

FIPI



Federation of Indian Petroleum Industry

POLICY & ECONOMIC REPORT

OIL & GAS MARKET
September 2025



Table of Contents

Executive Summary	3
Economy in Focus.....	5
Lessons from Economics.....	20
Oil Market	22
Crude oil price – Monthly Review	22
Indian Basket Crude oil price	24
Oil production situation	24
Oil demand situation.....	25
Global petroleum product prices	26
Petroleum products consumption in India	28
Natural Gas Market.....	30
Natural Gas Price – Monthly Review.....	30
Monthly Report on Natural gas production, imports, and consumption – August 2025	33
Key developments in Oil & Gas sector.....	35
Key Policy developments/Significant news in Energy sector	36

List of Figures & Tables

Figure 1: Global Growth in Q1 2025-26 (%).....	5
Figure 2: Real GDP growth projections for 2024,2025,2026	6
Figure 3: Headline inflation.....	7
Figure 4: Global Trade volumes	7
Figure 5: Trade Policy shifts global uncertainties	9
Figure 6: Quarterly Real GDP estimates (in Rs. Lakh crores) and y-o-y growth rates (%)	11
Figure 7: Sectoral Composition and Growth Rates of Quarterly GVA	11
Figure 8: All India inflation rates for CPI (General) and CFPI	12
Figure 9: Top five major states with high Year on Year inflation for the month of July, 2025	13
Figure 10: India PMI Index	14
Figure 11: Total Trade during August 2025.....	15
Figure 12: Total Trade during April- August 2025	16
Figure 13: GDP growth projection (y-o-y) in %	18
Figure 14: Benchmark price of Brent, WTI and Dubai crude	23
Figure 15: Indian crude oil basket price in \$ per bbl.....	24
Figure 16: Refining Margins (\$/bbl)	27
Figure 17: Singapore crack Spreads vs. Dubai (\$/bbl)	27
Figure 18: Global natural gas price trends (\$/mmbtu)	31
Figure 19: Domestic natural gas price September'24–25 (\$/mmbtu).....	32
Figure 20: Domestic natural gas Gross production (Qty in MMSCM)	33
Figure 21: LNG imports (Qty in MMSCM)	34
Figure 22: Sectoral Consumption of Natural Gas (Qty in MMSCM) in August 2025	34
Table 1: Trade during July 2025.	15
Table 2: Crude oil price in September, 2025.....	24
Table 3: Non-DoC liquids production in 2025, mb/d	25
Table 4: World Oil demand, mb/d	26
Table 5: Singapore FOB, refined product prices (\$/bbl) in August 2025	28
Table 6: Petroleum products consumption in India, August 2025 and Year till Date (YTD)	29
Table 7: Gas price, August 2025.....	31
Table 8: Gas price, GCV Basis	31

Executive Summary

According to the OECD in its latest economic outlook, global Gross Domestic Product (GDP) growth is projected to slow from 3.3 percent in 2024 to 3.2 percent in 2025 and to 2.9 percent in 2026. According to the OECD, the downward revision from its previous forecast is due to "front-loading ceasing and higher tariff rates and still-high policy uncertainty" that dampen investment and trade. The report cautioned that risks to the outlook remain elevated. Potential triggers for weaker growth include further tariff escalation, renewed inflationary pressures, heightened fiscal concerns, and financial market instability.

For the United States, GDP growth is forecast to decline from 2.8 percent in 2024 to 1.8 percent in 2025, and then to 1.5 percent in 2026, as strong investment in high-tech sectors is outweighed by the drag from tariffs and lower net immigration. In the eurozone, GDP is projected to grow by 1.2 percent in 2025 and 1.0 percent in 2026. While easier credit conditions provide some support, trade frictions and geopolitical uncertainty are expected to limit momentum. Growth in China is projected to be 4.9% in 2025 and 4.4% in 2026, as front-loading unwinds, higher tariffs take effect and fiscal support fades.

In case of India, the National Statistics Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI) released the Quarterly Estimates of Gross Domestic Product (GDP) for the April-June Quarter (Q1) of Financial Year (FY) 2025-26. The key highlights are as follows: -

- Real GDP has been estimated to grow by 7.8% in Q1 of FY 2025-26 over the growth rate of 6.5% during Q1 of FY 2024-25.
- Nominal GDP has witnessed a growth rate of 8.8% in Q1 of FY 2025-26.
- Agriculture and Allied Sector has observed the Real GVA growth rate of 3.7%, as compared to the growth rate of 1.5% registered in Q1 of last financial year.
- Secondary Sectors, prominently Manufacturing (7.7%) and Construction (7.6%) Sector has registered above 7.5% growth rate at Constant Prices in this quarter.
- Tertiary Sector (9.3%) has recorded substantial growth rate at Constant Prices in Q1 of FY 2025-26, over the growth rate of 6.8% in Q1 of FY 2024-25.

Year-on-year inflation rate based on All India Consumer Price Index (CPI) for the month of August, 2025 over August, 2024 is 2.07% (Provisional). There is an increase of 46 basis points in headline inflation of August, 2025 in comparison to July, 2025.

Year-on-year inflation rate based on All India Consumer Food Price Index (CFPI) for the month of August, 2025 over August, 2024 is -0.69% (Provisional). Corresponding inflation rates for rural and urban are -0.70% and -0.58%, respectively. An increase in headline inflation and food inflation during the month of August, 2025 is mainly attributed to increase in inflation of Vegetables, Meat and fish, Oil and fats, Personal care and affects, Egg etc.

The HSBC Flash India Composite Output Index, which measures the combined performance of India's manufacturing and service sectors, fell to 61.9 in September from 63.2 in August, marking a modest slowdown but still indicating a sharp rate of expansion. This was the second-best reading in over two years. Growth in factory output outpaced that of services, although the pace of increase moderated across both sectors.

On the external front, India's foreign exchange reserves rose by USD 4.698 billion to USD 702.966 billion in the week ending September 12, according to the Reserve Bank of India's latest Weekly Statistical Supplement. This marks the third consecutive weekly increase, with the reserves crossing the much-awaited USD 700 billion mark. According to RBI Governor, India's foreign exchange holdings are now sufficient to cover 11 months of imports.

As far as oil and gas industry is concerned, the oil market is currently being influenced by a variety of competing factors. On one hand, the risk of supply disruptions due to newly imposed sanctions on Russia and Iran looms large. On the other, these concerns are tempered by increased supply from OPEC+ and the possibility of growing global oil inventories. Meanwhile, China continues to accumulate crude oil reserves, contributing to a slight backwardation in Brent crude futures.

The tightened sanctions on Iran and Russia have had only a limited effect on global supply and trade flows, despite a downward trend in exports from both countries in recent months. However, the European Union's impending ban—effective from the beginning of 2026—on imports of refined products derived from Russian crude could potentially reduce output and significantly alter trade routes in the near future.

Premiums of light sweet crude over medium sour grades narrowed in Asia and on the US Gulf Coast (USGC), in line with a sharp decline in the Brent–Dubai spread, which moved into a deep discount. This reflected a stronger sour crude market amid concerns over supply disruptions to medium sour grades due to sanctions and geopolitical developments. However, though sweet–sour crude differentials in Europe widened slightly, they remained relatively low.

Crude spot prices averaged lower in August, pressured mainly by heavy selling activity in the oil futures markets, which weighed on sentiment. Weaker refining margins in Europe and Asia added to the downward pressure. A decline in sour crude benchmarks in the East of Suez market was limited compared with light sweet crudes in the Atlantic Basin, as medium sour grades continued to benefit from strong demand from Asia-Pacific refiners. Spot prices also maintained at a firm premium against futures in August, reflecting supportive short-term supply/demand fundamentals, despite seasonal demand softening.

Natural gas spot prices at the US Henry Hub benchmark averaged \$2.91 per million British thermal units (MMBtu) in August 2025. Henry Hub's natural gas prices fell in August by 8.8%, m-o-m. They were under pressure from lower seasonal demand amid mild summer temperatures, which contributed to higher storage levels. According to data from the US Energy Information Administration (EIA), average weekly natural gas storage increased by 3.9%, m-o-m, in August. Strong LNG export volumes provided some support to prices in the period, which were up by 46.2%, y-o-y.

Economy in Focus

1. A snapshot of the global economy

Global economic growth

- According to the OECD in its latest economic outlook, global Gross Domestic Product (GDP) growth is projected to slow from 3.3 percent in 2024 to 3.2 percent in 2025 and to 2.9 percent in 2026.
- According to the OECD, the downward revision from its previous forecast is due to "front-loading ceasing and higher tariff rates and still-high policy uncertainty" that dampen investment and trade.
- The report cautioned that risks to the outlook remain elevated. Potential triggers for weaker growth include further tariff escalation, renewed inflationary pressures, heightened fiscal concerns, and financial market instability.

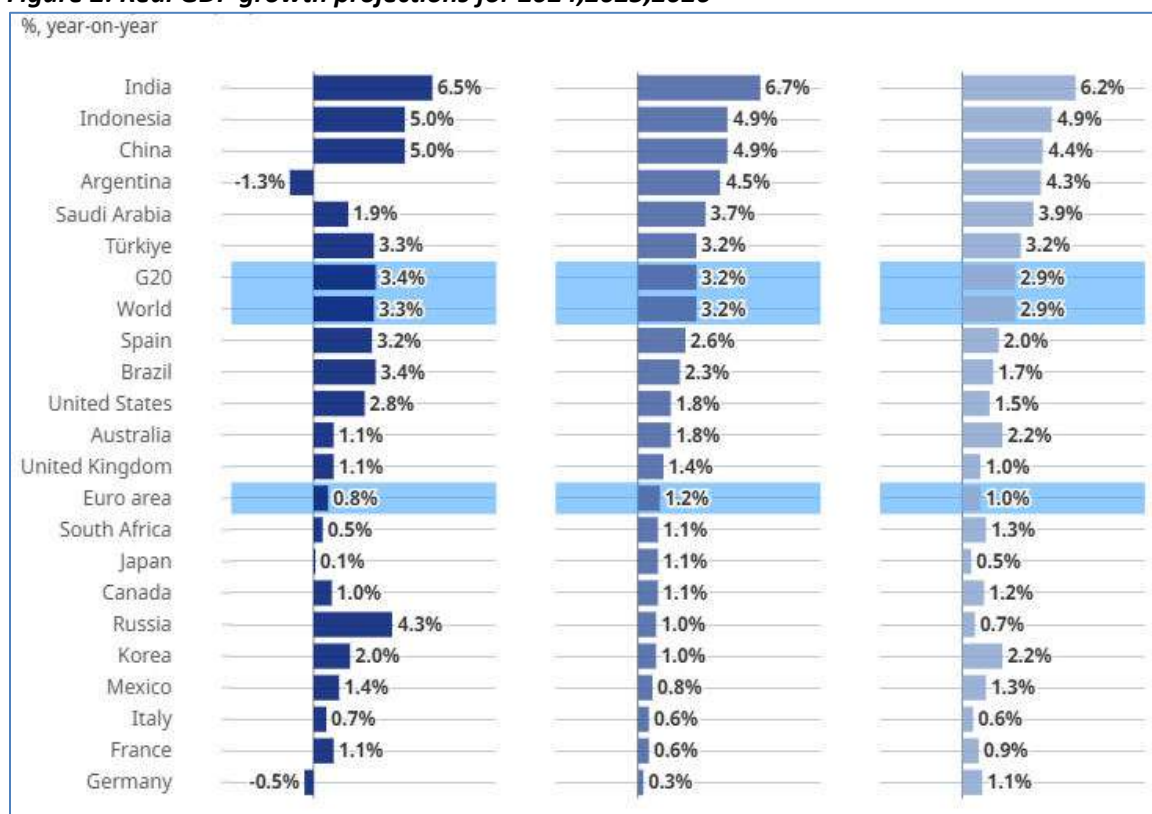
Figure 1: Global Growth in Q1 2025-26 (%)



Source- OECD

- For the United States, GDP growth is forecast to decline from 2.8 percent in 2024 to 1.8 percent in 2025, and then to 1.5 percent in 2026, as strong investment in high-tech sectors is outweighed by the drag from tariffs and lower net immigration.
- In the eurozone, GDP is projected to grow by 1.2 percent in 2025 and 1.0 percent in 2026. While easier credit conditions provide some support, trade frictions and geopolitical uncertainty are expected to limit momentum.
- Growth in China is projected to be 4.9% in 2025 and 4.4% in 2026, as front-loading unwinds, higher tariffs take effect and fiscal support fades.

Figure 2: Real GDP growth projections for 2024,2025,2026



Source- OECD

Global Inflation

Inflation in most G20 economies is projected to fall as economic growth and labor markets continue to soften. Headline inflation is expected to decline from 3.4% in 2025 to 2.9% in 2026, while core inflation in advanced G20 economies remains broadly stable, easing only slightly from 2.6% to 2.5%.

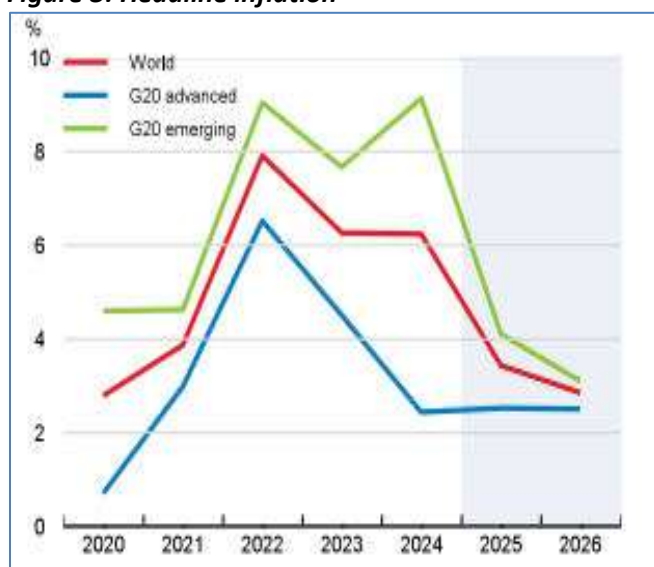
In the United States, the increase in effective tariff rates will further boost inflation, with the rate of pass-through to final goods prices assumed to strengthen as businesses become less willing to absorb the rising cost of imported goods.

In the euro area, inflation is anticipated to remain subdued, while the normalization of food prices in Japan will contribute to inflation moving back to the central bank target in 2026.

Significant further disinflation in Argentina and Türkiye are key factors, but inflation is also anticipated to moderate in Brazil and Mexico. In contrast, a rise in inflation is projected for Indonesia, as past exchange rate depreciation feeds into domestic prices.

In China, inflation is expected to gradually increase from its current very low level, partly reflecting the imposition of higher tariff rates on goods imported from the United States.

