The growth rate of remittances in 2024 is estimated to be 5.8 percent, significantly higher than 1.2 percent registered in 2023.

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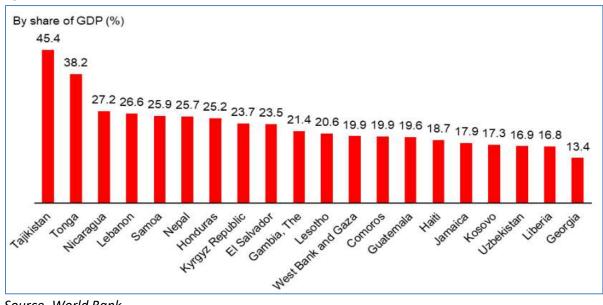
- The top five recipient countries for remittances in 2024 are India, with an estimated inflow of \$129 billion, followed by Mexico (\$68 billion), China (\$48 billion), the Philippines (\$40 billion), and Pakistan (\$33 billion).
- In smaller economies, remittance inflows represent very large shares of gross domestic product (GDP), highlighting the importance of remittances for funding the current account and fiscal shortfalls. Topping the list is Tajikistan (45 percent of GDP), followed by Tonga (38 percent), Nicaragua (27 percent), Lebanon (27 percent), and Samoa (26 percent).

Figure 4: Top Recipients of Remittances among Low- and Middle-Income Countries in volume, 2024



Source- World Bank

Figure 5: Top Recipients of Remittances among Low- and Middle-Income Countries in % of GDP, 2024



Source- World Bank

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- The recovery of the job markets in the high-income countries of the Organization for Economic Co-operation and Development (OECD), following the onset of the COVID-19 pandemic, has been the key driver of remittances. This is especially true for the United States where the employment of foreign-born workers has recovered steadily and is 11 percent higher than the pre-pandemic level seen in February 2020.
- By region, remittance flows to South Asia are expected to register the highest increase in 2024, at 11.8 percent, driven mainly by continued strong flows to India, Pakistan, and Bangladesh.
 Remittance to the Middle East and Africa is estimated to have increased 5.4 percent, primarily due to rebounded flows to Egypt, compared with a 14.6 percent decline in 2023.
- In other regions, remittance growth to Latin America and the Caribbean is projected to slow to 5.5 percent in 2024, from 7.5 percent a year ago. Remittances to Mexico is expected to reach about \$68 billion in 2024, an increase of 3 percent. Mexico receives the most remittances in the region by far and is the world's second-largest recipient of remittances. Guatemala is the second largest recipient of remittances in the LAC region.

3. World Bank announces record \$100bn support for world's poorest countries

The World Bank has announced that it has raised \$24 bn to provide loans and grants for some of the world's poorest nations, which it can leverage to generate a record \$100 bn in total spending power.

Donor countries committed \$23.7 bn to replenish the bank's concessional lending arm, known as the International Development Association (IDA), marking a slight increase from the roughly \$23.5 bn pledged during the last fundraising round three years ago.

The bank can use this money to borrow on financial markets, allowing it to leverage the amount raised by around four times, unlocking about \$100bn in new loans and grants, up from \$93bn in 2021. This funding will be deployed to support the 78 countries. It will be utilized in resources to invest in health, education, infrastructure, and climate resilience as well as to help stabilize economies and create jobs.

IDA has become the single largest source of concessional, or below-market, climate finance, and about two-thirds of all IDA funding over the past decade has gone to support countries in Africa, according to the World Bank, an international development organization owned by 187 countries.

IDA replenishment is a crucial part of the bank's operations, and happens once every three years, with much of the funding coming from the United States, Japan and several European countries including the United Kingdom, Germany, and France.

4. Eradicating extreme poverty is decades out of reach- World Bank

According to World Bank, about 700 million people—or 8.5 percent of the global population—live in extreme poverty on less than \$2.15 a day. Around 3.5 billion people live on less than \$6.85 a day, the poverty line more relevant for middle-income countries, which are home to three-quarters of the world's population. Without drastic action, it could take decades to eradicate extreme poverty and more than a century to eliminate poverty as it is defined for nearly half of the world.

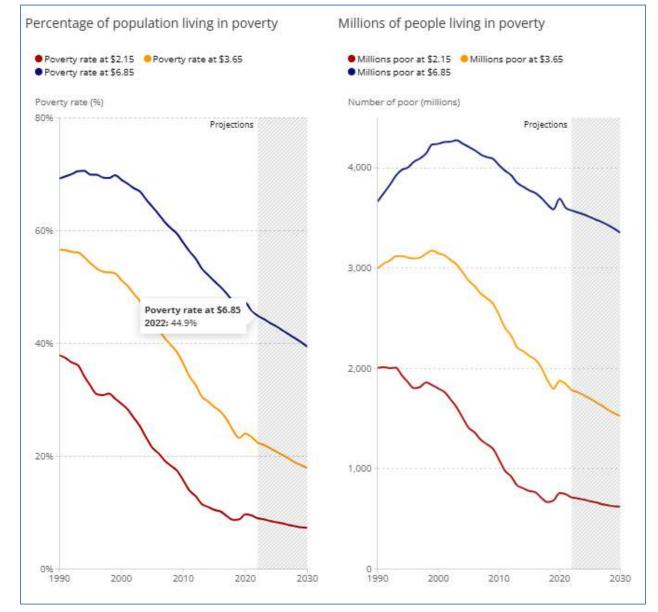


Figure 6: % of population in poverty & number in millions

Source- World Bank

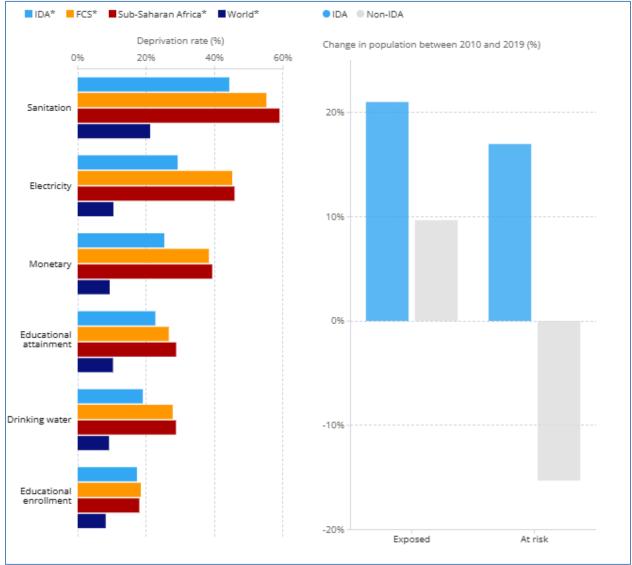
Multidimensional poverty concentrated in lowest-income countries

Poverty goes beyond a lack of income. It can also include insufficient access to education, health, electricity, or basic services such as safe drinking water or sanitation. As of 2024, over one-third of people in countries eligible for support from the World Bank's International Development Association (IDA) and more than half of those in Sub-Saharan Africa are experiencing multidimensional poverty, highlighting how persistent development challenges remain.

In December 2024, the global community came together to reaffirm their commitment to IDA, which offers concessional lending to 78 low-income countries. The 21st replenishment of IDA raised \$23.7 billion

to boost development for these countries for 2025-28. This will generate \$100 billion in affordable financing to help countries spur job growth, deliver better quality health care, improve education, expand electricity access, enhance food security and nutrition.

Figure 7: Rates of multidimensional poverty and increased risks from extreme weather in IDA countries compared with other countries



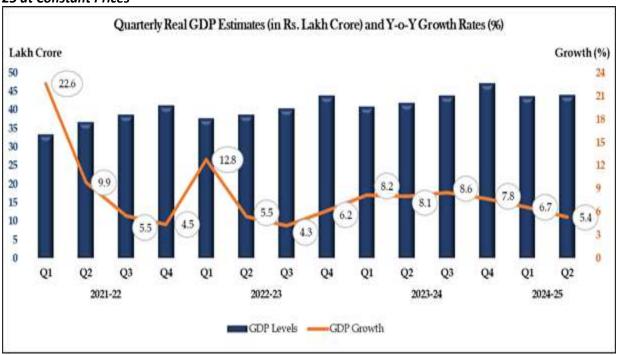
Source- World Bank

5. Indian Economy

India's economic growth

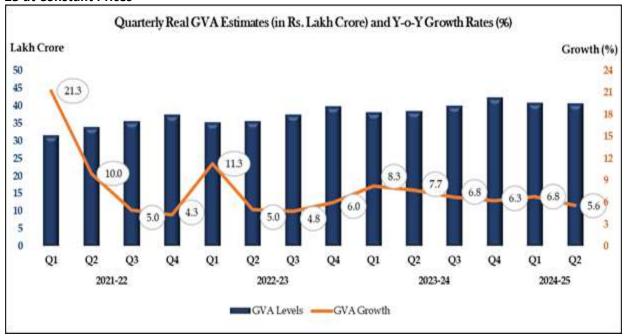
- According to data released by Ministry of Statistics & Programme Implementation, real GDP, or GDP at Constant Prices in Q2 of 2024-25 is estimated at ₹44.10 lakh crore, against ₹41.86 lakh crore in Q2 of 2023-24, showing a growth rate of 5.4%.
- Nominal GDP or GDP at Current Prices in Q2 of 2024-25 is estimated at ₹76.60 lakh crore, against ₹70.90 lakh crore in Q2 of 2023-24, showing a growth rate of 8.0%.
- Real GVA in Q2 of 2024-25 is estimated at ₹40.58 lakh crore, against ₹38.42 lakh crore in Q2 of 2023-24, showing a growth rate of 5.6%.
- Nominal GVA in Q2 of 2024-25 is estimated at ₹69.54 lakh crore, against ₹64.35 lakh crore in Q2 of 2023-24, showing a growth rate of 8.1%.

Figure 8: Quarterly GDP Estimates along with Y-o-Y Growth Rates from Q1 FY 2021-22 to Q2 FY 2024-25 at Constant Prices



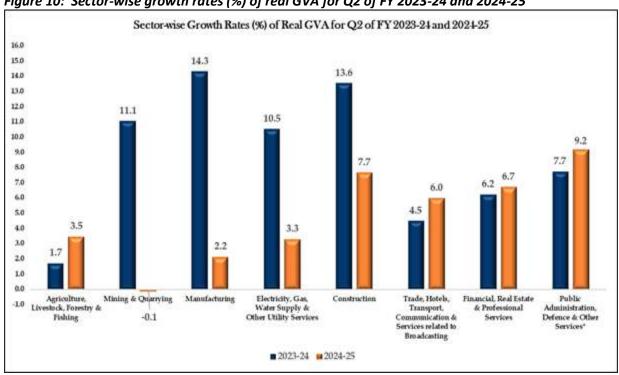
Source- MoSPI

Figure 9: Quarterly GVA Estimates along with Y-o-Y Growth Rates from Q1 FY 2021-22 to Q2 FY 2024-25 at Constant Prices



Source- MoSPI

Figure 10: Sector-wise growth rates (%) of real GVA for Q2 of FY 2023-24 and 2024-25



Source- MoSPI

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Inflation in India

Year-on-year inflation rate based on All India Consumer Price Index (CPI) for the month of November, 2024 over November, 2023 is 5.48% (Provisional). Corresponding inflation rates for rural and urban are 5.95% and 4.83%, respectively.