Figure 3: Headline inflation



Source- OECD

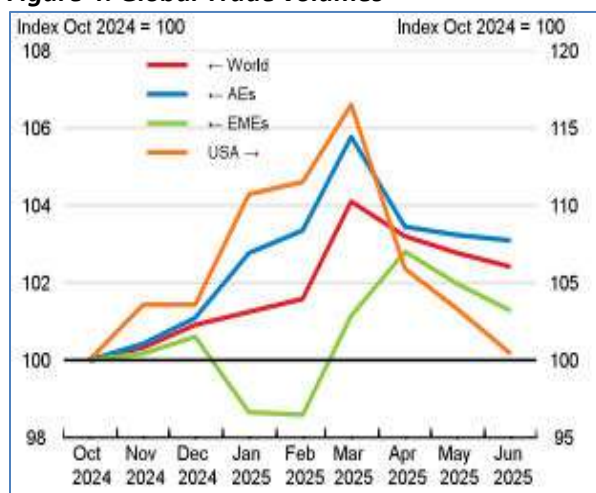
Global Trade

Global merchandise trade grew rapidly in the first half of 2025, partly influenced by the spike in goods shipments to the United States. This was particularly evident prior to April and was accompanied by a rise in inventory-to-sales ratios at US retailers.

Trade continued to expand steadily in advanced Asian economies in the second quarter, as well as in emerging-market economies in both Asia and Eastern Europe, but import volumes declined sharply in the United States and exports dropped in Canada and Latin America.

Bilateral trade between China and the United States has declined sharply in recent months. Recent high-frequency global trade indicators have been mixed, with signs that container port traffic, air freight and passenger traffic have all moderated over the summer.

Figure 4: Global Trade volumes



Source- OECD

2. AI to boost trade by nearly 40% by 2040- World Trade Report 2025

The 2025 edition of the World Trade Report reveals that, with the right enabling policies, artificial intelligence (AI) could boost the value of cross-border flows of goods and services by nearly 40% by 2040 thanks to productivity gains and lower trade costs.

According to the report, AI could lead to significant increases in trade and GDP by 2040, with global trade projected to rise by 34-37% across different scenarios based on different degrees of policy and technological catch-up between low-, middle- and high-income economies. Global GDP could meanwhile see a 12-13% increase across different scenarios. Trade, in turn, can be a powerful enabler of inclusive AI-supported growth by helping economies access AI-enabling goods, such as raw materials, semiconductors and intermediate inputs. The WTO report estimates that global trade in these goods totaled USD 2.3 trillion in 2023.

In a scenario in which low- and middle-income economies narrow their digital infrastructure gap with high-income economies by 50% and adopt AI more widely, these economies are projected to see incomes rising by 15% and 14% respectively.

The report also points to the need for open and predictable trade policies, noting that the number of quantitative restrictions applied to AI-related goods has climbed sharply over time, from 130 in 2012 to nearly 500 in 2024, driven by high- and upper middle-income economies. Access to AI-enabling goods remains uneven, with bound tariffs reaching up to 45% in some low-income economies.

Investing in education and training and deploying appropriate labour market policies can help avoid a widening of inequality within economies, the report adds.

The report emphasizes the role of the WTO in helping to deliver inclusive access to AI and its benefits. The organization provides a forum for WTO members to discuss AI-related trade measures, the report notes, highlighting that 80 specific trade concerns raised at the WTO have focused on AI. Dedicated discussions on AI and inclusive trade have also taken place in the context of the Work Programme on E-Commerce.

3. U.S. Federal Reserve cuts interest rate by 0.25 points

The Federal Reserve cut its key interest rate by a quarter point in September and projected it would do so twice more this year as concern grows at the central bank about the health of the nation's labour market.

The move is the Fed's first cut since December and lowered its short-term rate to about 4.1%, down from 4.3%. Federal officials, led by Chair Jerome Powell, had kept their rate unchanged this year as they evaluated the impact of tariffs, tighter immigration enforcement, and other Trump administration policies on inflation and the economy. Lower interest rates could reduce borrowing costs for mortgages, car loans, and business loans and boost growth and hiring.

The Committee seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run. In assessing the appropriate stance of monetary policy, the Committee will continue to monitor the implications of incoming information for the economic outlook. The Committee would be prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals. The Committee's assessments will consider a wide range of

information, including readings on labor market conditions, inflation pressures and inflation expectations, and financial and international developments.

4. Trade policy uncertainty looms over global markets- UNCTAD

Trade policy uncertainty has become a major source of global instability. Sudden shifts in tariffs, subsidies or restrictions fuel volatility.

Policy changes in one country can send shockwaves across the globe, disrupting suppliers, manufacturers and markets. The United States' recent policy shifts illustrate this. As the world's largest importer, even modest changes reshape supply chains and alter global trade flows.

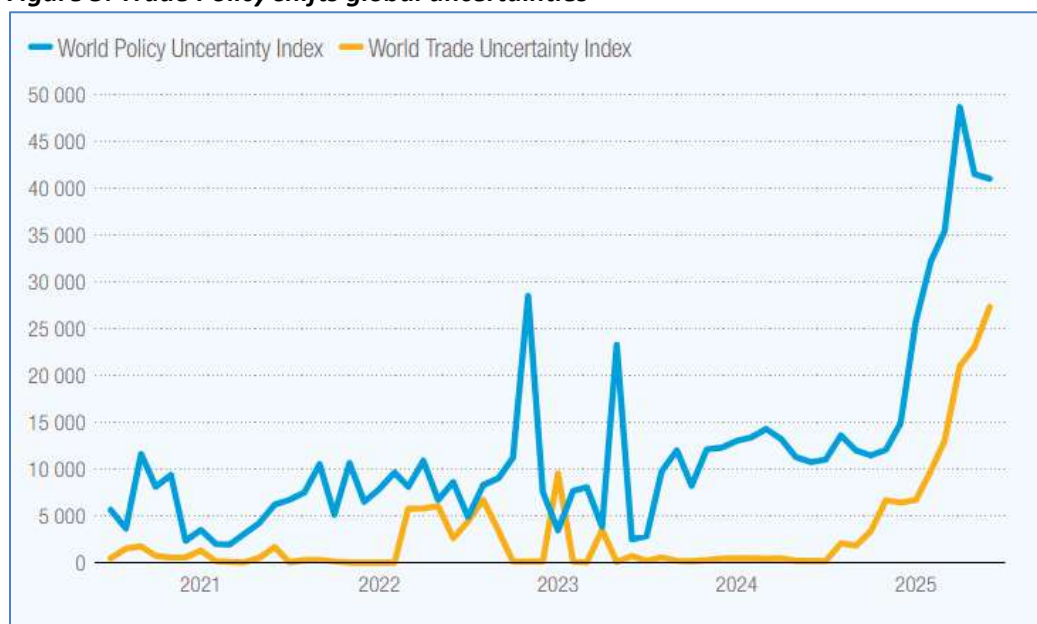
For decades, multilateral and regional agreements discouraged abrupt shifts and stabilized flows, with uncertainty mostly limited to episodes like Brexit, COVID-19 or US–China trade tensions. But in 2025, with weakened rules and fierce competition for critical raw materials, uncertainty has soared to record levels.

The cost of unpredictability

Trade policy uncertainty weighs on the global economy in three key ways.

- **Higher costs, slower growth.** Companies must carry excess inventory, hedge against losses and reconfigure supply chains, raising costs and discouraging investment.
- **Risks to financial stability.** Sudden shifts unsettle exchange rates and weaken investor confidence, capital flows and credit conditions.
- **Erosion of trust.** Weaker rules and unilateral actions fuel retaliation, making global cooperation harder.

Figure 5: Trade Policy shifts global uncertainties



Source- OECD

Uncertainty over when measures will apply often triggers pre-emptive reactions. Firms rush shipments before tariff deadlines – a practice known as “front-loading” – often switching to faster and more costly forms of transport. For example, air shipments to the US jumped nearly 10% the first quarter of 2025 compared to the same period a year before.

Overall imports to the US surged in the first quarter as goods were front-loaded, then dropped sharply in the second quarter, once tariffs took hold – showing that uncertainty itself can be more disruptive than tariffs.

Diversification key for resilience

Two factors can reduce vulnerabilities: **diversified export markets** and **participation in trade agreements**.

- **Firms with multiple markets** can redirect shipments when one closes, cushioning losses.
- **Countries with broader export bases** offset downturns in one region with gains elsewhere.
- **Trade agreements** provide rules and dispute settlement mechanisms, reducing shocks and encouraging long-term investment.

5. Indian Economy

India's economic growth

The National Statistics Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI) released the Quarterly Estimates of Gross Domestic Product (GDP) for the April-June Quarter (Q1) of Financial Year (FY) 2025-26. The key highlights are as follows: -

- Real GDP has been estimated to grow by 7.8% in Q1 of FY 2025-26 over the growth rate of 6.5% during Q1 of FY 2024-25.
- Nominal GDP has witnessed a growth rate of 8.8% in Q1 of FY 2025-26.
- Agriculture and Allied Sector has observed the Real GVA growth rate of 3.7%, as compared to the growth rate of 1.5% registered in Q1 of last financial year.
- Secondary Sectors, prominently Manufacturing (7.7%) and Construction (7.6%) Sector has registered above 7.5% growth rate at Constant Prices in this quarter.
- Mining & Quarrying (-3.1%) and Electricity, Gas, Water Supply and Other Utility Services Sector (0.5%) has seen moderated Real growth rate during Q1 of FY 2025-26.
- Tertiary Sector (9.3%) has recorded substantial growth rate at Constant Prices in Q1 of FY 2025-26, over the growth rate of 6.8% in Q1 of FY 2024-25.
- Government Final Consumption Expenditure (GFCE) has bounced back, registering 9.7% growth rate in Nominal terms during Q1 of FY 2025-26, over the growth rate of 4.0% in Q1 of FY 2024-25

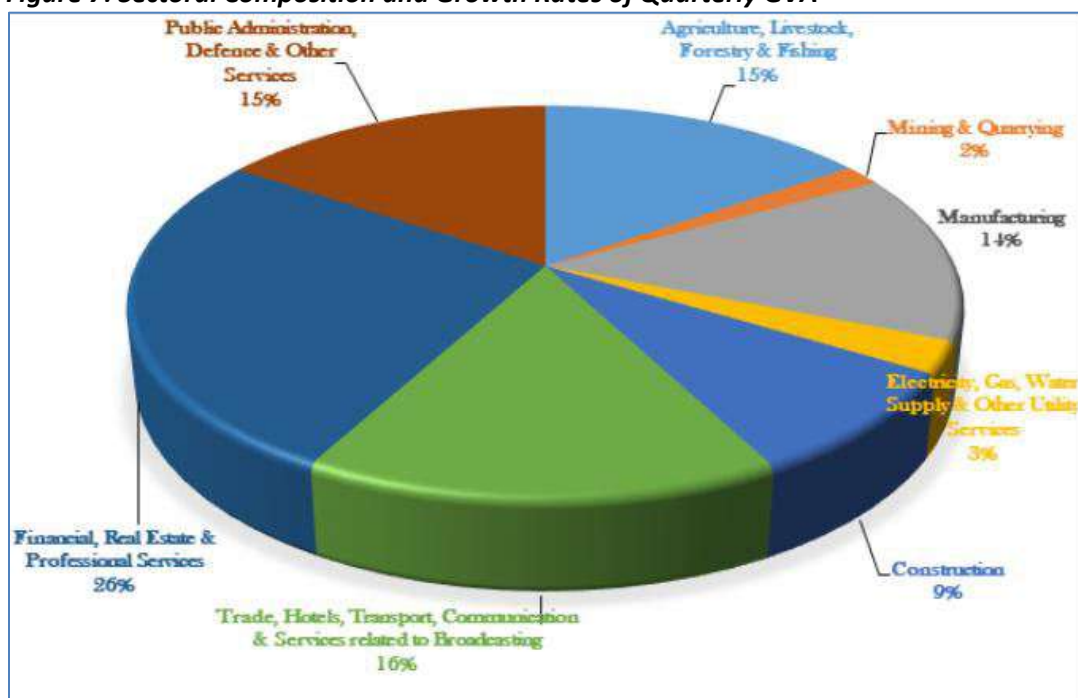
- Real Private Final Consumption Expenditure (PFCE) has reported 7.0% growth rate during Q1 of FY 2025-26 as compared to the 8.3% growth rate in the corresponding period of previous financial year.
- Gross Fixed Capital Formation (GFCF) has recorded 7.8% growth rate at Constant Prices, over the growth rate of 6.7% in Q1 of FY 2024-25.

Figure 6: Quarterly Real GDP estimates (in Rs. Lakh crores) and y-o-y growth rates (%)



Source- NSO, MoSPI

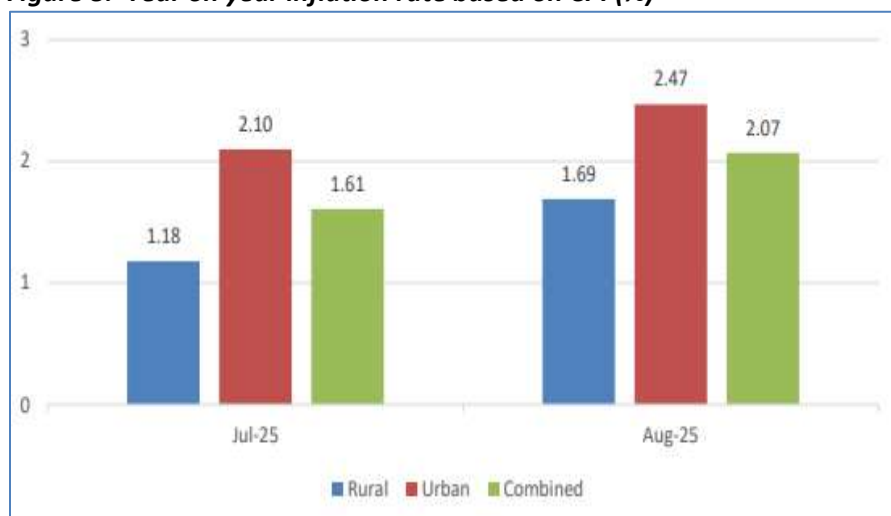
Figure 7: Sectoral Composition and Growth Rates of Quarterly GVA



Inflation in India

- Headline inflation-: Year-on-year inflation rate based on All India Consumer Price Index (CPI) for the month of August, 2025 over August, 2024 is 2.07% (Provisional). There is an increase of 46 basis points in headline inflation of August, 2025 in comparison to July, 2025.

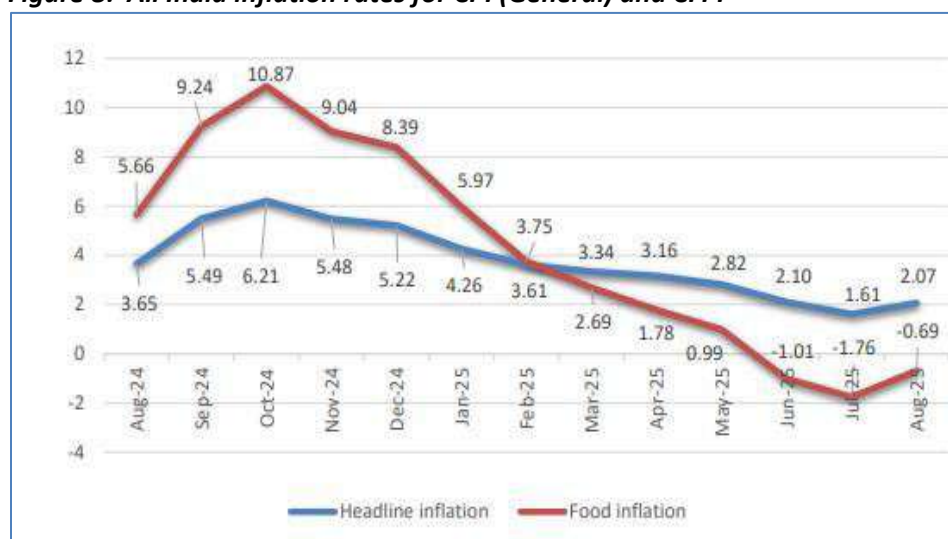
Figure 8: Year on year inflation rate based on CPI (%)



Source- NSO

- Food Inflation: Year-on-year inflation rate based on All India Consumer Food Price Index (CFPI) for the month of August, 2025 over August, 2024 is -0.69% (Provisional). Corresponding inflation rates for rural and urban are -0.70% and -0.58%, respectively. All India inflation rates for CPI (General) and CFPI over the last 13 months are shown below. An increase of 107 basis points is observed in food inflation in August, 2025 in comparison to July, 2025.

Figure 8: All India inflation rates for CPI (General) and CFPI

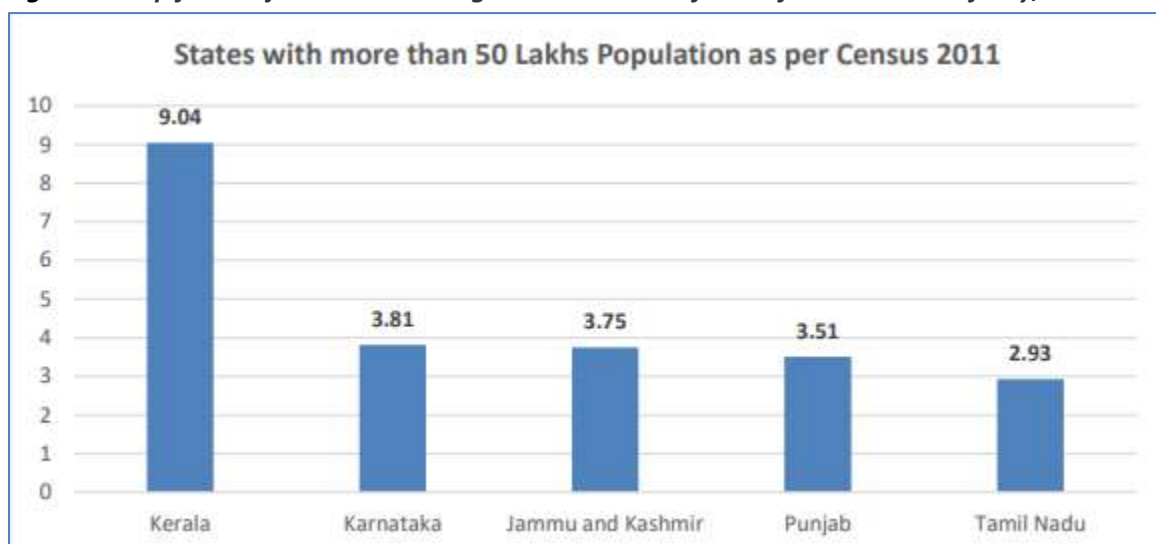


Source- NSO

An increase in headline inflation and food inflation during the month of August, 2025 is mainly attributed to increase in inflation of Vegetables, Meat and fish, Oil and fats, Personal care and affects, Egg etc.

- Rural Inflation:** An increase in headline and food inflation in rural sector observed in August, 2025. The headline inflation is 1.69% (Provisional) in August, 2025 while the same was 1.18% in July, 2025. The CFPI based food inflation in rural sector is observed as -0.70% (Provisional) in August, 2025 in comparison to -1.74% in July, 2025.
- Urban Inflation:** An increase from 2.10% in July, 2025 to 2.47% (Provisional) in August, 2025 is observed in headline inflation of urban sector. Increase is also observed in food inflation from -1.90% in July, 2025 to -0.58% (Provisional) in August, 2025.
- Housing Inflation:** Year-on-year Housing inflation rate for the month of August, 2025 is 3.09% (Provisional). Corresponding inflation rate for the month of July, 2025 was 3.17%. The housing index is compiled for urban sector only.
- Fuel & light:** Year-on-year Fuel & light inflation rate for the month of August, 2025 is 2.43% (Provisional). Corresponding inflation rate for the month of July, 2025 was 2.67%. It is combined inflation rate for both rural and urban sector.
- Top five major states with high Year on Year inflation for the month of August, 2025 are shown in the graph below.**

Figure 9: Top five major states with high Year on Year inflation for the month of July, 2025

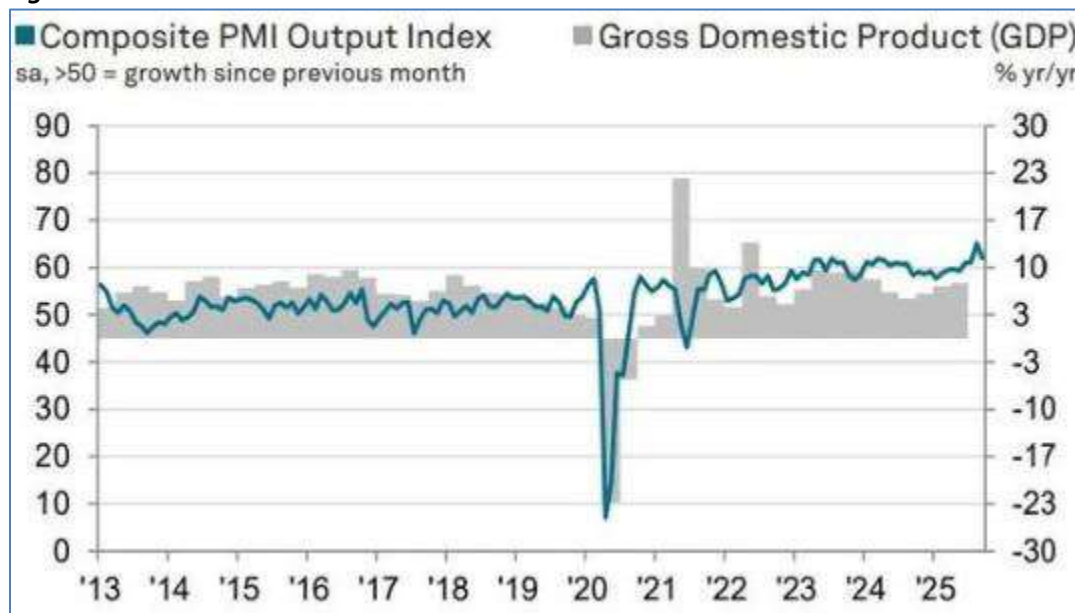


Source- NSO

Manufacturing PMI – India

- The HSBC Flash India Composite Output Index, which measures the combined performance of India's manufacturing and service sectors, fell to 61.9 in September from 63.2 in August, marking a modest slowdown but still indicating a sharp rate of expansion. This was the second-best reading in over two years. Growth in factory output outpaced that of services, although the pace of increase moderated across both sectors.

Figure 10: India PMI Index



Source- HSBC, S&P Global

India's external position

India's forex reserves

- India's foreign exchange reserves rose by USD 4.698 billion to USD 702.966 billion in the week ending September 12, according to the Reserve Bank of India's latest Weekly Statistical Supplement. This marks the third consecutive weekly increase, with the reserves crossing the much-awaited USD 700 billion mark.
- The RBI data showed that foreign currency assets (FCA), the largest component of forex reserves, climbed to USD 587.014 billion, up by USD 2.537 billion. Gold reserves also surged, rising by USD 2.12 billion to reach USD 92.419 billion.
- According to RBI Governor, India's foreign exchange holdings are now sufficient to cover 11 months of imports.

- Special Drawing Rights (SDRs) rose by \$33 million to \$18.8 billion. India's reserve position with the International Monetary Fund (IMF) also increased by \$9 million to \$4.7 billion in the reporting week.

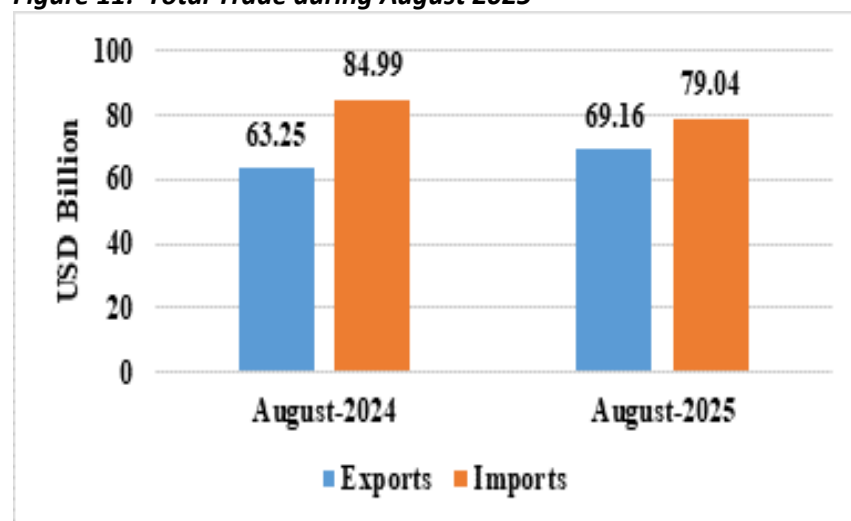
India's foreign trade position

- India's total exports (Merchandise and Services combined) for August 2025 is estimated at US\$ 69.16 Billion, registering a growth of 9.34 percent vis-à-vis August 2024.
- Total imports (Merchandise and Services combined) for August 2025* is estimated at US\$ 79.04 Billion, registering a negative growth of (-) 7 percent vis-à-vis August 2024. Table 1: Trade during July 2025.

		August 2025 (USD Billion)	August 2024 (USD Billion)
Merchandise	Exports	35.10	32.89
	Imports	61.59	68.53
Services	Exports	34.06	30.36
	Imports	17.45	16.46
Total Trade (Merchandise + Services)	Exports	69.16	63.25
	Imports	79.04	84.99
	Trade Balance	-9.88	-21.73

Source- Ministry of Commerce & Industry

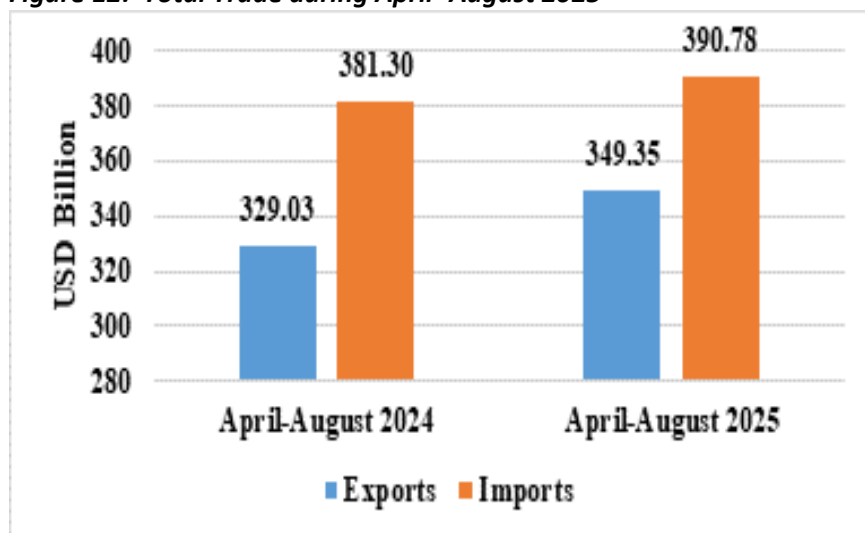
Figure 11: Total Trade during August 2025



Source- RBI

India's total exports during April- August 2025 is estimated at US\$ 349.35 Billion registering a growth of 6.18 percent. Total imports during April- August 2025 is estimated at US\$ 390.78 Billion registering a growth of 2.49 percent.

Figure 12: Total Trade during April- August 2025



Source- RBI

- Exports of Other Cereals (89.69%), Electronic Goods (25.93%), Mica, Coal & Other Ores, Minerals Including Processed Minerals (24.57%), Tea (20.52%), Meat, Dairy & Poultry Products (17.69%), Gems & Jewellery (15.57%), Rice (11.94%), Ceramic Products & Glassware (11.4%), Marine Products (7.87%), Cereal Preparations & Miscellaneous Processed Items (7.3%), Drugs & Pharmaceuticals (6.94%), Petroleum Products (6.54%), Fruits & Vegetables (5.77%), Engineering Goods (4.91%), Organic & Inorganic Chemicals (3.76%), Oil Seeds (3.62%), Spices (0.52%) and Leather & Leather Products (0.14%) record positive growth during August 2025 over the corresponding month of last year.
- Imports of Project Goods (-90.63%), Pulses (-64.14%), Silver (-59.67%), Gold (-56.67%), Newsprint (-35.28%), Leather & Leather Products (-27.04%), Dyeing/Tanning/Colouring Mtrls. (-26.84%), Transport Equipment (-26.54%), Coal, Coke & Briquettes, Etc. (-26.2%), Wood & Wood Products (-14.46%), Iron & Steel (-10.98%), Artificial Resins, Plastic Materials, Etc. (-9.69%), Organic & Inorganic Chemicals (-5.19%), Chemical Material & Products (-3.73%), Pulp And Waste Paper (-3.25%) and Textile Yarn Fabric, Made-Up Articles (-0.6%) record negative growth during August 2025 over the corresponding month of last year.
- Services exports is estimated to grow by 10.57 percent during April-August 2025 over April-August 2024.