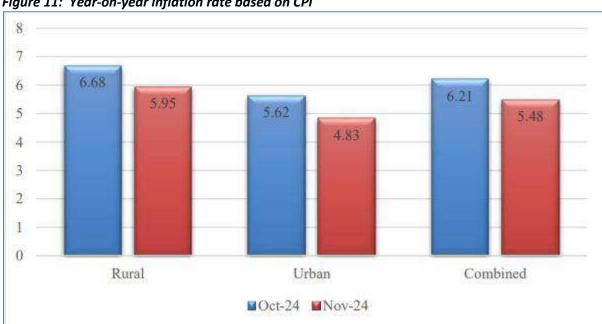


Figure 11: Year-on-year inflation rate based on CPI

Source- MoSPI

- Year-on-year inflation rate based on All India Consumer Food Price Index (CFPI) for the month of November, 2024 over November, 2023 is 9.04% (Provisional). Corresponding inflation rate for rural and urban are 9.10% and 8.74%, respectively.
- It can be observed that after December 2023, inflation rate for both CPI(General) and CFPI were declining, reaching their lowest point in July 2024. However, from August, 2024 to October. 2024, an increasing trend was observed. Thereafter, in November, 2024 inflation is again declined. The decline in inflation in November 2024 is mainly due to decline in inflation in "food & beverages" group.
- Year-on-year Housing inflation rate for the month of November, 2024 is 2.87%. Corresponding inflation rate for the month of October, 2024 was 2.81%. The housing index is compiled for urban sector only.

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12.00 9.53 9.36 8.69 8.66 10.87 8.70 8.30 10.00 8.52 8.00 6.00 4.00 5.55 5.69 4.85 4.83 5.08 5.09 5.10 2.00 3.54 0.00 CPI (General)

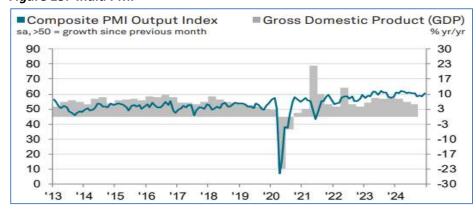
Figure 12: All India Inflation Rates for CPI(General) and CFPI

Source- MoSPI

Manufacturing PMI - India

- The HSBC Flash India Composite Output Index a seasonally adjusted index that measures the month
 on-month change in the combined output of India's manufacturing and service sectors registered 60.7
 at the end of the 2024 calendar year. Rising from a final reading of 58.6 in November, the latest
 reading highlighted the strongest growth rate for four months. There were quicker increases in output
 at both goods producers and service providers.
- The HSBC Flash India Manufacturing PMI a single-figure snapshot of factory business conditions
 calculated from measures of new orders, output, employment, supplier delivery times and stocks of
 purchases recovered from November's two-month low of 56.5 to 57.4 in December. This pointed to
 an improvement in manufacturing sector conditions that was substantial and stronger than seen on
 average across the series history.
- Demand for Indian goods and services continued to improve in December, as seen by a sharp increase in new orders that was the most pronounced since July 2024.

Figure 13: India PMI



Source- S&P Global

India's external position

India's forex reserves

- India's foreign exchange reserves fell by nearly \$2 billion to an almost six-month low of \$652.87 billion as of Dec. 13, according to data from the Reserve Bank of India (RBI).
- The central bank stated that the forex reserves increased by USD 6.4 billion during 2024-25 so far to USD 652.87 billion on December 13, 2024.
- In the week that ended December 13, the foreign exchange reserves declined by USD 1.988 billion to USD 652.87 billion.
- The latest RBI data showed that India's foreign currency assets (FCA), the largest component of forex reserves, stood at USD 562.576 billion.
- According to RBI, India's foreign exchange reserves (Forex) are sufficient to meet the more than 11 months of imports and about 96 per cent of external debt outstanding at end-June 2024.
- The reserves have been declining likely due to RBI intervention aimed at aggressively preventing a sharp depreciation of the Rupee. A substantial foreign exchange reserve buffer also helps shield domestic economic activity from global shocks.

India's foreign trade position

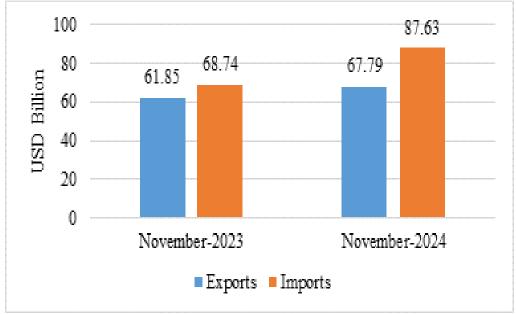
- India's total exports (Merchandise and Services combined) for November 2024 is estimated at USD 67.79 Billion, registering a growth of 9.59 percent vis-à-vis November 2023.
- Total imports (Merchandise and Services combined) for November 2024 are estimated at USD 87.63 Billion, registering a growth of 27.47 percent vis-à-vis November 2023.

Table 1: Trade during October 2024

		November 2024 (USD Billion)	November 2023 (USD Billion)
Merchandise	Exports	32.11	33.75
	Imports	69.95	55.06
Services	Exports	35.67	28.11
	Imports	17.68	13.68
Overall Trade (Merchandise + Services)	Exports	67.79	61.85
(INICICIIAIIGISE + SEIVICES)	Imports	87.63	68.74
	Trade Balance	-19.84	-6.89

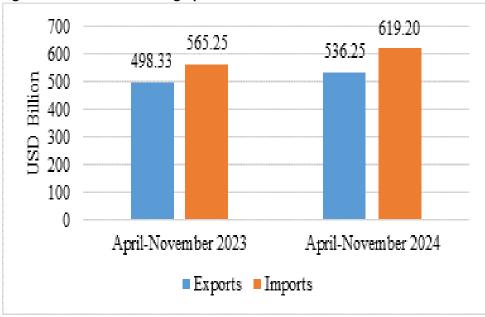
Source- Ministry of Commerce & Industry

Figure 14: Overall Trade during November 2024



Source- RBI

Figure 15: Total Trade during April- November 2024



Source- RBI

- India's total exports during April- November 2024 is estimated at USD 536.25 Billion registering a growth of 7.61 percent.
- Total imports during April- November 2024 is estimated at USD 619.20 Billion registering a growth of 9.55 percent.

- Exports of Rice (95.18%), Electronic Goods (54.72%), Tobacco (50.48%), Jute Mfg. Including Floor Covering (36.13%), Cashew (23.61%), Meat, Dairy & Poultry Products (21.38%), Marine Products (17.82%), Coffee (16.31%), Tea (15%), Engineering Goods (13.75%), Plastic & Linoleum (10.91%), Rmg Of All Textiles (9.81%), Other Cereals (7.4%), Spices (6.1%), Man-Made Yarn/Fabs./Made-Ups Etc. (4.88%), Cereal Preparations & Miscellaneous Processed Items (2.71%), Carpet (2.4%), Oil Seeds (2.19%), Cotton Yarn/Fabs./Made-Ups, Handloom Products Etc. (2.02%), Drugs & Pharmaceuticals (1.12%) and Leather & Leather Products (0.73%) record positive growth during November 2024 over the corresponding month of last year.
- Imports of Leather & Leather Products (-41.59%), Coal, Coke & Briquettes, etc. (-29.31%), Iron & Steel (-28.63%), Dyeing/Tanning/Coloring Mtrls. (-5.26%), Transport Equipment (-5.23%), Pearls, Precious & Semi-Precious Stones (-3.27%), Metalliferous Ores & Other Minerals (-0.86%) record negative growth during November 2024 over the corresponding month of last year.
- Services exports is estimated to grow by 14.48 percent during April-November 2024 over April-November 2023.
- Top 5 export destinations, in terms of change in value, exhibiting growth in November 2024 vis a vis November 2023 are U Arab Emts (11.38%), Australia (64.38%), Italy (37.71%), Singapore (22.88%) and Malaysia (27.31%).
- Top 5 export destinations, in terms of change in value, exhibiting growth in April-November 2024 vis a vis April-November 2023 are U Arab Emts (15.25%), Netherland (23.04%), U S A (5.27%), Singapore (20.7%) and U K (15.21%).
- Top 5 import sources, in terms of change in value, exhibiting growth in November 2024 vis a vis November 2023 are Switzerland (360.02%), U Arab Emts (109.57%), South Africa (217.33%), Australia (71.91%) and Saudi Arab (35.64%).
- Top 5 import sources, in terms of change in value, exhibiting growth in April-November 2024 vis a vis April-November 2023 are U Arab Emts (60.84%), China P Rp (9.81%), Russia (9.22%), Switzerland (21.83%) and Taiwan (42.82%).

6. India's FDI Journey Hits \$1 Trillion

India has achieved a remarkable milestone in its economic journey, with gross foreign direct investment (FDI) inflows reaching an impressive \$1 trillion since April 2000. This landmark achievement was bolstered by a nearly 26% rise in FDI to \$42.1 billion during the first half of the current fiscal year.

Such growth reflects India's growing appeal as a global investment destination, driven by a proactive policy framework, a dynamic business environment, and increasing international competitiveness.

FDI has played a transformative role in India's development by providing substantial non-debt financial resources, fostering technology transfers, and creating employment opportunities. Initiatives like "Make

in India," liberalized sectoral policies, and the Goods and Services Tax (GST) have enhanced investor confidence, while competitive labor costs and strategic incentives continue to attract multinational corporations.