- Top 5 export destinations, in terms of change in value, exhibiting growth in August 2025 vis a vis August 2024 are U Arab Emts (23.42%), U S A (7.15%), Netherland (17.87%), Hong Kong (62.46%) and China P Rp (22.38%).
- Top 5 export destinations, in terms of change in value, exhibiting growth in April-August 2025 vis a vis April-August 2024 are U S A (18.06%), China P Rp (19.82%), U Arab Emts (6.53%), Hong Kong (26.19%) and Germany (11.73%).
- Top 5 import sources, in terms of change in value, exhibiting growth in August 2025 vis a vis August 2024 are Russia (21.7%), Saudi Arab (38.43%), Ireland (150.15%), Iraq (8.85%) and Qatar (15.25%).
- Top 5 import sources, in terms of change in value, exhibiting growth in April-August 2025 vis a vis April-August 2024 are China P Rp (10.19%), Ireland (266.67%), U Arab Emts (9.18%), Hong Kong (24.05%) and U S A (8.54%).

6. S&P retains India's GDP growth forecast at 6.5% on strong domestic demand

S&P Global Ratings retained India's GDP growth forecast at 6.5% in the current fiscal, citing strong domestic demand amid a largely benign monsoon. S&P also said it expects a 25-bps rate cut by the RBI this fiscal as it revised its inflation forecast down to 3.2% for this fiscal year.

In its Economic Outlook Asia-Pacific Q4 2025: Growth to Ease on External Strain report, S&P said that across the region, relatively resilient domestic demand should dampen the impact from stronger external headwinds following the increase in US import tariffs and slower global growth. U.S. tariffs on imports from different Asian economies will shape both their export outlook and their role in regional supply chains.

7. OECD raises India's growth outlook to 6.7% in 2025 over domestic demand

The Organisation for Economic Cooperation and Development (OECD) raised India's GDP growth by 40 bps to 6.7 per cent in 2025 from its earlier projection of 6.3 per cent in June, driven by strong domestic demand and robust GST reforms. In India, higher tariff rates will weigh on the export sector, but overall activity is anticipated to be supported by monetary and fiscal policy easing, including the reform to the Goods and Services Tax, with growth projected to be 6.7% in 2025 and 6.2% in 2026.

India's gross domestic product (GDP) surged to a five-quarter high of 7.8% in April-June period. To spur consumption, the GST Council approved a two-slab structure (5% and 18%) to reduce tax rates on household items, while in February the government announced that incomes up to Rs 12 lakh would be exempted from income tax.

Figure 13: GDP growth projection (y-o-y) in %



8. IPRS 3.0 launched to benchmark industrial parks and boost Make in India initiative- Ministry of Commerce and Industry

On the decade-long celebrations of “Make in India,” the Union Minister of Commerce and Industry, Shri Piyush Goyal, launched the Industrial Park Rating System (IPRS) 3.0 in New Delhi. Developed by the Department for Promotion of Industry and Internal Trade (DPIIT) with support from the Asian Development Bank (ADB), the initiative aims to further strengthen India’s industrial ecosystem and enhance the competitiveness of industrial infrastructure.

Shri Goyal highlighted that the Government is actively developing 20 plug-and-play industrial parks and smart cities under NICDC, with four already completed, four under active construction, and the remaining at various stages of bidding and tendering. He added that the launch of IPRS 3.0 will help assess and benchmark facilities, infrastructure, and competitiveness of industrial parks across the country. The initiative will provide stakeholders with reliable data, encourage best practices, and support the creation of world-class infrastructure, thereby strengthening the Make in India programme and enhancing India’s global competitiveness.

Building on the pilot phase in 2018 and IPRS 2.0 in 2021, the third edition introduces an expanded framework with new parameters, including sustainability, green infrastructure, logistics connectivity, digitalization, skill linkages, and enhanced tenant feedback.

Under IPRS 3.0, industrial parks will be benchmarked and categorized as Leaders, Challengers, and Aspirers based on their performance across key indicators. This will provide investors with transparent

and credible information, foster healthy competition among States and Union Territories, and guide policymakers in designing targeted interventions.

For States and UTs, the initiative offers an opportunity to showcase best-performing parks, identify gaps for improvement, attract investments, generate employment, and strengthen their industrial ecosystem. The exercise is expected to make India a more sustainable, inclusive, and globally competitive investment destination.

9. FDI into India in July at 50-month high of \$11.11 billion

Foreign Direct Investment (FDI) into India had risen to the highest in over four years in July, according to data released by the Reserve Bank of India (RBI). At \$11.11 billion, the gross FDI inflow in July was the highest since May 2021, when \$12.32 billion had come into the country on a gross basis.

In June, gross FDI inflows into India stood at \$9.57 billion, while the figure for July 2024, at \$5.54 billion, was half the latest number. Singapore, followed by the Netherlands, Mauritius, the US, and the UAE, together accounted for more than three-fourth of total inflows. Manufacturing and services including communication, computer and business services were the top recipient sectors.

On a net basis, \$5.05 billion came into India in July compared to \$2.51 billion in June and an outflow of \$2.69 billion a year ago. Net FDI is calculated after adjusting for investments that are repatriated by foreign companies and overseas investments made by Indian companies.

Lessons from Economics

Inclusive Growth

The Organization for Economic Co-operation and Development (OECD) defines inclusive growth as economic growth that is distributed across society in a fair manner and creates opportunities for all. The pathway to achieve economic growth may include mediums like skill development, technological advancements, financial inclusion, and economic growth. The bottlenecks in achieving an inclusive society may include factors like agricultural backwardness, unemployment, regional disparities, and poverty.

According to a report by McKinsey, it is almost impossible to ensure economic mobility and equitable distribution of resources without complementing the same with an increase in the overall size of the economy. Hence, economic development and inclusivity through access to resources go hand in hand.

Importance of Inclusive growth

- **Reduces poverty and inequality.** Inclusive growth provides opportunities for marginalized and low-income individuals to access formal financial services, such as savings, credit, and insurance. By empowering them with the tools to manage their finances financial inclusion can help lift people out of poverty and reduce economic disparities.
- **Promotes small businesses.** Small businesses often face challenges in accessing credit from traditional banking sources. Inclusive growth through innovative lending models and online platforms can provide much-needed funding for entrepreneurs to grow their businesses.
- **Empowers otherwise marginalized demographics.** For example, initiatives targeted at women can promote gender equality and women's economic empowerment. By providing access to financial services, women gain more control over their finances, which can lead to improved educational opportunities, better health outcomes, and increased decision-making power within households.
- **Promotes innovation.** Inclusive growth drives innovation, leading to the development of new technologies that cater to the needs of underserved populations. These innovations can benefit the broader financial ecosystem and lead to advancements in financial services.
- **Foster digital inclusion.** As technology plays a significant role, promoting access to digital financial services also contributes to digital inclusion, ensuring that more people can participate in the digital economy.
- **Foster Entrepreneurship:** Implement programs like Start-Up India and provide credit linkages to encourage entrepreneurship among women and disadvantaged groups, generating inclusive employment.

Inclusive Growth Index (IGI)- UNCTAD

The UNCTAD's Inclusive Growth Index (IGI) comprehensively measures a country's economic well-being and inclusivity across four categories: economy, living conditions, equality, and the environment. The IGI summarizes 27 indicators organized in four categories into a single indicator, thereby offering a multidimensional perspective on growth that goes beyond traditional economic metrics.

- The first category, economy, encompasses economies' GDP, national income, power consumption, employment, and trade using traditional economic indicators.
- The second category, living conditions, focuses on social and health conditions as well as logistics and finance, using indicators such as the under-five mortality rate, school enrollment, coverage of essential health services and percentage of people using safely managed drinking water services.
- The third category, equality, aims to measure equality using indicators such as the income concentration ratio, gender parity in school enrollment, ratio of female to male employment rate, difference in female to male labor force participation rate, and others.
- The fourth category, environment, focuses on natural capital protection and energy intensity using indicators such as carbon dioxide emissions, efficiency of water use and percentage of terrestrial protected areas.

The IGI is calculated as a geometric average of the indices for the four categories.

The index covers 134 countries representing 95% of the world's population and 97% of global GDP. Luxembourg, Norway, and Denmark continue to lead, with only two developing economies – Singapore and the United Arab Emirates (UAE) – in the top 30. Developing economies show progress. Singapore, for example, outperforms many developed economies in living conditions, scoring 97.1. Similarly, Chile, China, Thailand, the UAE, and Uruguay all score above 80 – much closer to the developed economy median (89.3) than the Global South's (46.4).

On equality, developing countries like the UEA (91.4), Belarus (87.4), Azerbaijan (73.7) and China (71.4) surpass or match the developed economy median (73.5), far exceeding the 37.4 median for developing economies.

India's story on Inclusive growth

The Union Budget's four priorities for growth: PM Gati Shakti, Inclusive Development, Productivity Enhancement & Investment, Sunrise Opportunities, Energy Transition, and Climate Action and Financing of Investment – are comprehensive and inclusive, touching on numerous sectors of health, human capital development, infrastructure, and economic growth.

It lays the foundation for Amrit Kaal and the next chapter of India's growth story, which entails increasing rural inclusion, as well as the development of a healthy and sustainable future for its residents and cities, large and small.

Oil Market

Crude oil price – Monthly Review

The oil market is currently being influenced by a variety of competing factors. On one hand, the risk of supply disruptions due to newly imposed sanctions on Russia and Iran looms large. On the other, these concerns are tempered by increased supply from OPEC+ and the possibility of growing global oil inventories. Meanwhile, China continues to accumulate crude oil reserves, contributing to a slight backwardation in Brent crude futures.

The tightened sanctions on Iran and Russia have had only a limited effect on global supply and trade flows, despite a downward trend in exports from both countries in recent months. However, the European Union's impending ban—effective from the beginning of 2026—on imports of refined products derived from Russian crude could potentially reduce output and significantly alter trade routes in the near future.

Oil prices remained relatively stable following OPEC+'s decision on 7 September to begin unwinding the second tranche of supply cuts that have been in effect since April 2023. The group of eight OPEC+ member countries plans to increase its production target by 137,000 barrels per day (kb/d) in October. Should this pace continue, it would take approximately 12 months to fully phase out the 1.65 million barrels per day (mb/d) of cuts, leaving the broader 22-member alliance with 2 mb/d of supply reductions still in place.

The actual increase in supply for October is expected to fall short of the targeted rise, as Iraq, the UAE, Kuwait, and Kazakhstan are already producing 1.1 million barrels per day (mb/d) above their assigned quotas. Additionally, other producers, including Russia, are encountering capacity constraints, according to our estimates. As of September, OPEC+ has increased actual crude output by 1.5 mb/d since the first quarter of 2025, which remains significantly below the announced target of 2.5 mb/d. The largest production gains have been contributed by Saudi Arabia and other key Middle Eastern producers. However, tanker tracking data suggest that the majority of the additional volumes have been absorbed domestically through increased regional refinery activity and power generation, rather than being exported from the region.

Hedge funds and other money managers turned increasingly bearish on crude oil futures in August, with combined NYMEX and ICE WTI contracts moving net short during the last three weeks of the month. Speculators had been steadily reducing bullish bets in WTI since mid-July, fuelling uncertainty among market participants, increasing volatility and exerting downward pressure on prices. Money managers also cut bullish positions in ICE Brent, selling an equivalent of 55 mb in August.

Premiums of light sweet crude over medium sour grades narrowed in Asia and on the US Gulf Coast (USGC), in line with a sharp decline in the Brent–Dubai spread, which moved into a deep discount. This reflected a stronger sour crude market amid concerns over supply disruptions to medium sour grades due to sanctions and geopolitical developments. However, though sweet–sour crude differentials in Europe widened slightly, they remained relatively low.

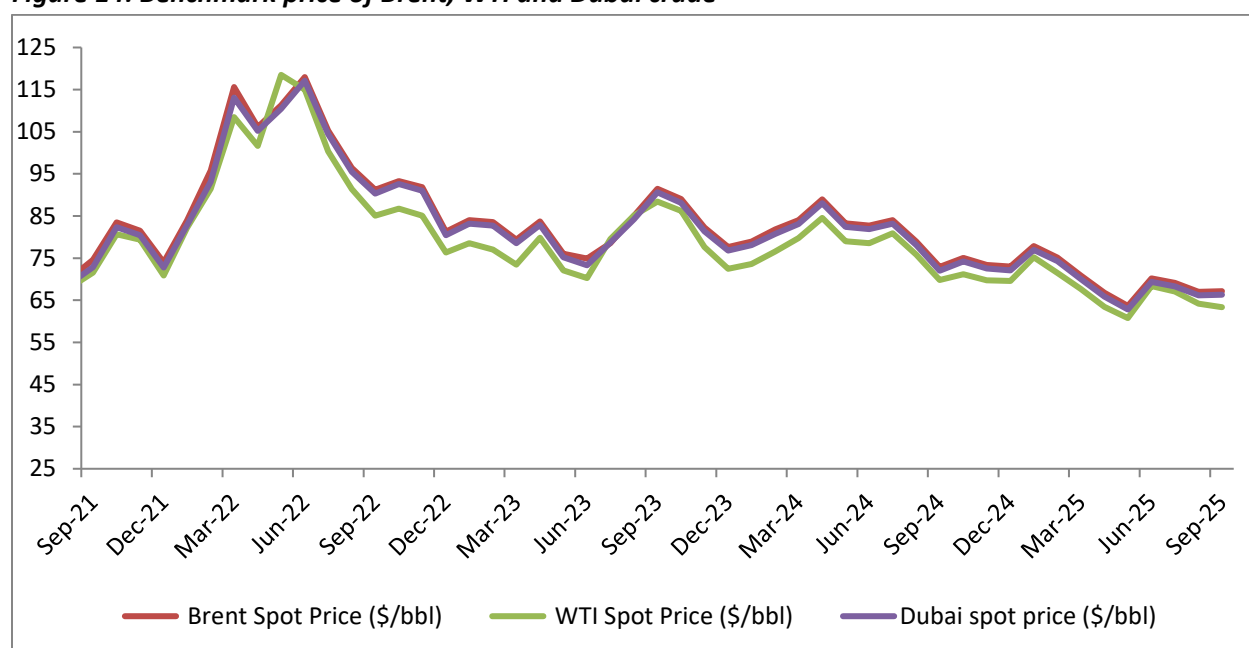
Crude spot prices averaged lower in August, pressured mainly by heavy selling activity in the oil futures markets, which weighed on sentiment. Weaker refining margins in Europe and Asia added to the downward pressure. A decline in sour crude benchmarks in the East of Suez market was limited compared

with light sweet crudes in the Atlantic Basin, as medium sour grades continued to benefit from strong demand from Asia-Pacific refiners. Spot prices also maintained at a firm premium against futures in August, reflecting supportive short-term supply/demand fundamentals, despite seasonal demand softening.