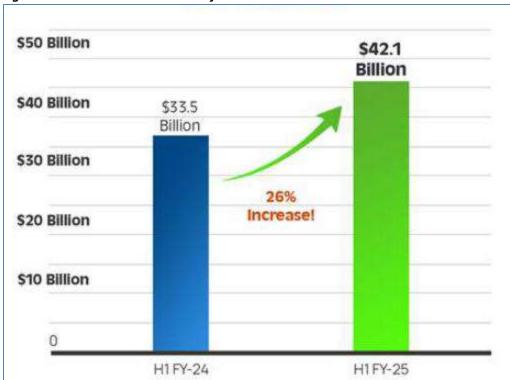


Figure 16: Growth in India's FDI inflows

Source- Department for Promotion of Industry & Internal trade (DPIT)

Over the last decade (April 2014 to September 2024), total FDI inflows amounted to \$709.84 billion, accounting for 68.69% of the overall FDI inflow in the past 24 years. This robust inflow of investments underscores India's pivotal role in shaping the global economic landscape.

India's remarkable achievement in attracting foreign direct investment (FDI) can be attributed to a range of contributing factors:

- Competitiveness and Innovation: India's ranking in the World Competitive Index 2024 jumped three positions to 40th, from 43rd in 2021. Additionally, India was named as the 48th most innovative country among the top 50 nations, securing the 40th position out of 132 economies in the Global Innovation Index 2023, a significant improvement from its 81st position in 2015. These rankings highlight the country's progress in enhancing its innovation ecosystem and competitive edge.
- Global Investment Standing: India was the third largest recipient of greenfield projects with 1,008 greenfield project announcements, as per the World Investment Report 2023. The number of international project finance deals in India also increased by 64%, making it the recipient of the second largest number of international project finance deals.

- Improved Business Environment: India made remarkable progress in improving its business environment, climbing from 142nd in 2014 to 63rd in the World Bank's Doing Business Report (DBR) 2020, published in October 2019 before its discontinuation. This 79-rank jump over five years reflects the government's sustained efforts to simplify regulations, reduce bureaucratic hurdles, and create a more business-friendly environment, significantly boosting investor confidence.
- Policy Reforms: To promote FDI, the government has put in place an investor friendly policy, wherein most sectors, except certain strategically important sectors, are open for 100% FDI under the automatic route. Further, to simplify tax compliance for startups and foreign investors, the Income Tax Act, 1961 has been amended in 2024 to abolish angel tax and to reduce income tax rate chargeable on income of a foreign company.

Thus, India's remarkable progress in attracting foreign direct investment is evident from the \$42.1 billion inflows during the first half of the current fiscal year and the cumulative \$1 trillion since April 2000. Factors like improved global competitiveness, a dynamic innovation ecosystem, and a business-friendly environment have been key drivers. Initiatives such as "Make in India," liberalization of sectoral policies, and recent policy changes, including greater FDI in the space sector, reflect the country's proactive approach

7. India, ADB sign \$500 mn loan to support green infrastructure projects

India and the Asian Development Bank (ADB) signed a \$500 million loan to support green and sustainable infrastructure projects aligned with the country's climate commitments.

The agreement was inked on December 20, 2024 and the ADB loan, with a sovereign guarantee, will be extended to the India Infrastructure Finance Company Limited (IIFCL)

To meet its net-zero commitments, the country needs immense private capital investment that will require innovative financing platforms and risk-mitigation instruments to address inherent sector risks and market asymmetries.

This policy-based loan aims to expand India's manufacturing sector and improve the resilience of its supply chains. The signatories to the loan agreement were Department of Economic Affairs (DEA), Ministry of Finance; Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry; and the ADB.

The Support for Marginalized Individuals for Livelihood and Enterprise (SMILE) program is a programmatic policy-based loan (PBL) to support the government in undertaking wide-ranging reforms in the logistics sector in India. The programmatic approach comprises two subprograms, which aim to expand India's manufacturing sector and improve the resilience of its supply chains.

The program establishes and operationalizes a comprehensive policy framework to enhance logistics efficiency through strengthening the institutional bases for multimodal logistics infrastructure development at the national, state, and city levels.

The ministry also noted that it will also help in standardizing warehousing and other logistics assets to strengthen supply chains and incentivize greater private sector investment, improving efficiencies in external trade logistics and adopting smart systems for efficient and low emission logistics.

The development of India's logistics sector is vital to enhancing the competitiveness of its manufacturing sector. Through strategic policy reforms, infrastructure development, and digital integration, ongoing reforms are poised to transform the logistics landscape.

8. India to drive global oil demand growth till 2035: IEA Report

India is set to lead global oil demand growth until 2035, according to a recent report by the International Energy Agency (IEA).

The report highlighted that India will add nearly 2 million barrels per day (mb/d) to global oil demand during this period, making it the primary growth driver of the entire industry. This shift comes as China, which has historically been the engine of oil market growth, transitions towards electricity-driven energy usage. The report noted that China's oil consumption for road transport is projected to decline due to the rise of electric vehicles. However, this decline is partially offset by increased oil usage in petrochemical production.

Globally, the growth in oil demand is slowing down under the Stated Policies Scenario (STEPS), which is causing significant challenges for major oil- producing nations. These resource owners may face an oversupply situation as spare crude oil production capacity is expected to rise to 8 mb/d by 2030.

Additionally, a significant transformation is underway in the transport sector. The report stated that over the past decade, road transport has driven oil demand growth by 4.2 mb/d, contributing to nearly half of global oil demand growth.

However, this trend is reversing, with oil demand for passenger cars expected to decline by 1 mb/d by 2030. This change is a major factor behind the anticipated peak in global oil demand by the end of this decade under the STEPS.

9. India to surpass China as the top source of global oil consumption growth in 2024 and 2025

India has emerged as the leading source of growth in global oil consumption in 2024 and 2025, overtaking China this year, according to December *Short-Term Energy Outlook* (STEO). China's oil consumption grew by more than India's in almost every year from 1998 through 2023, with China's oil consumption regularly growing more than any other country during those years.

Over 2024 and 2025, India accounts for 25% of total oil consumption growth globally. It is expected that there will be an increase of 0.9 million barrels per day (b/d) in global consumption of liquid fuels in 2024 and global oil consumption will also increase by 1.3 million b/d.

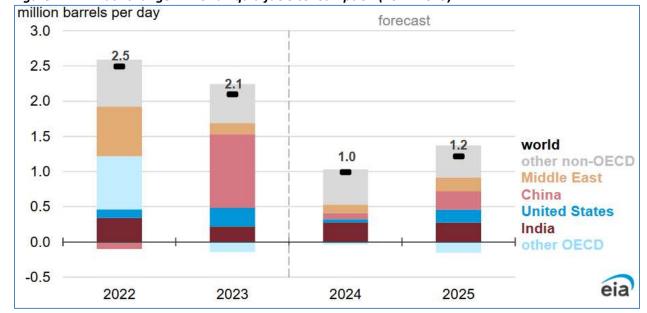


Figure 17: Annual change in world liquid fuels consumption (2022-2025)

Source- US Energy Information Administration (EIA)

Driven by rising demand for transportation fuels and fuels for home cooking, consumption of liquid fuels in India is forecast to increase by 220,000 b/d in 2024 and by 330,000 b/d in 2025.

It is forecasted that China's liquid fuels consumption will grow by 90,000 b/d in 2024 before increasing by 250,000 b/d in 2025. In China, rapidly expanding electric vehicle ownership, rising use of liquefied natural gas for trucking goods, a declining population, and decelerating economic growth have limited consumption growth for transportation fuels. Most of the growth in China is the result of increasing oil use for manufacturing petrochemicals.

Although India's growth in percentage and volume terms exceeds China's growth in the forecast, China still consumes significantly more oil. Total consumption of liquid fuels in India was 5.3 million b/d in 2023, while China consumed more than triple that amount at 16.4 million b/d in 2023.

Lessons from Economics

Global Competitive Report/Index

The Global Competitiveness Index (GCI), a highly comprehensive index, which captures the microeconomic and macroeconomic foundations of national competitiveness. Competitiveness as the set of institutions, policies, and factors that determine the level of productivity of a country.

Competitiveness and economic growth are intimately intertwined, mutually reinforcing each other; therefore, increased competitiveness leads to increased economic growth, which in turn can increase competitiveness.

Competitiveness refers to the capacity of a country or company to generate goods and services that can compete on the global market, whereas economic growth refers to the increase in the quantity of goods and services produced over time.

Advantages of Global Competitiveness

- Competition between enterprises will, on the one hand, drive firms to produce more and betterquality items, which will benefit consumer economic agents, while on the other hand, it will generate larger profits, firms will grow their market share, and be able to attract more clients.
- The rise in turnover at the microeconomic level and the gross domestic product at the
 macroeconomic level will, over time, lead to an increase in investment, which will generate an
 increase in aggregate supply, resulting in a rise in employment and, consequently, a rise in the
 standard of living and social and economic welfare.
- When a nation is competitive, it is more likely to attract foreign investment, which can provide
 enterprises with capital, technology, and knowledge to enhance their competitiveness and
 productivity. This can result in increasing exports, which can contribute to economic expansion.
 To increase economic growth, it would be beneficial to focus on competitiveness-enhancing
 measures, such as investments in education, infrastructure, innovation, and trade liberalization.

Since 2004, the report published by the World Economic Forum, ranks the world's nations according to the *Global Competitiveness Index*, based on the latest theoretical and empirical research. It is made up of over 110 variables, of which two thirds come from the Executive Opinion Survey, and one third comes from publicly available sources such as the United Nations. The variables are organized into twelve pillars, with each pillar representing an area considered as an important determinant of competitiveness.

The report has twelve pillars of competitiveness. These are:

- 1. Institutions
- 2. Appropriate infrastructure
- 3. Stable macroeconomic framework

- 4. Good health and primary education
- 5. Higher education and training
- 6. Efficient goods markets
- 7. Efficient labour markets
- 8. Developed financial markets
- 9. Ability to harness existing technology
- 10. Market size—both domestic and international
- 11. Production of new and different goods using the most sophisticated production processes
- 12. Innovation

The demands of citizens, international collaboration in establishing new key performance indicators (KPIs), and the imperative to reduce emissions are compelling the global economy to embrace a fresh set of KPIs.

Further, what creates productivity in Sweden is necessarily different from what drives it in Ghana. Thus, the GCI separates countries into three specific stages: factor-driven, efficiency-driven, and innovation-driven, each implying a growing degree of complexity in the operation of the economy.

Oil Market

Crude oil price - Monthly Review

The decision by OPEC+ to delay the unwinding of its additional voluntary production cuts by another three months and extend the ramp-up period by nine months through September 2026 has materially reduced the potential supply overhang that was set to emerge next year. Even so, persistent overproduction from some OPEC+ members, robust supply growth from non-OPEC+ countries and relatively modest global oil demand growth leaves the market looking comfortably supplied in 2025.