In August, the OPEC Reference Basket (ORB) value dropped by \$1.24, m-o-m, to settle at \$69.73/b. All ORB component-related crude benchmarks dropped, which largely offset an increase in most official selling prices for the Asian market, particularly for medium sour grades.

Brent crude ranged an average to \$67.36 a barrel and WTI ranged to \$63.52 per barrel in the month of September 2025.

Figure 14: Benchmark price of Brent, WTI and Dubai crude



Source - World Bank

- Brent crude price averaged \$67.36 per bbl in September 2025, up by 0.5% on a month on month (MoM) and down by 7.6% on year on year (YoY) basis, respectively.
- WTI crude price averaged \$63.52 per bbl in September 2025, down by 1.0% on a month on month (MoM) and by 9.0% on year on year (YoY) basis, respectively.
- Dubai crude price averaged \$66.50 per bbl in September 2025, up by 0.5% on a month on month (MoM) and down by 7.7% on year on year (YoY) basis, respectively.

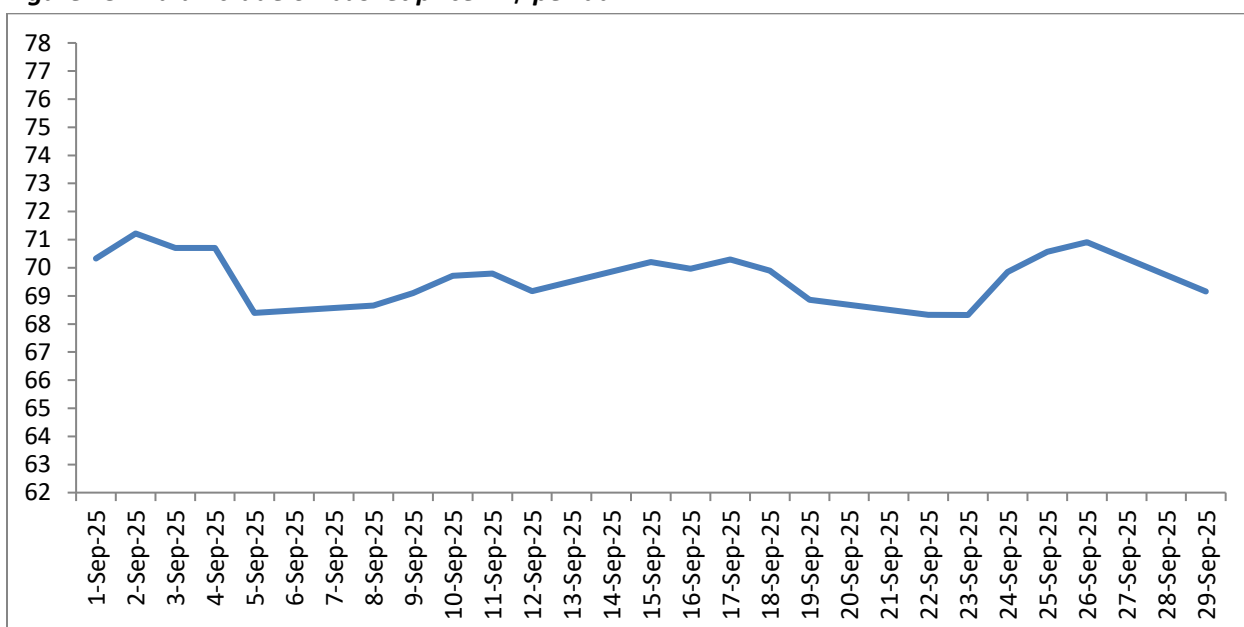
Table 2: Crude oil price in September, 2025

Crude oil	Price (\$/bbl)	MoM (%) change	YoY (%) change
Brent	67.36	0.5%	-7.6%
WTI	63.52	-1.0%	-9.0%
Dubai	66.50	0.5%	-7.7%

Source - World Bank

Indian Basket Crude oil price

Figure 15: Indian crude oil basket price in \$ per bbl



Source - PPAC

- Indian crude basket price averaged \$69.64 per barrel in September 2025, up by 0.8% on Month on Month (M-o-M) and down by 5.5% on a year on year (Y-o-Y) basis, respectively.

Oil production situation

- Non-DoC liquids production (i.e. liquids supply from countries not participating in the Declaration of Cooperation) is forecasted to grow by about 0.8 mb/d, y-o-y, in 2025.
- The main growth drivers are expected to be the US, Brazil, Canada and Argentina. The non-DoC liquids production growth forecast for 2026 is also unchanged at 0.6 mb/d, y-o-y, with Brazil, Canada, the US, and Argentina as the main growth drivers. Natural gas liquids (NGLs) and non-conventional liquids from countries participating in the DoC are forecast to grow by 0.1 mb/d, y-o-y, in 2025, averaging 8.7 mb/d, followed by a similar increase of about 0.1 mb/d, y-o-y, in 2026, to average 8.8 mb/d. Crude oil production by countries participating in the DoC increased by 509 tb/d in August, m-o-m, to average about 42.40 mb/d, according to available secondary sources.

Table 3: Non-DoC liquids production in 2025, mb/d

Non-OPEC liquids production	2024	1Q25	2Q25	3Q25	4Q25	2025
Americas	27.71	28.06	28.31	28.11	28.08	28.14
of which US	21.76	21.82	22.37	22.12	21.96	22.07
Europe	3.53	3.59	3.53	3.55	3.61	3.57
Asia Pacific	0.44	0.40	0.44	0.43	0.42	0.42
Total OECD	31.68	32.05	32.28	32.09	32.12	32.13
China	4.56	4.69	4.66	4.50	4.53	4.59
India	0.81	0.83	0.82	0.82	0.80	0.82
Other Asia	1.61	1.63	1.63	1.57	1.57	1.60
Latin America	7.23	7.42	7.59	7.50	7.65	7.54
Middle East	1.99	2.01	2.01	2.00	2.00	2.01
Africa	2.33	2.32	2.25	2.29	2.29	2.29
Other Eurasia	0.37	0.36	0.35	0.37	0.36	0.36
Other Europe	0.10	0.09	1.10	0.10	0.10	0.10
Total Non-OECD	19.00	19.35	19.42	19.15	19.31	19.31
Total Non-DoC production	50.58	51.40	51.70	51.24	51.43	51.44
Processing gains	2.52	2.57	2.57	2.57	2.57	2.57
Total Non-DoC liquids production	53.20	53.97	54.27	53.81	54.00	54.01

Source - OPEC monthly report, September 2025

- From the above table, it can be inferred, that the total non-DoC liquids production is expected to reach 54.01 mb/d by 2025.
- The non-DoC liquids supply (i.e. liquids supply from countries not participating in the Declaration of Cooperation) is forecasted to grow by about 0.8 mb/d, y-o-y in 2025.

Oil demand situation

- The global oil demand growth forecast for 2025 remains at about 1.3 mb/d, y-o-y, unchanged from last month's assessment. In the OECD, oil demand is forecast to grow by about 0.1 mb/d in 2025, while oil demand in the non-OECD is forecast to grow by about 1.2 mb/d.
- In 2026, global oil demand is forecast to grow by about 1.4 mb/d, y-o-y, also unchanged from last month's assessment. The OECD is projected to grow by about 0.2 mb/d, y-o-y, while the non-OECD is expected to expand by about 1.2 mb/d, y-o-y.

Table 4: World Oil demand, mb/d

	2024	1Q25	2Q25	3Q25	4Q25	2025	Growth	%
Total OECD	45.67	45.15	45.62	46.32	46.13	45.81	0.14	0.31
<i>~ of which US</i>	20.42	20.42	20.48	20.67	20.72	20.57	0.15	0.73
Total Non-OECD	58.17	59.13	58.72	59.21	60.23	59.33	1.15	1.99
<i>~ of which India</i>	5.55	5.70	5.70	5.50	5.91	5.70	0.15	2.70
<i>~ of which China</i>	16.65	16.86	16.47	17.03	17.04	16.85	0.20	1.20
Total world	103.84	104.29	104.34	105.53	106.36	105.14	1.29	1.25

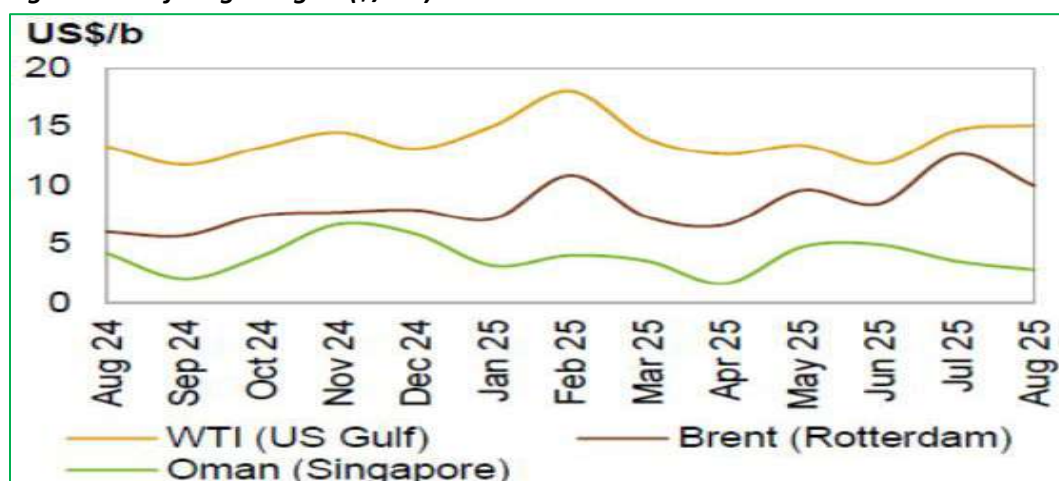
Source - OPEC monthly report, September 2025

Global petroleum product prices

USGC refining margins against WTI extended their upward trend to reach a 6-month high in August. Seasonal gasoline strength amid notable naphtha demand drove refining economics higher. The positive margin performance came against a backdrop of a significant improvement in USGC middle distillate balances after the historically low diesel inventory levels and diesel production constraints witnessed in previous months. This exerted downward pressure on diesel/gasoil prices and crack spreads. Higher refinery runs and higher product output weighed on middle distillate and residual fuel markets. Nevertheless, the gains recorded at the top section of the barrel outweighed the losses witnessed at the middle and bottom sections. According to preliminary August data, USGC refinery intake added 110 tb/d to the previous month's level, to average 17.35 mb/d. USGC margins against WTI averaged \$15.07/b, up by 42¢, m-o-m, and by \$1.80, y-o-y.

Rotterdam refinery margins against Brent declined following the robust performance registered in July. This was mainly a reflection of a sharp drop in gasoil crack spreads, while smaller, albeit significant losses linked to jet/kerosene and residual fuel also contributed to the downside. According to Platts data, as of 28 August, total Amsterdam-Rotterdam-Antwerp (ARA) product stocks were up by 2.3 mb (+5.7%) m-o-m at the end of the month, with the vast majority of the inventory rise, 2.6 mb (+114%), attributed to gasoil, following a 837 tb (-2.0%) total product decline in July. This suggests a significant m-o-m improvement in product availability in the region. Compared to last year, however, August total product ARA stocks were 3.7 mb (7.9%) lower, which suggests that the European product balance is shorter this year compared to the previous year.

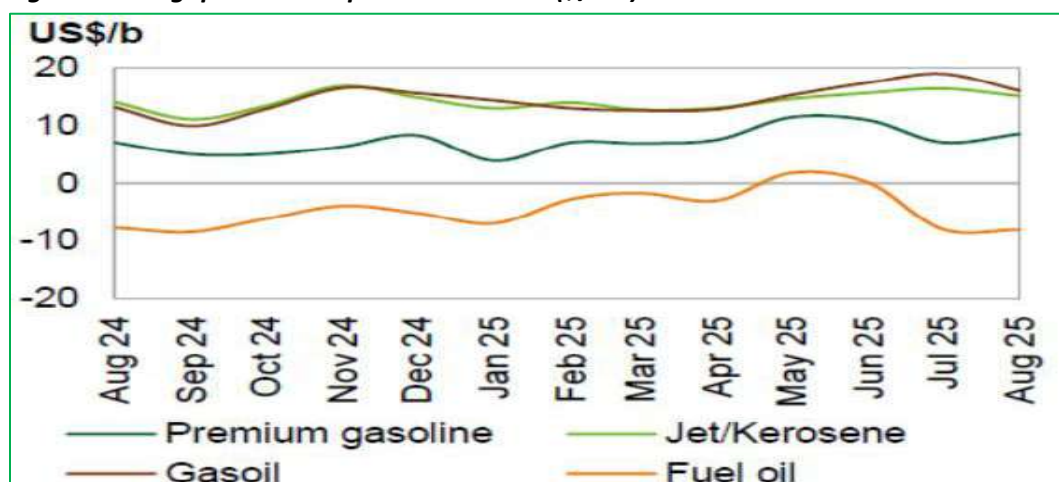
Figure 16: Refining Margins (\$/bbl)



Source - Argus and OPEC

The Southeast Asia gasoline 92 crack spread against Dubai rebounded following two consecutive monthly losses. Several gasoline-producing unit outages suppressed Chinese gasoline exports, and a late-summer demand uptick in several countries across the region provided support. The margin averaged \$8.53/b in August, up \$1.45, m-o-m, and \$1.48, y-o-y.

Figure 17: Singapore crack Spreads vs. Dubai (\$/bbl)



Source - Argus and OPEC

The Singapore gasoil crack spread reversed direction from the robust performance seen in the previous month, dropping back from the multi-month high reached in July. Nonetheless, gasoil crack spreads in absolute levels remained the top margin driver in August, closely followed by jet/kerosene. The middle distillate balance expansion in the northern hemisphere likely contributed to the pressure, limiting East-West gasoil deliveries due to softening buying interest and economics. The Singapore gasoil crack spread against Dubai averaged \$15.94/b, down \$2.96, m-o-m, but up \$2.85, y-o-y.

Table 5: Singapore FOB, refined product prices (\$/bbl) in August 2025

Singapore product prices	Price (\$/b)	MoM (%) change	YoY (%) change
Naphtha	62.71	-0.3%	-13.8%
Premium gasoline (unleaded 95)	80.11	0.7%	-9.9%
Regular gasoline (unleaded 92)	77.96	0.1%	-7.9%
Jet/Kerosene	84.46	-3.1%	-7.7%
Gasoil/Diesel (50 ppm)	86.09	-4.9%	-6.4%
Fuel oil (180 cst 2.0% S)	84.46	-4.4%	-6.4%
Fuel oil (380 cst 3.5% S)	61.34	-2.4%	-11.4%

Source - OPEC

Petroleum products consumption in India

Monthly Review:

- Overall consumption of all petroleum products in August 2025 with a volume of 18.73 MMT registered growth of 2.56% on volume of 18.26 MMT in August 2024.
- MS (Petrol) consumption during the month of August 2025 with a volume of 3.54 MMT recorded a growth of 5.48% on volume of 3.36 MMT in August 2024.
- HSD (Diesel) consumption during the month of August 2025 with a volume of 6.58 MMT recorded growth of 1.16% on volume of 6.50 MMT in the month of August 2024.
- LPG consumption during the month of August 2025 with a volume of 2.81 MMT registered a growth of 5.37% over the volume of 2.66 MMT in the month of August 2024.
- ATF consumption during August 2025 with a volume of 0.711 MMT registered de-growth of 2.88% over the volume of 0.732 MMT in August 2024.
- Bitumen consumption during August 2025 with a volume of 0.421 MMT registered growth of 47.12% over volume of 0.286 MMT in the month of August 2024.
- Kerosene consumption registered de-growth of 0.91% during the month of August 2025 as compared to August 2024.