OPEC+ crude oil production may still rise next year if Libya, South Sudan and Sudan can sustain production and as Kazakhstan's 260 kb/d Tengiz expansion comes online. Globally, the bulk of supply growth will continue to be dominated by non-OPEC+ countries, with the US, Brazil, Canada, Guyana and Argentina adding more than 1.1 mb/d of crude oil and NGL output between them. The start-up of Saudi Aramco's Jafurah gas project next year will also boost Saudi Arabia's NGL supply.

Hedge funds and other money managers adopted a less bearish outlook on crude oil compared to late October, although their positions showed mixed trends throughout the month, contributing to increased volatility in oil futures prices.

The forward curve of all major benchmarks continued to flatten in November for the fourth consecutive month. This was driven by trader's sentiments amid prospects of de-escalating geopolitical tensions in the Middle East and ongoing concerns about demand in key consuming countries. Seasonal factors also played a role, with refinery maintenance in October and November dampening spot market activity and weighing on front-month prices. However, the oil futures price structure remained in backwardation, signalling supportive physical crude market fundamentals and a relatively positive short-term global supply-demand outlook.

The premium of light sweet crude over medium sour crude showed mixed trends across regions but remained largely little changed m-o-m. In Europe, the sweet-sour differential widened due to weak demand for sour crude and lower high-sulphur fuel oil margins. In Asia, the spread was little changed. However, in the USGC, the spread narrowed as sour crude gained support from higher fuel oil margins while light sweet crude faced pressure due to high availability and lower margins for naphtha and gasoline.

Crude spot prices averaged lower in November, reversing part of the previous month's gains, mainly driven by selling in the oil futures market and changes in the market's perception of short-term oil market outlooks. Spot prices were also under pressure due to a well-supplied spot market amid slow crude demand for December loading cargoes, particularly in the Atlantic Basin, as refiners tend to reduce their crude stocks toward the end of the year due to tax considerations.

In November, the ORB value declined by \$1.47, or 2.0%, m-o-m, to stand at \$72.98/b, as most ORB component-related crude benchmarks fell. Lower crude differentials and mixed official selling prices (OSPs) also contributed to lowering the ORB value. Compared with the previous year, y-t-d, the ORB was lower by \$2.79, or 3.4%, from \$83.28/b in 2023 for an average of \$80.49/b so far this year.

Brent crude ranged an average to \$72.98 a barrel and WTI ranged to \$69.61 per barrel in the month of December 2024.

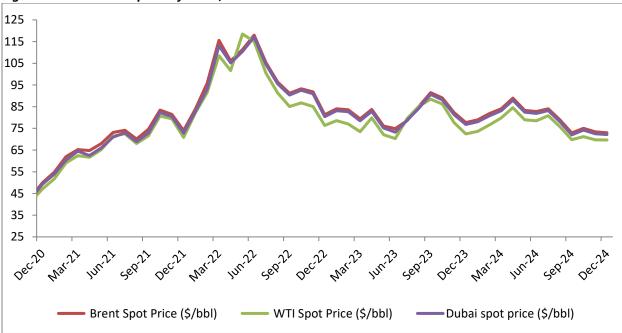


Figure 18: Benchmark price of Brent, WTI and Dubai crude

Source- World Bank

- Brent crude price averaged \$72.98 per bbl in December 2024, down by 0.6% on a month on month (MoM) and by 6.0% on year on year (YoY) basis, respectively.
- WTI crude price averaged \$69.61 per bbl in December 2024, down by 0.1% on a month on month (MoM) and by 3.9% on year on year (YoY) basis, respectively.
- Dubai crude price averaged \$72.12 per bbl in December 2024, down by 0.6% on a month on month (MoM) and by 6.1% on year on year (YoY) basis, respectively.

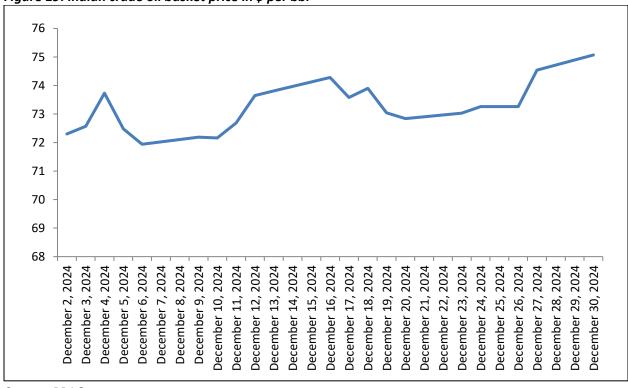
Table 2: Crude oil price in December, 2024

Crude oil	Price (\$/bbl)	MoM	YoY
		(%) change	(%) change
Brent	72.98	-0.6%	-6.0%
WTI	69.61	-0.1%	-3.9%
Dubai	72.12	-0.6%	-6.1%

Source- World Bank

Indian Basket Crude oil price

Figure 19: Indian crude oil basket price in \$ per bbl



Source- PPAC

• Indian crude basket price averaged \$73.21 per barrel in December 2024, up by 0.2% on Month on Month (M-o-M) and down by 5.4% on a year on year (Y-o-Y) basis, respectively.

Oil production situation

- Non-DoC liquids supply (i.e. liquids supply from countries not participating in the DoC) is expected to grow by 1.3 mb/d, y-o-y, in 2024, revised up slightly from last month's assessment. The main growth drivers are expected to be the US and Canada. For 2025, the non-DoC liquids supply growth forecast is expected to grow by 1.1 mb/d, y-o-y, unchanged from last month. Growth is anticipated to be mainly driven by the US, Brazil, Canada, and Norway.
- Natural gas liquids (NGLs) and non-conventional liquids from countries participating in the DoC are
 forecast to grow by about 0.1 mb/d, y-o-y, in 2024 to average 8.3 mb/d, followed by an increase of
 about 80 tb/d, y-o-y, in 2025 to average 8.4 mb/d. Crude oil production by the countries participating
 in the DoC increased by 0.32 mb/d in November compared with the previous month, averaging about
 40.67 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	26.67	26.91	27.58	27.83	27.86	27.55
of which US	20.97	21.02	21.81	21.92	21.79	21.64
Europe	3.66	3.66	3.59	3.54	3.65	3.61
Asia Pacific	0.45	0.46	0.43	0.43	0.46	0.44
Total OECD	30.77	31.03	31.60	31.80	31.97	31.60
China	4.52	4.62	4.63	4.52	4.51	4.57
India	0.79	0.80	0.79	0.77	0.79	0.79
Other Asia	1.61	1.62	1.62	1.60	1.59	1.61
Latin America	6.96	7.28	7.18	7.18	7.35	7.25
Middle East	2.02	2.00	2.00	2.01	2.01	2.00
Africa	2.22	2.24	2.26	2.36	2.37	2.31
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	18.60	19.03	18.95	18.91	19.10	19.00
Total Non-DoC production	49.37	50.06	50.55	50.71	51.07	50.60
Processing gains	2.47	2.52	2.52	2.52	2.52	2.52
Total Non-DoC liquids production	51.84	52.58	53.07	53.23	53.59	53.12

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

- From the above table, it can be inferred, that the total non-DoC liquids production is expected to reach 53.12 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 1.3 mb/d in 2024 to average 53.1 mb/d.

Oil demand situation

- The global oil demand growth forecast for 2024 is revised down by 210 tb/d from the previous month's assessment to 1.6 mb/d, year-on-year (y-o-y). This minor adjustment is mainly due to updated data for 1Q24, 2Q24 and 3Q24. In the OECD, oil demand is expected to grow by around 0.1 mb/d, while non-OECD demand is forecast to expand by close to 1.5 mb/d in 2024.
- Global oil demand growth for 2025 is also revised down by 90 tb/d from the previous month's assessment to 1.4 mb/d, y-o-y. OECD demand is expected to grow by 0.1 mb/d, y-o-y, in 2025, while demand in the non-OECD is forecast to expand by 1.3 mb/d.

Table 4: World Oil demand, mb/d

	2023	1Q24	2Q24	3Q24	4Q24	2024	Growth	%
Total OECD	45.65	44.80	45.56	46.41	46.26	45.76	0.11	0.25
~ of which US	20.36	19.92	20.47	20.66	20.85	20.48	0.12	0.57
Total Non-OECD	56.56	57.96	57.44	57.56	59.27	58.06	1.50	2.65
~ of which India#	5.34	5.66	5.61	5.30	5.65	5.55	0.21	3.93
~ of which China	16.36	16.66	16.60	16.78	17.10	16.79	0.43	2.63
Total world	102.21	102.76	102.99	103.96	105.53	103.82	1.61	1.58

Source- OPEC monthly report, December 2024

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

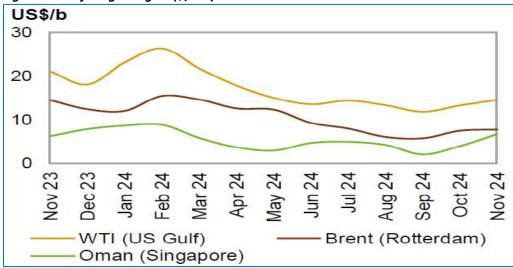
Global petroleum product prices

USGC refining margins continued to rise and reached a six-month high in November. On the USGC, stronger gasoil, jet/kerosene and fuel oil crack performance backed refining economics despite a m-o-m pick-up in refinery runs. On a weekly basis, gasoline showed gains as heightened domestic demand amid the Thanksgiving holiday season and reduced imports led to stock draws. Nonetheless, this short-lived weekly upside was outweighed by the winter season bearishness associated with lower consumption levels registered for most of November.

Refinery intake in the USGC was 300 tb/d higher, m-o-m, averaging 16.47 mb/d in November. USGC margins against WTI averaged \$14.48/b in November, up by \$1.28, m-o-m, but \$6.56 lower, y-o-y.

Refinery margins in Rotterdam against Brent increased to reach a four-month high despite having exhibited the lowest monthly gain compared to what was registered in the USGC vs. WTI and Singapore vs. Oman. Gasoil, low sulphur fuel oil and naphtha were the source of strength reflecting improving diesel demand amid higher heating demand and a contracting LSFO and jet/kerosene balance in the region. Although overall product inventories in ARA increased 812 tb, m-o-m, as of 28 November, fuel oil showed a 1.1 mb decline. The supply declines were attributed to lower residual fuel arrivals from the Middle East, and stronger kerosene requirements in Asia.