Table 6: Petroleum products consumption in India, August 2025 and Year till Date (YTD)

Consumption of Petroleum Products (P)	Monthly			Year till Date	
	Consumption in '000 MT	MoM (%) change	YoY (%) change	Consumption in '000 MT	YoY (%) change
LPG	2,807	1.1%	5.4%	13,289	7.04%
Naphtha	1,107	10.6%	-4.3%	5,010	-12.12%
MS	3,544	1.5%	5.5%	17,791	6.52%
ATF	711	0.1%	-2.9%	3,698	1.27%
SKO	34	-5.5%	-0.9%	176	4.31%
HSD	6,576	-10.7%	1.2%	38,894	2.32%
LDO	80	-6.5%	0.7%	419	31.43%
Lubricants & Greases	365	-9.5%	6.9%	1,910	-1.72%
FO & LSHS	519	13.2%	5.9%	2,404	-11.46%
Bitumen	421	-8.1%	47.1%	3,279	2.05%
Petroleum coke	1,726	-4.3%	0.0%	8,710	-4.84%
Others	839	-0.2%	-5.9%	4,230	-25.65%
TOTAL	18,729	-3.6%	2.6%	99,809	0.13%

Source- PPAC

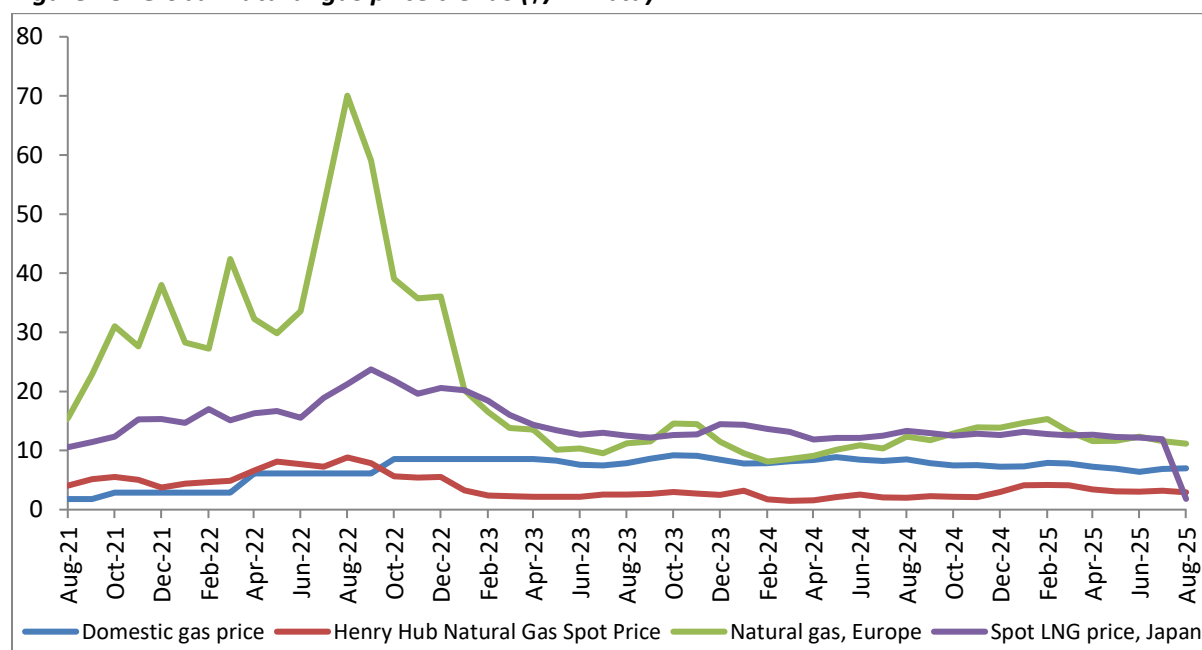
Year Till Date: 1st April 2025 – 31st March 2026

Natural Gas Market

Natural Gas Price – Monthly Review

- Natural gas spot prices at the US Henry Hub benchmark averaged \$2.91 per million British thermal units (MMBtu) in August 2025. Henry Hub's natural gas prices fell in August by 8.8%, m-o-m. They were under pressure from lower seasonal demand amid mild summer temperatures, which contributed to higher storage levels. According to data from the US Energy Information Administration (EIA), average weekly natural gas storage increased by 3.9%, m-o-m, in August. Strong LNG export volumes provided some support to prices in the period, which were up by 46.2%, y-o-y.
- Natural gas spot price at the Title Transfer Facility (TTF) in the Netherlands in Europe traded at an average of \$11.15 per MMBtu. The average Title Transfer Facility (TTF) declined for a second consecutive month, falling by 4.1%, m-o-m. High storage levels in the region kept the market well supplied and reduced market supply risk concerns. According to data from Gas Infrastructure Europe, EU storage levels rose to 77.7% as of the end of August, up from 68.6% in July, a 9.1 pp increase. Moreover, higher US LNG imports in the period offset Norwegian supply disruptions and kept a lid on the geopolitical risk premium. Prices were down by 9.9%, y-o-y.
- Japan Liquefied Natural Gas Import Price averaged at \$11.82 per MMBtu for August 2025. There is a change of -0.8% from last month and -11.3% 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\$ 6.50 per MMBTU. The price such arrived at will also have a floor of US\$4 per MMBTU. As per notification dated 31st March 2025, the APM gas price has been raised to US\$ 6.75 per MMBTU, up from US\$ 6.50 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. As per notification dated 30th September 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. Prices were 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. Accordingly, 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. Now, as per notification dated 31st March 2025, Gas price ceiling was further revised for the period 1st April, 2025 – 30th September, 2025 was notified as US\$10.04/MMBTU on Gross Calorific Value (GCV) basis.

Figure 18: Global natural gas price trends (\$/mmbtu)



Source - EIA, World Bank

Table 7: Gas price, August 2025

Natural Gas	Price (\$/MMBTU)	MoM (%) change	YoY (%) change
India, Domestic gas price (Sep'25)	6.99	-0.43%	-10.96%
India, Gas price ceiling – difficult areas (Apr-Sep'25)	10.04	-1.18%	1.72%
GIXI (Gas index of India) price*	11.6	-1%	-5%
Henry Hub	2.91	-9.1%	46.2%
Natural Gas, Europe	11.15	-4.0%	-9.9%
Liquefied Natural Gas, Japan	11.82	-0.8%	-11.3%

Source - EIA, PPAC, World Bank, IGX

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

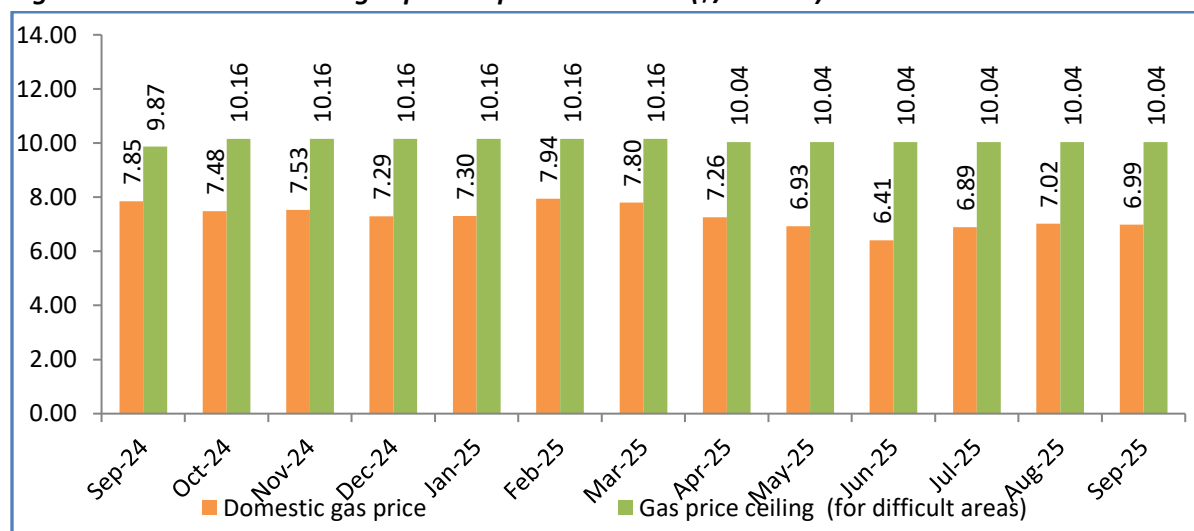
Table 8: Gas price, GCV Basis

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

Period	Domestic Gas calculated price in US\$/MMBTU	Gas price ceiling – difficult areas price in US\$/MMBTU
1-31 December 2023	8.47	9.96
1-31 January 2024	7.82	9.96
1-29 February 2024	7.85	9.96
1-31 March 2024	8.17	9.96
1-30 April 2024	8.38	9.87
1-31 May 2024	8.90	9.87
1-30 June 2024	8.44	9.87
1-31 July 2024	8.24	9.87
1-31 August 2024	8.51	9.87
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
1-31 January 2025	7.30	10.16
1-28 February 2025	7.94	10.16
1-31 March 2025	7.80	10.16
1-30 April 2025	7.26	10.04
1-31 May 2025	6.93	10.04
1-30 June 2025	6.41	10.04
1-31 July 2025	6.89	10.04
1-31 August 2025	7.02	10.04
1-30 September 2025	6.99	10.04

Source – PPAC

Figure 19: Domestic natural gas price September'24–25 (\$/mmbtu)



Source - PPAC

Indian Gas Market

- Gross production of natural gas for the month of August 2025 (P) was 2971 MMSCM which was lower by 2.5% compared with the corresponding month of the previous year.
- Total Import of LNG (Provisional) during the month of August 2025 (P) was 2819 MMSCM (lower by 7.8% over the corresponding month of the previous year).
- Natural Gas available for Sale during August 2025 (P) was 5304 MMSCM (P) (decrease of 5.1% over the corresponding month of the previous year).
- Total Gas Consumption Availability during August 2025 (P) was 5754 MMSCM (Provisional). Major consumers were Fertilizer (30%), City Gas Distribution (CGD) (23%), Power (11%), Refinery (8%) and Petrochemicals (6%).

Monthly Report on Natural gas production, imports, and consumption – August 2025

1. Domestic Natural Gas Gross Production:

Domestic natural gas gross production for the month of August 2025 was 2971 MMSCM (decrease of 2.5% over the corresponding month of the previous year).

Figure 20: Domestic natural gas Gross production (Qty in MMSCM)

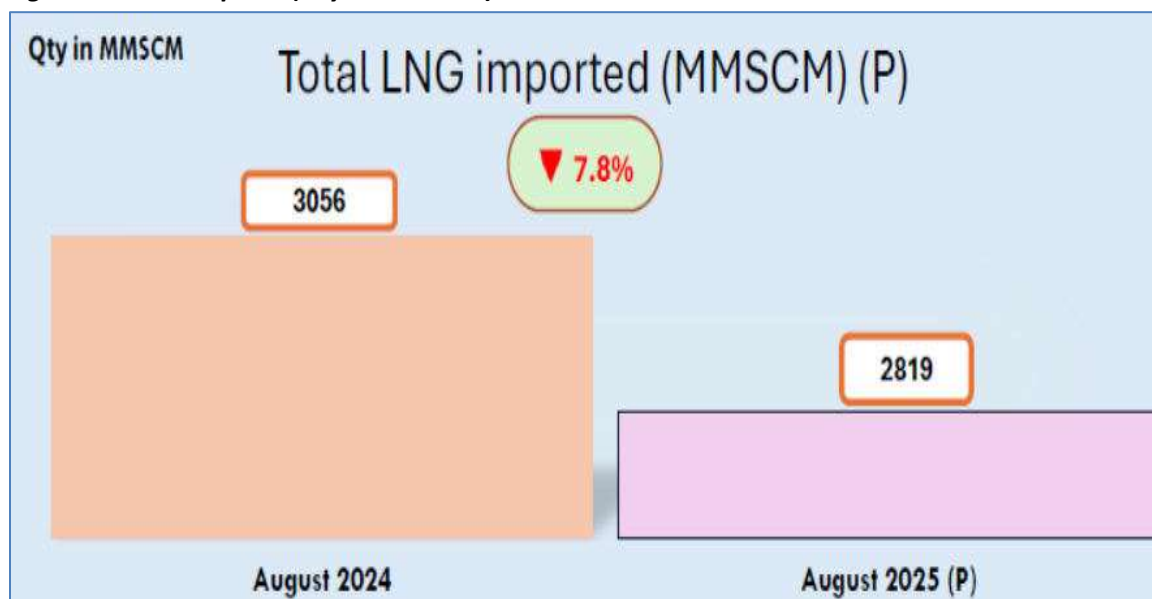


Source - PPAC

2. LNG imports:

Total import of LNG (provisional) during the month of August 2025 was 2819 MMSCM (P) (lower by 7.8% over the corresponding month of the previous year).

Figure 21: LNG imports (Qty in MMSCM)

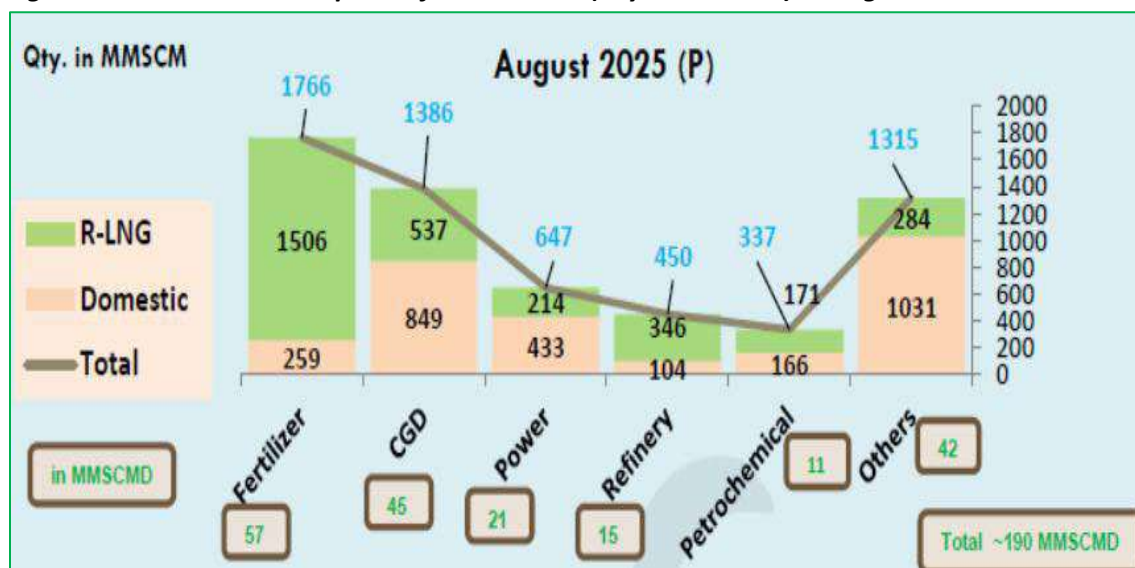


Source - PPAC

3. Sectoral Consumption of Natural Gas:

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

Figure 22: Sectoral Consumption of Natural Gas (Qty in MMSCM) in August 2025



Source - PPAC

Key developments in Oil & Gas sector

Monthly Production Report for August, 2025

1. Production of Crude Oil

Indigenous crude oil and condensate production during August 2025 was 2.4 MMT. Around 75.3% of production came from Nomination Fields, 13.7% from Pre-NELP Fields and 10.8% from NELP fields, during August 2025. There is a de-growth of 0.6% in crude oil and condensate production during August 2025 as compared with the corresponding period of the previous year.

2. Production of Natural Gas

Gross production of natural gas for the month of August 2025 (P) was 2971 MMSCM which was lower by 2.5% compared with the corresponding month of the previous year. The cumulative gross production of natural gas of 14725 MMSCM for the current financial year till August 2025 was lower by 3% compared with the corresponding period of the previous year.

3. Crude Oil Processed (Crude Throughput)

Total Crude oil processed during August 2025 was 22.3 MMT which is 3% higher than August 2024, where PSU/JV refiners processed 15 MMT and private refiners processed 7.3 MMT of crude oil. Total indigenous crude oil processed was 2.2 MMT and total Imported crude oil processed was 20.1 by all Indian refineries (PSU+JV+PVT). There was a growth of 1.8% in total crude oil processed in April-August 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 August 2025 which is 3.4% lower than August 2024. Out of 23.5 MMT, 23.2 MMT was from refinery production & 0.3 MMT was from fractionator. There was a growth of 0.3% in production of petroleum products in April-August FY 2025 – 26 as compared to same period of FY 2024 – 25. Out of total POL production, in August 2025, share of major products including HSD is 41.5%, MS 18.4%, Naphtha 6.2%, ATF 5.8%, Pet Coke 5%, LPG 4.5%, and rest is shared by Bitumen, FO/LSHS, LDO, Lubes & others.

Key Policy developments/Significant news in Energy sector

Government has approved release of 25 lakh additional LPG connections under Ujjwala

In a major step towards women empowerment, Government has approved the release of 25 lakh additional LPG connections under the Pradhan Mantri Ujjwala Yojana (PMUY) during the Financial Year 2025-26. Extending his greetings to women beneficiaries on this occasion, Prime Minister Shri Narendra Modi stated in a post on X, *“On the auspicious occasion of Navratri, I extend my best wishes to all mothers and sisters joining the Ujjwala family. This step not only brings them joy during this sacred festival but also strengthens our resolve towards women empowerment.”*

Announcing the decision, Union Minister of Petroleum and Natural Gas, Shri Hardeep Singh Puri, stated, *“With the onset of Navratri, the decision to provide 25 lakh deposit-free LPG connections under Ujjwala is yet another testimony of Prime Minister Shri Narendra Modi’s commitment to treat women with the same respect accorded to Goddess Durga. This strengthens our resolve for the dignity and empowerment of mothers and sisters. Ujjwala has emerged as one of the most impactful social welfare schemes in India—transforming kitchens, safeguarding health, and brightening the future of families across the country.”*

With this expansion, the total number of PMUY connections will rise to 10.58 crore. The Government has approved an expenditure of ₹676 crore for the release of these connections, which includes ₹512.5 crore for providing 25 lakh deposit-free connections at the rate of ₹2,050 per connection, ₹160 crore for targeted subsidy of ₹300 per 14.2 kg domestic LPG cylinder (for up to nine refills per year, proportionately pro-rated for 5 kg cylinders), and ₹3.5 crore towards project management expenses, transaction and SMS charges, Information, Education & Communication (IEC) activities, and administrative expenditure.

Under PMUY, beneficiaries receive a deposit-free LPG connection that covers the security deposit of cylinder, pressure regulator, suraksha hose, Domestic Gas Consumer Card (DGCC) booklet, and installation charges. In addition, the first refill and stove are also provided free of cost. Beneficiaries are not required to make any payment for the LPG connection, the first refill, or the stove, as these costs are borne by the Government of India and the Oil Marketing Companies (OMCs). Beneficiaries have the flexibility to choose from a 14.2 kg single bottle connection, a 5 kg single bottle connection, or a 5 kg double bottle connection.

To further enhance transparency and ease of access, the process for obtaining an LPG connection under PMUY has been made fully streamlined and technology-enabled. Eligible adult women from poor households who do not have an existing LPG connection in their family can apply by submitting a simplified KYC application form and Deprivation Declaration, either online at <http://www.pmuy.gov.in> or at any LPG distributor of the public sector OMCs. Applications undergo system-driven de-duplication checks, followed by physical verification by OMC officials, before issuance of a Subscription Voucher and installation of the LPG connection at the applicant’s residence. Existing applicants with pending applications are required to undergo a revised eKYC process and submit details as per the updated proforma.

'Ocean of opportunities': India confirms natural gas discovery in Andaman basin, 87% methane detected

India has confirmed the presence of natural gas in the Andaman basin, marking a milestone in the country's deepwater exploration ambitions. Union Petroleum Minister Hardeep Singh Puri announced the discovery, calling it 'an ocean of energy opportunities.'

The gas was found in the Sri Vijayapuram-2 well, located about 17 km from the Andaman coastline at a water depth of 295 metres and drilled to a target depth of 2,650 metres.

Gas samples show high methane

According to Puri, initial testing between depths of 2,212–2,250 metres established the presence of natural gas with intermittent flaring. Samples transported to Kakinada for analysis showed 87 percent methane content, confirming the quality of hydrocarbons.

“The size of the gas pool and its commercial viability will be verified in the coming months,” Puri noted, but stressed that the discovery validates India's long-held belief that the Andaman basin is rich in natural gas, in line with discoveries in Myanmar and Indonesia along the same geological belt.

The discovery comes on the back of Prime Minister Narendra Modi's announcement of the National Deep Water Exploration Mission, termed 'Samudra Manthan,' during his Independence Day address.

The mission, to be executed in mission mode, aims to expand oil and gas exploration in offshore basins and accelerate India's push for energy self-reliance.

Puri underlined that the discovery will strengthen India's ability to partner with global deepwater exploration leaders like Petrobras, BP India, Shell, and ExxonMobil. “This occurrence of natural gas will help us take forward our exploration ambitions and is a significant milestone in our journey through Amrit Kaal,” he said.

Ministry of Power Initiates Stakeholder Survey to Build India Energy Stack (IES), a Digital Backbone for Power Sector

India's power sector is undergoing a paradigm shift driven by grid digitalization, renewable energy integration, decentralized power generation, and consumer-centric reforms. To support this transformation, the Ministry of Power has conceptualized the India Energy Stack (IES), a Digital Public Infrastructure (DPI) for the power sector.

The IES aims to enable a connected, intelligent, and interoperable energy ecosystem. As part of this initiative, a Utility Intelligence Platform will be developed using standardized and open APIs and protocols, in collaboration with selected power distribution utilities. This platform will help unlock data from various IT/OT systems to drive innovation and efficiency across the sector.

To ensure the IES and its associated solutions are comprehensive and future-ready, the Ministry is conducting a Stakeholder Mapping Survey. The survey seeks to gather insights on:

- Organizational profiles
- Offered solutions and innovations
- Readiness to participate in the IES ecosystem

As the IES will define open standards and interoperability frameworks, all stakeholders — utilities, technology providers, and innovators — are encouraged to factor these standards into the early design of their products and platforms. Early adoption will help organizations remain future-ready, minimize retrofit costs, and support a unified, innovation-driven power sector.

Union Minister Shri Manohar Lal Inaugurated State-of-the-Art Central Power Research Institute Regional Testing Laboratory (RTL)

In a landmark event, the Central Power Research Institute (CPRI), an autonomous body under the Ministry of Power, Government of India, inaugurated its latest advanced Regional Testing Laboratory (RTL) at Nashik.

The inauguration ceremony was graced by Shri Manohar Lal Khattar, Honorable Minister of Power & Housing and Urban Affairs, who inaugurated the facility, and dedicated the laboratory to the Nation, in the esteemed presence of Shri Devendra Fadnavis, Honorable Chief Minister of Maharashtra and prominent political leader, Shri. Chagan Bhujbal, Honorable Minister of Food, Civil Supplies & Consumer Protection, Maharashtra State, Shri. Girish Mahajan, Honorable Minister, Water Resources & Crisis Management, Maharashtra State, along with a galaxy of distinguished dignitaries including Members of Parliament & Members of Legislative Assembly, Maharashtra State, Officials from the Ministry of Power, CPRI leadership, industry representatives, and key stakeholders from the power and electrical sectors.

The newly established RTL Nashik is strategically positioned to serve industries in the western region of India, providing cutting-edge testing services for a wide range of electrical and power equipment such as Transformers, Energy Meters, Smart Meters, and Transformer Oil. This facility is expected to significantly reduce the turnaround time for testing and certification, thereby strengthening the quality assurance ecosystem and facilitating faster procurement cycles by utilities.

During the event, Shri Manohar Lal Khattar, Hon'ble Minister of Power & Housing and Urban Affairs, emphasized the importance of robust testing infrastructure in accelerating India's power sector growth and self-reliance. He also highlighted the role of CPRI in providing world-class testing and research services in line with global benchmarks. Shri. Devendra Fadnavis, Hon'ble Chief Minister of Maharashtra, in his address, emphasised on the importance of the Regional Testing Laboratory at Nashik in the requirement of quality assurance and growth of the electrical industry in Maharashtra. Shri. Chagan Bhujbal, Hon'ble Minister, Water Resources & Crisis Management, Maharashtra State, in his address expressed the impetus of this testing laboratory on the rural development and strengthening of the development policies of the Government of Maharashtra. Shri. Girish Mahajan, Honorable Minister, Water Resources & Crisis Management, Maharashtra State, in his address highlighted the importance of this laboratory in the power sector, ensuring quality products and opportunities to the rural sector.

Shri Asit Singh, Director General, CPRI, extended a warm welcome to the Hon'ble Minister of Power & Housing and Urban Affairs, Shri Manohar Lal Khattar, the Chief Minister of Maharashtra, Shri Devendra

Fadnavis, and all the esteemed dignitaries, distinguished guests, and participants gathered for the momentous occasion.

The commissioning of RTL Nashik marks a significant milestone in our journey to enhance national testing capabilities and support the power sector's technological advancement. This laboratory will not only serve industry needs but also contribute to advancing research and development in power sector equipment testing.

India Targets Swadeshi Solar Cells by 2028; Moving Towards Indigenous Wafers and Ingots: Union Minister Pralhad Joshi

Union Minister for New and Renewable Energy Shri Pralhad Joshi has announced that India is firmly moving towards building a complete Swadeshi solar value chain, with the target of achieving indigenous solar cell manufacturing by 2028. Speaking at the State Review Meeting on Renewable Energy organised by Ministry of New and Renewable Energy, the Minister said that the country is now advancing beyond modules to develop domestic capacity for wafers and ingots as well, ensuring that the entire solar manufacturing ecosystem is established within India. The Minister said that this step will not only reduce import dependence but also generate employment, boost investment, and strengthen India's position as a global leader in clean energy manufacturing.

In his address, Shri Joshi appreciated the remarkable efforts of states in advancing renewable energy initiatives, noting that these contributions are strengthening India's position as a global leader in the sector. He highlighted that India's 2030 vision of achieving 500 GW of non-fossil capacity is already more than halfway achieved, with the country crossing 251.5 GW of non-fossil capacity. He termed this achievement a testament to the visionary leadership of Prime Minister Shri Narendra Modi, which transformed India's clean energy growth and domestic manufacturing in RE sector, and is accelerating the march towards Viksit Bharat.

Progress Under PM Surya Ghar and PM-KUSUM

Highlighting key schemes, the Minister said that nearly 20 lakh households have already benefitted under the PM Surya Ghar Muft Bijli Yojana. He urged states and DISCOMs to ensure strict quality compliance, finalise agreements without delay, and offer the best possible tariff credits to consumers. On PM-KUSUM, he noted that after initial reluctance, the scheme has now gained strong momentum across states, with demand for additional allocations from Chief Ministers. He announced that the second phase of PM-KUSUM will be launched after the present phase ends in March 2026.

On the issue of free electricity, Shri Joshi observed that benefits must be delivered in a financially sustainable way. He pointed out that nearly half the beneficiaries under the PM Surya Ghar Yojana are receiving zero electricity bills, demonstrating a model that combines relief for citizens with long-term sustainability.

Strengthening Renewable Energy Growth and Ease of Doing Business

The Minister underlined that India has also achieved the milestone of 50% of installed electricity capacity from non-fossil fuel sources five years ahead of schedule. He, however, cautioned that capacity addition must be complemented by effective utilisation, and urged states to expedite Renewable Purchase Obligations (RPOs), power purchase agreements (PPAs), and land allotments in a transparent manner. “Timely action is the backbone of this system. If we keep delaying procurement on the expectation that tariffs will fall further, we are missing the bigger picture”, the Minister said.

Shri Joshi called upon states to strengthen Ease of Doing Business in the renewable sector by adopting single-window clearance systems, reducing compliances, and resolving Right of Way and law-and-order issues faced by developers. He stressed that investor confidence hinges on proactive facilitation by state governments.

The Minister also called upon wind-rich states to come up with time-bound roadmaps for new site allocation and transmission readiness. He welcomed the recent GST cut on renewable energy devices and services from 12% to 5%, which would make solar, wind, biogas, and waste-to-energy systems more affordable. He urged states to promote these technologies more actively.