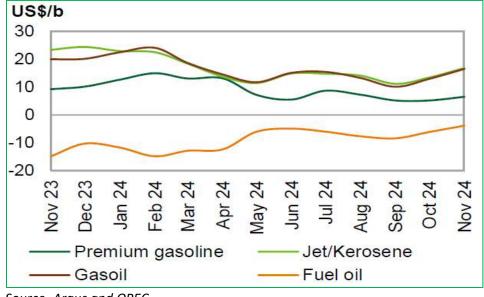
Figure 20: Refining Margins (\$/bbl)



Source- Argus and OPEC

The Southeast Asia gasoline 92 crack spread against Dubai rose to a three-month high and benefitted from the policy changes in China that led to stronger export interest ahead of the implementation of the export tax rebate cuts. This came against a backdrop of lower wholesale gasoline 92 prices, m-o-m, which were 63¢ lower in November, reflecting a decline in feedstock prices. Going forward, seasonality, soft East-West flow incentives and solid upside potential for gasoline refinery output are expected to outweigh the downside risk in post-tax cut rebate gasoline exports, placing Asian gasoline markets under pressure. Any potential strength to sustain Asian gasoline markets, for the time being, will have to emerge from within the region, assuming all other factors remain unchanged. The product's margin averaged \$6.30/b in November, up \$1.31, m-o-m, but down \$2.73, y-o-y.

Figure 21: Singapore crack Spreads vs. Dubai (\$/bbl)



Source- Argus and OPEC

The Singapore gasoil crack spread led in gains and reached the highest level seen since March 2024, even though middle distillate inventories in Singapore increased in November. A regionally tighter (compared to other products) gasoil balance stemming from the recent heavy maintenance season contracted further on the back of heightened export interest from Chinese refiners as they attempted to shift December deliveries to November aiming to avoid higher value-added tax. The Singapore gasoil crack spread against Dubai averaged \$16.38/b, up \$3.59, m-o-m, but down by \$3.50, y-o-y.

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

Singapore product prices	Price (\$/b)	MoM (%) change	YoY (%) change
Naphtha	69.92	-4.3%	0.5%
Premium gasoline (unleaded 95)	84.59	-1.5%	-13.7%
Regular gasoline (unleaded 92)	78.96	-0.8%	-14.5%
Jet/Kerosene	89.40	1.7%	-16.2%
Gasoil/Diesel (50 ppm)	89.12	1.6%	-16.0%
Fuel oil (180 cst 2.0% S)	88.94	2.0%	-13.7%
Fuel oil (380 cst 3.5% S)	68.75	0.5%	0.5%

Source- OPEC

Petroleum products consumption in India

Monthly Review:

- Overall consumption of all petroleum products in November 2024 with a volume of 20.43 MMT registered growth of 8.13% on volume of 18.89 MMT in November 2023.
- MS (Petrol) consumption during the month of November 2024 with a volume of 3.43 MMT recorded a growth of 9.56% on volume of 3.13 MMT in November 2023.
- HSD (Diesel) consumption during the month of November 2024 with a volume of 8.17 MMT recorded growth of 8.46% on volume of 7.53 MMT in the month of November 2023.
- LPG consumption during the month of November 2024 with a volume of 2.67 MMT registered growth of 7.55% over the volume of 2.49 MMT in the month of November 2023.
- ATF consumption during November 2024 with a volume of 0.748 MMT registered a growth of 8.45% over the volume of 0.690 MMT in November 2023.
- Bitumen consumption during November 2024 with a volume of 0.714 MMT registered growth of 5.13% over volume of 0.679 MMT in the month of November 2023.
- Kerosene consumption registered de-growth of 19.33% during the month of November 2024 as compared to November 2023.

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

		Monthly		Year till [Date
Consumption of Petroleum Products (P)	Consumption in '000 MT	MoM (%) change	YoY (%) change	Consumption in '000 MT	YoY (%) change
LPG	2,674	-2.1%	7.5%	20,429	6.86%
Naphtha	1,052	-10.4%	1.3%	8,945	4.50%
MS	3,428	0.5%	9.6%	26,690	7.70%
ATF	748	-1.2%	8.4%	5,882	10.02%
SKO	36	10.6%	-19.3%	273	-19.52%
HSD	8,165	6.9%	8.5%	60,187	1.73%
LDO	80	15.7%	46.5%	540	4.31%
Lubricants & Greases	367	2.7%	15.7%	3,056	23.72%
FO & LSHS	529	-18.3%	1.0%	4,446	1.85%
Bitumen	714	3.7%	5.1%	5,032	-4.51%
Petroleum coke	1,795	6.3%	17.8%	13,849	13.76%
Others	838	1.7%	-4.2%	8,205	-8.34%
TOTAL	20,428	2.0%	8.1%	1,57,534	4.29%

Source- PPAC

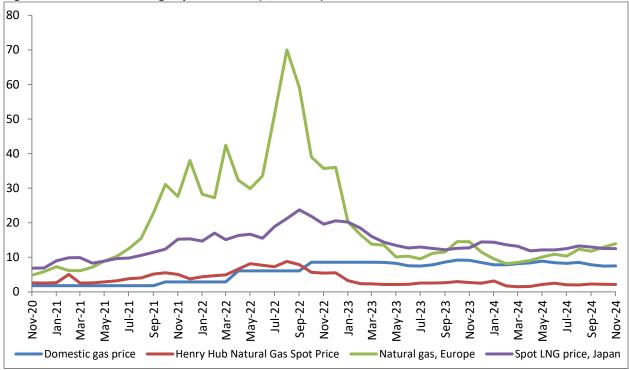
Fiscal Year: 1st April 2024 – 31st March 2025

Natural Gas Market

Natural Gas Price - Monthly Review

- Natural gas spot prices at the US Henry Hub benchmark averaged \$2.12 per million British thermal units (MMBtu) in November 2024. Henry Hub's natural gas prices experienced a consecutive monthly decline in November, falling by ~4.0%, m-o-m. Prices rose earlier in the month on the back of higher heating demand. However, the absence of an expected winter storm reduced heating demand, therefore putting downward pressure on prices. Reports of robust storage levels added more downward pressure on prices. According to data from the US Energy Information Administration (EIA), weekly average underground storage rose in November by 5.7%, m-o-m, and it is around 8% above the five-year average (2019–2023). Henry Hub prices were down by ~22.0%, y-o-y.
- Natural gas spot price at the Title Transfer Facility (TTF) in the Netherlands in Europe traded at an average of \$13.93 per MMBtu. The average Title Transfer Facility (TTF) price rose for a second consecutive month in November, increasing by 7.8%, m-o-m. Prices advanced on the back of renewed supply risk concerns amid geopolitical developments and higher demand for residential heating, which pushed gas demand above average seasonal demand. It is worth noting that, according to data from Gas Infrastructure Europe, EU storage levels were at about 85% of capacity as of 30 November, ten percentage points below the previous month. Prices were down by 3.9%, y-o-y.
- Japan Liquefied Natural Gas Import Price averaged at \$12.49 per MMBtu for November 2024. There is a change of -0.4% from last month and -1.8% 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. For the period 1st October, 2024 31st March, 2025 Gas price ceiling was further revised as US\$10.16/MMBTU on Gross Calorific Value (GCV) basis as per notification dated 30th September 2024.

Figure 22: Global natural gas price trends (\$/mmbtu)



Source- EIA, World Bank

Table 7: Gas price, November 2024

Natural Gas	Price (\$/MMBTU)	MoM (%) change	YoY (%) change
India, Domestic gas price (Dec'24)	7.29	-3.19	-13.93
India, Gas price ceiling – difficult areas (Oct'24-Mar'25)	10.16	2.94%	2.01%
GIXI (Gas index of India) price*	13.07	0.4%	-2%
Henry Hub	2.12	-3.6%	-21.8%
Natural Gas, Europe	13.93	7.8%	-3.9%
Liquefied Natural Gas, Japan	12.49	-0.4%	-1.8%

Source- EIA, PPAC, World Bank, IGX

Table 8: Gas price, GCV Basis

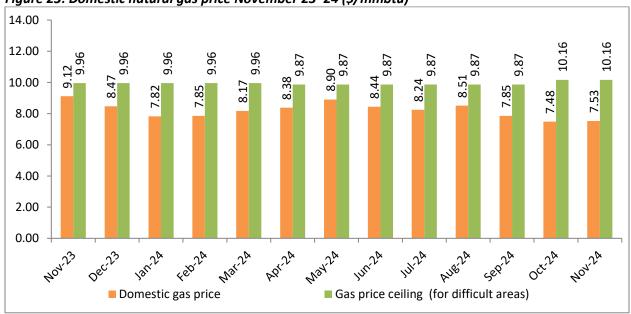
Period	Domestic Gas calculated price in US\$/MMBTU	Gas price ceiling – difficult areas price in US\$/MMBTU
1-31 May 2023	8.27	12.12
1-30 June 2023	7.58	12.12
1-31 July 2023	7.48	12.12
1-31 August 2023	7.85	12.12
1-30 September 2023	8.60	12.12

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

Period	Domestic Gas calculated price in US\$/MMBTU	Gas price ceiling – difficult areas price in US\$/MMBTU
1-31 October 2023	9.20	9.96
1-30 November 2023	9.12	9.96
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
1-30 September 2024	7.85	9.87
1-31 October 2024	7.48	10.16
1-30 November 2024	7.53	10.16
1-31 December 2024	7.29	10.16

Source- PPAC

Figure 23: Domestic natural gas price November'23-24 (\$/mmbtu)



Source- PPAC

Indian Gas Market

- Gross production of natural gas for the month of November 2024 (P) was 2972 MMSCM which was lower by 2.3% compared with the corresponding month of the previous year.
- Total import of LNG (provisional) during the month of November 2024 was 3022 MMSCM (P) (increase of 25.1% over the corresponding month of the previous year).
- Natural gas available for sale during November 2024 was 5494 MMSCM (increase of 10.8% over the corresponding month of the previous year).
- Total consumption during November 2024 was 5767 MMSCM (provisional). Major consumers were fertilizer (30%), City Gas Distribution (CGD) (21%), Power (9%), Refinery (8%) and Petrochemicals (6%).

Monthly Report on Natural gas production, imports, and consumption - November 2024

1. Domestic Natural Gas Gross Production:

Domestic natural gas gross production for the month of November 2024 was 2972 MMSCM (decrease of 2.3% over the corresponding month of the previous year).



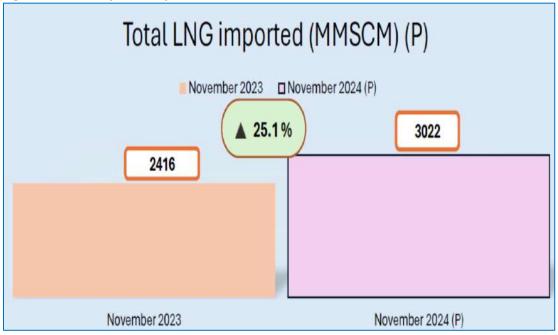
Figure 24: Domestic natural gas Gross production (Qty in MMSCM)

Source- PPAC

2. LNG imports:

Total import of LNG (provisional) during the month of November 2024 was 3022 MMSCM (P) (increase of 25.1% over the corresponding month of the previous year).

Figure 25: LNG imports (Qty in MMSCM)

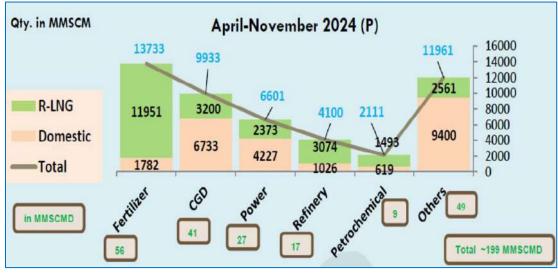


Source- PPAC

3. Sectoral Consumption of Natural Gas:

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

Figure 26: Sectoral Consumption of Natural Gas (Qty in MMSCM) in April-November 2024



Source- PPAC

Key developments in Oil & Gas sector

Monthly Production Report for November, 2024

1. Production of Crude Oil

Indigenous crude oil and condensate production during November 2024 was 2.3 MMT. OIL registered a production of 0.3 MMT, ONGC registered a production of 1.5 MMT whereas PSC/RSC registered production of 0.6 MMT during November 2024. There is a de-growth of 2.1% in crude oil and condensate production during November 2024 as compared with the corresponding period of the previous year.

2. Production of Natural Gas

Gross production of natural gas for the month of November was 2972(P) MMSCM which was lower by 2.3% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 24243 MMSCM for the current financial year till November 2024 was higher by 0.7% compared with the corresponding period of the previous year.

3. Crude Oil Processed (Crude Throughput)

Total Crude oil processed during November 2024 was 21.6 MMT which is -0.1 % lower than November 2023, where PSU/JV refiners processed 14.7 MMT and private refiners processed 6.9 MMT of crude oil. Total indigenous crude oil processed was 2 MMT and total Imported crude oil processed was 19.6 by all Indian refineries (PSU+JV+PVT). There was a growth of 1.8% in total crude oil processed in April-November current Financial Year as compared to same period of previous Financial Year.

4. Production of Petroleum Products

Production of petroleum products was 23.5 MMT during November 2024 which is 2.9% higher than November 2023. Out of 23.5 MMT, 23.2 MMT was from refinery production & 0.3 MMT was from fractionator. There was a growth of 2.9% in production of petroleum products in April-November FY 2024 – 25 as compared to same period of FY 2023 – 24. Out of total POL production, in November 2024, share of major products including HSD is 41.1%, MS 17%, Naphtha 6.2%, ATF 6.6%, Pet Coke 5.3%, LPG 4.4%, and rest is shared by Bitumen, FO/LSHS, LDO, Lubes & others.

Key Policy developments/Significant news in Energy sector

Government scraps windfall tax on crude oil, jet fuel, petrol and diesel exports

The government has officially withdrawn the windfall tax on crude oil, aviation turbine fuel (ATF), petrol, and diesel exports, marking a complete rollback of the levy introduced during a period of heightened global crude prices. Notifications numbered 29/2024 and 30/2024 formalised the decision, presented in Parliament by the Finance Ministry.

First imposed in July 2022, the windfall tax formally known as Special Additional Excise Duty (SAED) was introduced to capitalise on extraordinary profits earned by oil producers and exporters amid surging global crude prices driven by the Russia-Ukraine conflict. Alongside this, the Road and Infrastructure Cess (RIC) on petrol and diesel exports has also been scrapped, effectively removing all export levies on fuel products.

Adoption rate of ethanol blended fuel

The Government has been promoting blending of ethanol in petrol under the Ethanol Blended Petrol (EBP) Programme wherein Public Sector Oil Marketing Companies (OMCs) sell ethanol blended with petrol. Under EBP Programme, the blending of ethanol with petrol increased from 188.6 crore litres in Ethanol Supply Year (ESY) 2018-19 to more than 700 crore litres in ESY 2023-24 with corresponding increase in blending percentage from 5% in ESY 2018-19 to approximately 14.6% in ESY 2023-24.

Since 2019, the number of retail outlets selling ethanol blended petrol has increased steadily. In 2019, ethanol blended petrol was sold from 43168 retail outlets of Public Sector OMCs which has increased to all retail outlets across the country in 2024.

Under EBP Programme, the approximate foreign exchange savings from ESY 2018-19 to ESY 2023-24 is as follows:

ESY	Approximate foreign exchange saved (in rupees crore)
2018-19	5500
2019-20	3500
2020-21	10100
2021-22	22500
2022-23	24300
2023-24 (as on 30.09.2024)	28400

In order to promote blending of ethanol in petrol, the Government has taken several measures which includes expansion of feedstock for production of ethanol, administered price mechanism for procurement of cane-based ethanol under the EBP Programme, Ethanol Interest Subvention Schemes (EISS) for ethanol production from molasses as well as grains and Long-Term Offtake Agreements (LTOAs) by OMCs with Dedicated Ethanol Plants (DEPs) etc. During the last three years, as on 30.09.2024, EBP programme helped expeditious payment of approx. Rs 57,552 Cr to the farmers, approximate savings of more than Rs. 75,000 Cr of foreign exchange, crude oil substitution of nearly 110 lakh metric tonnes and net CO₂ reduction of about 332 lakh metric tonnes.

Importance of Oil Exploration and Production

As per the report of Energy Institute Statistical Review of World Energy, 2024, India is the world third-largest energy consumer. Further, India's energy consumption is increasing continuously, due to sustained economic growth over the last few years, through industrialisation, urbanisation, transportation needs, infrastructure development, rising income, improved standard of living, increased access to modern energy coupled with increase in private consumption and gross fixed capital formation, etc. resulting in increasing import of Crude Oil. Currently, about ~13% of oil and ~53% of gas are domestically produced by E&P companies. Exploration and Production (E&P) contributes to reducing the country's dependence on imported oil and gas through various mechanisms. Production of crude oil has been 29.36 MMT during 2023-24 and 14.4 MMT (provisionally) during the current year 2024-25. As per International Energy Agency, projected demand of oil and petrol in India, by 2030, would be 6.6 mb/d (million barrel per day) and 1.0 mb/d respectively.

Government has been taking various steps to boost domestic oil and gas production and accelerate the pace of exploration activities which, *inter-alia*, include:

- i. Policy under PSC regime for early monetization of hydrocarbon discoveries, 2014.
- ii. Discovered Small Field Policy, 2015.
- iii. Hydrocarbon Exploration and Licensing Policy (HELP), 2016.
- iv. Policy for Extension of PSCs, 2016 and 2017.
- v. Policy for early monetization of Coal Bed Methane, 2017.
- vi. Setting up of National Data Repository, 2017.
- vii. Appraisal of Un-appraised areas in Sedimentary Basins under National Seismic Programme, 2017.

- viii. Policy framework for extension of PSCs for Discovered Fields and Exploration Blocks under Pre-New Exploration Licensing Policy (Pre-NELP), 2016 and 2017.
- ix. Policy to Promote and Incentivize Enhanced Recovery Methods for Oil and Gas, 2018.
- x. Policy Framework for exploration and exploitation of Unconventional Hydrocarbons under Existing Production Sharing Contracts (PSCs), Coal Bed Methane (CBM) Contracts and Nomination Fields, 2018.
- xi. Natural Gas Marketing Reforms, 2020.
- xii. Lower Royalty Rates, Zero Revenue Share (till Windfall Gain) and no drilling commitment in Phase-I in OALP Blocks under Category II and III basins to attract bidders.
- xiii. Release of about 1 Million Sq. Km. (SKM) 'No-Go' area in offshore which were blocked for exploration for decades.
- xiv. Government is also spending about Rs.7500 Cr. for acquisition of seismic data in onland and offshore areas and drilling of stratigraphic wells to make quality data of Indian Sedimentary Basins available to bidders. Government has approved acquisition of additional 2D Seismic data of 20,000 LKM in onland and 30,000 LKM in offshore beyond Exclusive Economic Zone (EEZ) of India.

Government Policies to accelerate the growth of the Bio Energy Sector

Government has notified the National Bioenergy Programme (NBP) with an aim to promote the use of bioenergy and waste-to-energy technologies to support clean energy solutions to enhance energy security and support sustainable development in India. In addition, to accelerate the growth of the biofuels sector and achieve the enhanced ethanol blending by 2025, the Government, since 2014, has taken several measures which *inter-alia* includes expansion of feedstock for production of ethanol, administered price mechanism for procurement of sugarcane based ethanol under the Ethanol Blended Petrol (EBP) Programme, lowered GST rate to 5% on ethanol for EBP Programme, introduction of various Ethanol Interest Subvention Schemes (EISS), during 2018-22, for ethanol production from molasses as well as grains and Long Term Offtake Agreements (LTOAs) by Oil Marketing Companies (OMCs) with Dedicated Ethanol Plants (DEPs) etc., Notification of the "Pradhan Mantri JI-VAN (Jaiv Indhan – Vatavaran Anukool fasal awashesh Nivaran) Yojana" to provide financial support for integrated bio-ethanol projects for setting up Advanced Biofuels projects in the country using lignocellulosic biomass and other renewable feedstock.

To promote the production of maize as a major feedstock for grain based ethanol supply under Ethanol Blended Petrol Programme, training/awareness/ exposure programme have been conducted by Indian Council of Agricultural Research (ICAR)- Indian Institute of Maize Research (IIMR) under its project 'Enhancement of Maize Production in Catchment Area of Ethanol Industries' for various stakeholders including farmers across the country for quality maize production towards profitable ethanol production.

The management of fall armyworm and aflatoxin was integral part in such programmes conducted under this project along with mechanization and best weed and nutrient management. A total of 788 demonstrations of improved package of practices were conducted during *Kharif* 2024 in 15 clusters across 15 States. In *Rabi* 2024-25, the inputs were distributed to conduct demonstrations of improved practices on 720 acres in the catchment area of ethanol industries. Specialized training for the distillers and seed production organization were also conducted.

The Government has introduced the Oilfields (Regulation and Development) Amendment Bill, 2024, with the aim of increasing domestic production of oil and gas and thereby reducing the country's import dependence. The bill targets various objectives, including attracting investments in the Exploration and Production sector to bring in necessary capital and technology for expediting petroleum operations in the country. It seeks to create an investor-friendly environment that promotes ease of doing business, fosters prospects for exploration, development, and production of all types of hydrocarbons, ensures stability, and provides adequate opportunities for risk mitigation.

The initiatives taken by the Government have resulted in a significant reduction in the "No-Go" area, located off the coast of India in the Bay of Bengal, the Indian Ocean, and the Arabian Sea, from 1,366,708 square kilometers (SKM) to 24,832 SKM, thereby opening up approximately 99% of the previously restricted areas for exploration activities. The enactment of the proposed legislation is expected to unlock valuable mineral oil resources, attract investments, facilitate the development and production of all types of hydrocarbons, and enable exploration of various unapprised and unexplored oilfields in the country, including blocks in the previously designated "No-Go" areas.

The Government had notified the "Pradhan Mantri JI-VAN (Jaiv Indhan — Vatavaran Anukool Fasal Awashesh Nivaran) Yojana" in 2019, amended in 2024, to provide financial support for integrated bioethanol projects aimed at setting up advanced biofuel projects in the country using lignocellulosic biomass and other renewable feedstock. Under this scheme, financial assistance of more than ₹908 crore has been approved for Public and Private Sector Oil Marketing Companies (OMCs) for six commercial-scale Second Generation (2G) bio-ethanol projects and four demonstration-scale 2G ethanol projects. Among these, the commercial project in Panipat, Haryana, has been dedicated to the Nation, while three other commercial-scale projects are in advanced stages of construction.

Over the last 10 years, ethanol blending in petrol by Public Sector OMCs has helped reduce approximately 557 lakh metric tonnes of CO₂ emissions.

Initiatives to Harness Hydro Potential

The Government of India has taken various initiatives to harness the hydro-power potential including the hydro pumped storage potential viz: -

- 1. Declaring large hydropower projects (capacity above 25 MW) as renewable energy source.
- 2. Hydro Renewable Energy Consumption Obligation by Designated Consumers.
- 3. Tariff rationalization measures for bringing down hydropower tariff.
- 4. Budgetary support for Flood Moderation/Storage hydroelectric projects.

- 5. Budgetary support towards cost of enabling infrastructure, i.e. roads, bridges, ropeways, railway siding, communication infrastructure and Transmission Line from power house to the nearest pooling point, including upgradation of polling substations of State or Central Transmission Utility.
- 6. Guidelines to promote development of Pumped Storage Projects (PSPs) in the country was issued on 10th April, 2023.
- 7. Waiver of Inter State Transmission System (ISTS) charges for hydroelectric projects and PSPs.
- 8. Central Financial Assistance (CFA) to the State Governments of North Eastern Region (NER) towards their equity participation for development of Hydro Electric Projects in the NER through Joint Venture collaboration between State entities and Central Public Sector Undertakings.
- 9. Reduction of timeline by Central Electricity Authority (CEA) for concurrence of Detailed Project Reports (DPR) of hydroelectric projects and PSPs.

PMSGMBY Set to Surpass 10 Lakh Installations by March 2025, Targeting One Crore by 2027

PM Surya Ghar: Muft Bijli Yojana (PMSGMBY), the world's largest domestic rooftop solar scheme, is transforming the solar energy landscape of India. By March 2025, installations are projected to surpass 10 lakh, ramping up to 20 lakh by October 2025, 40 lakh by March 2026, and the targeted one crore by March 2027. Within just 9 months of PMSGMBY, 6.3 lakh installations have been achieved—an average of 70,000 per month. This marks a ten-fold increase in monthly installations compared to the average of 7,000 per month prior to the launch of the scheme in February 2024. States such as Gujarat, Maharashtra, Kerala, and Uttar Pradesh have demonstrated exceptional progress, reflecting robust infrastructure and stakeholder collaboration.

The early progress of PMSGMBY is a testament to the solid groundwork being laid, and the scheme is on track for accelerated growth in the coming months, paving the way for a sustainable future in rooftop solar energy.

Implementation Challenges quickly resolved for Faster Rollout

Initial implementation challenges were effectively addressed to accelerate the rollout. DISCOMs undertook auto-load enhancements to ensure the necessary power load capacity, while regulatory barriers were reduced by waiving Technical Feasibility Reports (TFR) for systems up to 10kW. Timely inspections by DISCOMs expedited subsidy releases, and measures ensured the availability of net meters. Efforts to expand the vendor base supported rapid deployment, complemented by affordable financing options through the Jan Samarth Portal for systems up to 3kW.

Building Infrastructure for Large-Scale Deployment

Building robust IT systems to integrate over 90 DISCOMs, banks, and other stakeholders was critical to coordinating operations at this scale. Vendor development has been a priority, with nearly 9,000 vendors activated and more joining daily. Capacity-building initiatives have trained 40,000 personnel, to ensure high-quality installations and service delivery. An additional 2 lakh technicians will be trained over the next eight months. Furthermore, more than 50,000 DISCOM engineers are receiving specialized training to inspect and commission rooftop solar plants and provide net meters.

Simplifying Consumer Processes

The scheme has also significantly simplified consumer processes. Previously, applicants had to submit multiple documents and make repeated visits to DISCOM offices. Now, most DISCOMs have waived Technical Feasibility approvals for systems under 10kW and digitized their processes, reducing the documentation burden and streamlining applications. Application can now be filed in 5 minutes on www.pmsuryaghar.gov.in, which also allows shortlisting and selecting vendors. Applicant can also use the GIS feature of the portal to see his roof and plan the capacity of rooftop solar system. Loan at 7% interest rate could also be applied seamlessly on the portal itself. After installation details can also be uploaded within minutes. Portal automatically informs the DISCOM to inspect, after which applicant could redeem subsidy also on the portal.

Efficient Subsidy Disbursement

Efficient subsidy disbursement has been another key achievement. Following the conclusion of the Model Code of Conduct in June 2024, disbursements commenced promptly. By November 2024, over ₹3,100 crore had been disbursed to more than four lakh consumers. With an average of 67,000 households receiving subsidies monthly, the scheme demonstrates operational robustness and a commitment to timely financial support. Subsidies are now processed within 15 days, enhancing consumer satisfaction.

Satisfied Households

With households receiving subsidy swiftly and with the electricity bills getting significantly reduced more and more applications are pouring through word of mouth. 28% of the households are getting zero electricity bills.

Extensive Awareness Campaigns

Extensive awareness campaigns have complemented these efforts, driving registrations and educating households about the scheme's benefits. These campaigns are expected to further bolster participation, ensuring sustained momentum and widespread adoption.

The PMSGMBY is not merely on course to meet its ambitious targets it is set to herald a new era of rooftop solar success that stands as an exemplary model of sustainable energy deployment globally. With robust infrastructure, streamlined processes, and a clear vision in place, the scheme is primed for accelerated growth. It is also poised to deliver far-reaching socio-economic and environmental benefits, setting a global benchmark for renewable energy integration and empowering millions of households across the nation.

MNRE Announces Significant Amendment to ALMM Order 2019 to Advance Solar Manufacturing

Ministry of New and Renewable Energy (MNRE) has announced a significant amendment to the Approved Models and Manufacturers of Solar Photovoltaic Modules (ALMM) Order, 2019 which will have far-reaching implications for India's solar power sector and its clean energy transition. This amendment, set to take effect from 1st June 2026, introduces the long-awaited List-II for solar PV cells under the ALMM

framework, marking a major step towards boosting domestic manufacturing and fostering self-reliance in India's renewable energy industry.

Introduction of ALMM List-II for Solar PV Cells

The introduction of List-II, is a response to the country's rapidly growing solar manufacturing capabilities. Until now, the absence of List-II was due to a limited domestic supply of solar cells. However, with substantial growth in India's solar cell production capacity anticipated over the next year, this amendment is poised to change the dynamics of the industry. From 1st June 2026, all solar PV modules used in projects – including government-backed schemes, net-metering projects, and open access renewable energy initiatives – will be required to source their solar cells from ALMM List-II, ensuring quality and reliability in solar PV cells used in India's energy infrastructure.

Exemptions for Existing Projects

For projects that have already been bid out but whose last date of bid submission is before the issuance of this order, an exemption will apply, allowing them to proceed without the requirement to use solar PV cells from List-II, even if their commissioning date is post-1st June 2026. However, for all future bids, the requirement to source both solar PV modules and cells from the respective ALMM lists will be mandatory, marking a decisive shift towards quality assurance and sustainability in India's solar power sector.

Economic and Environmental Benefits

This policy enhancement is expected to have profound economic and environmental benefits. By mandating the use of solar PV cells which will be included in the ALMM List-II following a rigorous procedure to verify the quality and reliability, the government aims to foster a robust domestic solar PV supply chain, reduce the carbon footprint associated with solar module imports, and bolster India's energy security. This move aligns with India's broader goal of achieving 500 GW of non-fossil fuel-based power capacity by 2030 and making substantial strides in its commitment to clean energy.

Stimulating Domestic Manufacturing

The amendment will not only strengthen India's position as a global leader in renewable energy but will also accelerate the growth of India's solar manufacturing sector. The increased demand for solar PV cells in India is expected to stimulate innovation, create new job opportunities, and attract investments in high-tech manufacturing. It will also enhance the overall quality and reliability of solar products used in India, ensuring that projects meet the highest standards.

Promoting Thin-Film Solar Technology Innovation

The government has also recognized the role of thin-film solar technology in India's renewable energy future. Under the new amendments, thin-film solar modules manufactured in integrated solar PV module manufacturing units will be considered in compliance with the requirement to use solar PV cells from List-II, further driving technological innovation and diversification within the sector.

In the coming months, the MNRE will issue detailed procedural guidelines for the enlistment of solar PV cells under ALMM List-II, providing clear instructions for manufacturers and project developers on how to comply with the updated requirements. This is part of the government's ongoing efforts to simplify the regulatory process and ensure that India remains at the forefront of global clean energy development.

By prioritizing solar PV cell manufacturing and reducing reliance on imports, this amendment lays a strong foundation for India's clean energy future. It supports the growth of the solar power industry, generates economic opportunities, and makes a meaningful contribution to the country's climate goals. With this move, India is set to strengthen its energy independence, support sustainable development, and become a global hub for solar energy innovation.

The amendment has been approved by the Minister for New and Renewable Energy Shri Pralhad Joshi and underscores the government's commitment to advancing India's renewable energy agenda and ensuring a greener, more sustainable future for all.

India's RE capacity registers 14.2% Year-on-Year Growth

Ministry of New and Renewable Energy (MNRE) has reported significant progress in India's renewable energy sector from November 2023 to November 2024. This progress underscores India's commitment to achieving its clean energy targets in line with the 'Panchamrit' goals set by Prime Minister Shri Narendra Modi.

Record Capacity Additions

As of November 2024, the total non-fossil fuel installed capacity has reached 213.70 GW, marking an impressive 14.2% increase from last year's 187.05 GW. Meanwhile, the total non-fossil fuel capacity, which includes both installed and pipeline projects, surged to 472.90 GW, a substantial 28.5% increase from the previous year's 368.15 GW.

During FY 24-25 a total of 14.94 GW of new RE capacity was added till November 2024, nearly doubling the 7.54 GW added during the same period in FY 23-24. In November 2024 alone, 2.3 GW of new capacity was added—marking a dramatic fourfold increase from the 566.06 MW added in November 2023.

Solar and Wind Power Experience Significant Growth

India's renewable energy sector has seen widespread growth across all major categories. Solar power continues to lead, with installed capacity rising from 72.31 GW in 2023 to 94.17 GW in 2024, a robust growth of 30.2%. Including pipeline projects, total solar capacity surged by 52.7%, reaching 261.15 GW in 2024, compared to 171.10 GW in 2023. Wind power also made notable contributions, with installed capacity rising from 44.56 GW in 2023 to 47.96 GW in 2024, reflecting a growth of 7.6%. Total wind capacity, including pipeline projects, increased by 17.4%, from 63.41 GW in 2023 to 74.44 GW in 2024.

Steady Contributions from Bioenergy, Hydro, and Nuclear Sectors

Bioenergy and hydroelectric projects also made steady contributions to the renewable energy mix. Bioenergy capacity rose from 10.84 GW in 2023 to 11.34 GW in 2024, reflecting a growth of 4.6%. Small

hydro projects saw a slight increase, from 4.99 GW in 2023 to 5.08 GW in 2024, with total capacity, including pipeline projects, reaching 5.54 GW. Large hydroelectric projects grew incrementally, with installed capacity rising from 46.88 GW in 2023 to 46.97 GW in 2024, and total capacity, including pipeline projects, increasing to 67.02 GW from 64.85 GW in the previous year.

In nuclear energy, installed nuclear capacity grew from 7.48 GW in 2023 to 8.18 GW in 2024, while the total capacity, including pipeline projects, remained steady at 22.48GW.

These impressive figures underscore the Government of India's continued efforts to scale up renewable energy capacity and reduce dependence on fossil fuels. MNRE under Union Minister of New and Renewable Energy Shri Pralhad Joshi has been taking various key initiatives reflecting India's dedication to fulfilling its climate commitments while strengthening energy security.

Overall Coal Production in November 2024 Reaches 90.62 Million Tonnes

The Ministry of Coal has achieved a remarkable milestone in November 2024, with overall coal production reaching 90.62 million tonnes (MT) (Provisional), compared to 84.52 MT in the same month last year, marking a 7.20% growth.

Coal production from captive and other entities has shown significant progress, reaching 17.13 MT (provisional) in November 2024, up from 12.44 MT in November 2023, marking an impressive growth of 37.69% (provisional).

Cumulatively, coal production for FY 2024-25 up to November 2024 reached 628.03 MT (Provisional), compared to 591.32 MT during the same period in FY 2023-24, reflecting a growth of 6.21%. (Provisional)

Additionally, Coal dispatches in November 2024 showed steady improvement, reaching 85.22 MT (Provisional), up from 82.07 MT in November 2023, reflecting a growth of 3.85%. Dispatches from captive and other entities experienced a sharp increase, rising to 16.58 MT in November 2024 from 13.19 MT in November 2023, marking an impressive growth of 25.73%.

Cumulatively, coal dispatches for FY 2024-25 up to November 2024 rose to 657.75 MT (Provisional), compared to 623.78 MT during the same period in the previous fiscal year, recording a growth of 5.45% (Provisional).

Ministry of Coal Launched 11th round of Commercial Coal Mine Auctions

Union Minister of Coal and Mines, Shri G. Kishan Reddy, launched the 11th round of Commercial Coal Mine auctions with a total of 27 coal blocks on offer.

These 27 coal blocks are spread across the states of Jharkhand, Odisha, Chhattisgarh, Maharashtra, Madhya Pradesh and Arunachal Pradesh and include both fully explored and partially explored mines including 1 coking coal mine.

The Ministry has also executed 9 agreements with successful bidders of 10th round of auctions. These mines upon operationalisation will generate Annual Revenue of Rs. 1,446 crores calculated at PRC of these coal mines and will provide employment to approximately 19,000 people.

The Ministry of Coal has taken a series of reforms to ensure that the coal sector grows at a rapid pace and is able to meet the country's energy needs. For 11th round also, Mines falling under protected areas, wildlife sanctuaries, critical habitats, having forest cover greater than 40%, heavily built-up area etc. have been excluded. The block boundaries of some of the coal mines where there was presence of dense habitation, high green cover or critical infrastructure etc. have been revised to improve the attractiveness of the coal mines.

Addressing the gathering, Union Minister of Coal and Mines, Shri G. Kishan Reddy, emphasized that coal remains the cornerstone of India's energy landscape, asserting that power generation is unimaginable without it. He highlighted the transformative impact of coal block auctions in achieving energy security, fostering self-reliance, and reducing dependency on imports. Urging industry players to participate enthusiastically in 11th round of auctions, he called for collective contributions toward realizing the vision of an energy-independent Aatmanirbhar Bharat, as envisioned by the Prime Minister Narendra Modi.

Union Minister, Shri Reddy reaffirmed the Government's dedication to boost domestic coal production to meet the nation's energy demand. The Minister further reiterated the Government's commitment to uplift local communities, emphasizing that coal auctions and mining activities go beyond economic growth. They also aim to empower communities by creating employment opportunities, improving infrastructure, and enhancing education and healthcare in coal mining regions. Shri Reddy expressed confidence that these reforms would position India as a global leader in sustainable mining practices while ensuring energy security.

He also highlighted the Government of India's Financial Incentive Scheme with an outlay of ₹8,500 crore to promote Coal and Lignite Gasification projects. This initiative, he noted, is a pivotal step toward achieving India's ambitious target of 100 million tonnes of coal gasification by 2030. By encouraging cleaner and more efficient technologies, the scheme aims to reduce reliance on imported natural gas, lower carbon emissions, and pave the way for sustainable energy development.

In his keynote address, Shri Vikram Dev Dutt, Secretary, Ministry of Coal highlighted the crucial role of policy reforms in creating an ecosystem that encourages innovation, reduces production costs, and meets the growing energy demands of the nation without compromising on environmental standards. Shri Dutt stressed that these reforms are designed to not only enhance coal production but also align the sector with India's broader goal of achieving energy self-reliance and sustainable development. He further emphasized on inter-ministerial collaboration, particularly with the Ministry of Environment, Ministry of Power, and Ministry of Steel. He underscored how such cooperation facilitates the harmonization of policies, streamlines processes, and addresses sectoral challenges more effectively, enabling a balanced approach to energy security and environmental stewardship. Secretary, also spoke about the modernization efforts that are reshaping the sector, leveraging advanced technology to improve productivity, worker safety, and environmental management. He underscored the pivotal role of First Mile Connectivity (FMC) projects in expediting coal evacuation, ensuring efficient transportation, and reducing

environmental impact. These initiatives, he stated, are crucial in driving the sector toward modernization and greater operational efficiency.

The Additional Secretary and Nominated Authority, Ministry of Coal, Smt. Rupinder Brar highlighted the need to explore more coal block as there is surging demand of coal. He stressed that leveraging private investment and expertise is crucial for meeting the growing energy needs and ensuring steady coal supply to various industries. By opening more coal blocks for exploration and encouraging private participation will contribute the coal sector in achieving higher production targets.

The commencement of sale of tender document shall start December 05, 2024. Details of the mines, auction terms, timelines etc. can be accessed on MSTC auction platform. The auction shall be held online through a transparent two stage process, on the basis of Percentage Revenue Share.

India has doubled power generation through Nuclear Energy in last decade

India's Nuclear power generation capacity has grown significantly in last one decade, nearly doubling from 4,780 MW in 2014 to 8,180 MW in 2024.

This was disclosed in the Lok Sabha by Union Minister of State (Independent Charge) for Science and Technology, Minister of State (Independent Charge) for Earth Sciences, MoS PMO, Department of Atomic Energy, Department of Space, Personnel, Public Grievances and Pensions, Dr. Jitendra Singh addressed the Lok Sabha, in response to a discussion on Nuclear power.

The Minister highlighted the significant progress and future potential of India's atomic energy program. He elaborated on key developments and outlined a roadmap for achieving greater self-reliance in nuclear power generation.

Dr. Jitendra Singh emphasized the revision of India's power distribution framework, which has increased the home state's share of electricity from atomic plants to 50%, with 35% allocated to neighboring states and 15% to the national grid. This new formula ensures equitable resource distribution and reflects the federal spirit of the nation.

While highlighting how India's Nuclear power generation capacity has grown significantly, nearly doubling from 4,780 MW in 2014 to 8,180 MW in 2024, Dr Jitendra Singh added that the capacity is projected to triple to 22,480 MW by 2031-32, showcasing India's commitment to scaling up its nuclear energy infrastructure.

The Union Minister attributed this progress to several transformative initiatives, including the bulk approval of 10 reactors, increased funding allocations, collaborations with Public Sector Undertakings (PSUs), and limited private sector participation. He credited advancements in technology and streamlined administrative processes for strengthening India's nuclear infrastructure.

In addition to energy production, Dr. Jitendra Singh highlighted the diverse applications of atomic energy. He noted its extensive use in agriculture, including the development of 70 mutagenic crop varieties. In the

healthcare sector, India has introduced advanced isotopes for cancer treatment, while in the defense sector, atomic energy processes have been used to develop cost-effective, lightweight bulletproof jackets.

The Union Minister also underscored India's abundant thorium reserves, which constitute 21% of the global total. Indigenous projects like "Bhavani" are being developed to harness this resource, reducing dependence on imported uranium and other materials. He acknowledged the challenges in implementing atomic power projects, such as land acquisition, forest clearances, and equipment procurement, but reaffirmed the government's commitment to addressing these issues. He noted that nine atomic power projects are currently under construction, with several others in the pre-project stage, demonstrating India's dedication to expanding nuclear energy capacity.

Dr. Jitendra Singh provided a historical perspective, highlighting projects like the Kudankulam Nuclear Power Plant, which gained momentum post-2014 under the leadership of Prime Minister Narendra Modi. He reiterated India's commitment to peaceful purposes of atomic energy, as envisioned by Dr. Homi Bhabha, and emphasized leveraging nuclear energy for sustainable development while aligning with the vision of "One Nation, One Government."

This progress underscores India's resolve to achieve energy self-sufficiency, drive innovation, and contribute significantly across sectors through the peaceful applications of nuclear energy.

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