On domestic manufacturing, Shri Joshi highlighted the success of the PLI Scheme for High Efficiency Solar PV Modules with an outlay of ₹24,000 crore. He informed that India now has 100 GW of module manufacturing capacity, ₹50,000 crore investments, and over 12,600 direct jobs created under the scheme.

Shri Joshi also stressed that India’s energy transition will succeed only through collective action by the Centre, states, industry, and citizens. He assured full support from MNRE and invited all stakeholders to share ideas for accelerating the renewable energy growth story.

Speaking at the occasion, Union Minister of State for New and Renewable Energy Shri Shripad Naik said that PM-KUSUM and PM Surya Ghar: Muft Bijli Yojana schemes lie at the heart of our mission to ensure energy security, sustainability, and empowerment of citizens. Shri Naik also said that PM-KUSUM Scheme has been a true game-changer for our farmers. Out of the 49 lakh solar pumps allocated, over 16 lakhs have already been installed or solarised. This has reduced diesel consumption by 1.3 billion litres annually, cut 40 million tonnes of CO₂ emissions, and saved precious foreign exchange. In PMSGY, installations are happening at the rate of 4,500 systems per day, supported by over 18,000 vendors nationwide. The Minister added that PM KUSUM and PMSGY represent the spirit of India’s energy transition, empowering farmers and households, cutting emissions, creating jobs, and positioning India as a global leader in renewable energy.

Secretary, MNRE Shri Santosh Kumar Sarangi said that India’s green energy transition is vital for achieving net zero by 2070, with targets of 1,800 GW renewable capacity by 2047 and 5,000 GW by 2070. He highlighted successful state practices such as Maharashtra’s PM-KUSUM implementation, Gujarat’s renewable clusters, and Karnataka’s land facilitation.

The review meeting organised by Ministry of New and Renewable Energy featured a state-wise assessment of PM Surya Ghar Muft Bijli Yojana and PM-KUSUM, with states presenting their progress and challenges. Industry associations made detailed presentations on current issues in the renewable energy sector. There were also stakeholder consultations on the design and implementation of PM-KUSUM 2.0. These deliberations aimed at aligning state action, industry inputs, and policy reforms to accelerate renewable energy deployment across the country. The meeting brought together representatives from renewable energy-rich states to review progress and chart the future roadmap for India's clean energy transition.

Union Minister Pralhad Joshi inaugurated 1st Green Hydrogen R&D Conference; launches ₹100 crore Call for Proposals for Start-ups

Union Minister of New and Renewable Energy, Shri Pralhad Joshi, inaugurated the 1st Annual Green Hydrogen R&D Conference organised by Ministry of New and Renewable Energy in New Delhi and launched a new ₹100 crore Call for Proposals to support start-ups in hydrogen innovation. The scheme will provide up to ₹5 crore per project for pilot projects in innovative hydrogen production, storage, transport and utilisation technologies. At the conference, 25 start-ups are showcasing their innovations, ranging from electrolyser manufacturing to AI-driven optimisation and biological hydrogen solutions.

Addressing researchers, start-ups, industry leaders and policymakers, Shri Joshi emphasised that the conference is not just about sharing ideas but about turning research into practical solutions that can power industries, clean cities, and create lakhs of new jobs across India. He underscored the vision of Prime Minister Shri Narendra Modi, who launched the National Green Hydrogen Mission (NGHM) in 2023, to transform India's energy landscape and make the country a global hub for green hydrogen. With an outlay of ₹19,744 crore, the Mission rests on four pillars – Policy and Regulatory Framework, Demand Creation, R&D and Innovation, and Enabling Infrastructure.

R&D Progress Under NGHM

Highlighting progress in research and development, the Minister said that the dedicated R&D Scheme under NGHM, has already awarded 23 projects in the first round of Call for Proposals. These cover key areas such as Safety and Integration, Hydrogen Production from Biomass, Hydrogen Applications, and Non-Biomass Hydrogen Production routes. Leading IITs, IISERs, CSIR labs and industry partners are implementing these projects. The second round of R&D proposals, launched on 14 July 2025, remains open till 15 September 2025. Internationally too, collaboration is expanding under the EU-India Trade and Technology Council, with over 30 joint proposals received on hydrogen production from waste.

Building a Green Hydrogen Ecosystem: From Vision to Action

Shri Joshi stressed that green hydrogen ecosystem in India is already moving from vision to action. India's first port-based Green Hydrogen Pilot Project has been launched at V.O. Chidambaranar Port in Tamil Nadu. In the steel sector, five pilot projects are demonstrating hydrogen-based decarbonisation. In shipping, vessels are being retrofitted and refuelling facilities are being developed at Tuticorin Port. In transport, hydrogen buses and refuelling stations are already operational. In fertilisers, India conducted

its first-ever green ammonia auction, discovering a historic low price of ₹49.75 per kg, compared to ₹100.28 per kg in 2024, with supplies set to begin at Paradeep Phosphates in Odisha.

The Minister further highlighted the enablers already in place, including the Green Hydrogen Standard and Certification Scheme aligned with over 140 international standards, sanctioning of five new testing facilities, certification of more than 5,600 trainees in hydrogen-related qualifications, and regulatory waivers such as transmission charge exemptions and streamlined clearances. Dedicated hydrogen hubs are being developed at Kandla, Paradip and Tuticorin Ports to strengthen India's export competitiveness. He added that both large enterprises like NTPC, Reliance and IOCL and start-ups and MSMEs are investing heavily in hydrogen, building a robust value chain and creating lakhs of new jobs.

Reiterating India's commitment, Shri Joshi said that NGHM aims for five million metric tonnes of green hydrogen production annually by 2030, 125 GW of new renewable capacity, investments of ₹8 lakh crore, six lakh new jobs, and 50 million tonnes of CO₂ reduction each year.

Union Minister Pralhad Joshi also inaugurated the start-up exhibition held as part of the conference.

Addressing the inaugural session, Principal Scientific Adviser to the Government of India, Prof. Ajay Kumar Sood said that R&D empowers the nation to solve complex challenges and drive economic growth. "R&D is not optional, but essential," Prof. Sood said, stressing the importance of sustained innovation for building a robust green hydrogen ecosystem.

MNRE Secretary Shri Santosh Kumar Sarangi highlighted that the Green Hydrogen R&D programme has a budgetary outlay of ₹400 crore and that MNRE is ready to collaborate and support all stakeholders in driving forward the National Green Hydrogen Mission.

Mission Director of the National Green Hydrogen Mission, Dr. Abhay Bhakre, said that India today stands at the threshold of becoming a global leader in green hydrogen.

India Poised to Emerge as Global Hub for Green Hydrogen Innovation: Union Minister of State Shri Shripad Yesso Naik

India's quest to achieve Net Zero by 2070 gained fresh momentum as Union Minister of State for New & Renewable Energy, Shri Shripad Yesso Naik, called upon scientists, industry leaders, startups and young researchers to make India a global hub of green hydrogen innovation. Addressing the valedictory session of the first Green Hydrogen R&D Conference organised by the Ministry of New & Renewable Energy (MNRE) under the National Green Hydrogen Mission, Shri Naik said the two-day event had brought together the finest minds to chart the country's path towards a clean, secure and self-reliant energy future.

Green Hydrogen at the Heart of India's Net Zero Journey

Shri Naik said that India has embarked on an ambitious journey to achieve Net Zero by 2070 and to position itself as a global leader in clean energy. "At the heart of this journey lies green hydrogen, a fuel that promises to decarbonise our hardest-to-abate sectors, open new trade frontiers, and create a cleaner

and more secure future,” he said. He noted that through the National Green Hydrogen Mission, launched by the Hon’ble Prime Minister, the Government is laying the foundations for India to emerge not just as a consumer, but as a global hub of innovation, manufacturing and deployment in hydrogen technologies.

Strengthening India’s R&D Ecosystem

MNRE has already supported more than 200 R&D projects in renewable energy, fuel cells, hydrogen, and storage technologies. Dedicated funding, testing facilities, and incubation programmes have been created so that Indian researchers and innovators have the ecosystem to translate ideas into breakthrough solutions. “This very conference is a testimony to our collective resolve, to make India’s laboratories into launchpads, and our startups into global champions,” Shri Naik said.

Wide-Ranging Deliberations Over Two Days

Shri Naik said that over the last two days, the conference witnessed stimulating discussions, bold ideas, and visionary debates, bringing together the finest minds from research institutions, industry, startups, and government. Participants deliberated on crucial themes including India’s vision as an R&D and innovation leader in green hydrogen; cutting-edge production pathways such as electrolysis, thermochemical, and biological routes; challenges of storage, transport and fuel-cell applications; and the need to balance safety with scalability. They also discussed governance frameworks, prototyping and commercialization, infrastructure, testing facilities, and talent development as essential pillars of a strong R&D ecosystem.

He said the sessions on blue-sky research and biological hydrogen production reminded participants to pursue long-term, curiosity-driven science even as near-term applications are advanced. Roundtables on safety, novel end-use applications, and testing infrastructure highlighted how collaborative innovation can ensure reliability, affordability, and trust in green hydrogen technologies.

Empowering Young Researchers and Startups

The Minister emphasised that research cannot remain confined to academic silos and must move seamlessly to pilots, prototypes, and commercial deployment to achieve scale and make hydrogen cost-competitive and accessible. Congratulating young researchers and startups who presented their pioneering work, Shri Naik said their energy, imagination and passion embody the spirit of Amrit Kaal and the vision of a developed India by 2047. He noted that the launch of the call for proposals for hydrogen startups during the conference is yet another step to empower them, reduce barriers, and fast-track innovation. “For our youth, I have a simple message: think beyond incremental change. Aspire to design disruptive solutions that can shape the world’s energy future,” he said, urging institutions to nurture interdisciplinary hubs where academia, industry and entrepreneurship converge.

Driving Economic Growth, Competitiveness and Clean Energy

Shri Naik said this mission is about more than clean energy, it is about economic growth, industrial competitiveness, and environmental responsibility. Green hydrogen will power the steel, cement, fertilizer, mobility, and shipping sectors, help reduce import dependence, create high-value jobs, and

establish India as a key exporter in the emerging global hydrogen economy. “At a time when countries are designing cross-border carbon regulations, India’s leadership in green hydrogen will ensure that our industries remain competitive and future-ready,” he added.

India Ready to Transform Challenges into Opportunities

Acknowledging the challenges in the journey from research to commercialization, Shri Naik said it requires patience, perseverance, and precision. “But with the ecosystem we are building, state-of-the-art R&D infrastructure, a supportive policy framework, international partnerships, and the extraordinary talent of our scientists and entrepreneurs, I am confident that India will not only meet these challenges, but transform them into opportunities,” he said.

Union Minister of State Shri Shripad Naik also visited the startup exhibition organised as part of the conference.

Mission Director, National Green Hydrogen Mission (NGHM), Shri Abhay Bhakre highlighted that green hydrogen is the fuel for the future and under the NGHM, concerted efforts are being made to position India as a global leader and export hub for green hydrogen. He informed that the Mission is receiving strong support from various state agencies, and over 140 standards have already been published to facilitate the growth of the sector.

Shri Sujit Pillai, Scientist ‘F’, MNRE, informed that the conference witnessed an overwhelming response from the scientific and industry community, with 1,347 registrations. Over the two days, 17 technical sessions including 5 panel discussions, and 8 roundtable meetings were organised, alongside a dedicated startup expo showcasing cutting-edge innovations in green hydrogen technologies.

Director General of the National Institute of Solar Energy (NISE), Dr. Mohammad Rihan, underlined that green hydrogen will play an important role in managing the grid more efficiently as renewable energy capacity expands. He said NISE, as the implementing agency for the startup support programme under the Mission, will work to forge strong partnerships and drive innovation to help India move forward and become a global green hydrogen hub.

Shri Akash Tripathi, Managing Director of SECI, said that India has a real opportunity to move forward rapidly in emerging technologies such as electrolyzers and the broader hydrogen sector. He emphasised that in addition to providing startup funding, there is also a strong need to build robust mentoring support systems to guide innovators and entrepreneurs in this domain.

GST on Renewable Energy Devices Rationalised to 5% to Accelerate India’s Clean Energy Transition

In line with the vision of Hon’ble Prime Minister Shri Narendra Modi to make GST a truly “Good and Simple Tax” that strengthens every sector of the economy, the renewable energy sector has received a major impetus under the latest GST reforms approved by the GST Council in its 56th meeting held on 3rd September 2025.

The rationalization of GST rates across the renewable energy value chain from 12% to 5% will bring down the cost of clean energy projects, making electricity more affordable and directly benefiting households, farmers, industries, and developers. For instance, the capital cost of a utility-scale solar project, which typically amounts to around ₹3.5–4 crore per MW, will now see savings of ₹20–25 lakh per MW. At the scale of a 500 MW solar park, this translates into project cost reductions of over ₹100 crore, significantly improving tariff competitiveness.

Lower Costs and Greater Competitiveness

The reduction in GST is expected to lower levelised renewable tariffs easing the financial burden of electricity procurement for distribution companies (DISCOMs). This could translate into nationwide annual savings of ₹2,000–3,000 crore in power procurement costs. End consumers will benefit from greater access to affordable clean electricity, reinforcing the long-term sustainability of India's power sector.

Benefits to Households, Farmers, and Rural Communities

The reform will make rooftop solar systems more affordable for households. A typical 3 kW rooftop system will now be cheaper by about ₹9,000–10,500, making it easier for lakhs of families to adopt solar energy and accelerating large-scale uptake under the PM Surya Ghar: Muft Bijli Yojana.

Farmers under the PM-KUSUM scheme will also benefit significantly. A 5 HP solar pump, costing about ₹2.5 lakh, will now be cheaper by nearly ₹17,500. At the scale of 10 lakh solar pumps, farmers collectively stand to save ₹1,750 crore, making irrigation more affordable and sustainable.

Rural and underserved regions will also gain from cheaper decentralized solutions such as mini-grids, livelihood applications, and solar water pumps. The shorter payback periods and improved returns will empower schools, health centres, and small businesses with clean and reliable energy access.

Boost to Domestic Manufacturing and Self-Reliance

Lower GST will enhance the competitiveness of Indian-made renewable energy equipment by reducing module and component costs by 3–4%, supporting the Make in India and Aatmanirbhar Bharat initiatives. With India targeting 100 GW of solar manufacturing capacity by 2030, the reform will encourage fresh investment into domestic manufacturing hubs. Considering that every GW of manufacturing creates about 5,000 jobs, the reform could support 5–7 lakh direct and indirect jobs over the next decade, strengthening India's clean energy industrial ecosystem.

Accelerating India's Energy Transition

The GST cut will not only reduce the levelized cost of energy but also boost investor confidence, enabling faster signing of power purchase agreements and quicker project commissioning. Given that India plans to add around 300 GW of renewable energy capacity by 2030, even a modest 2–3% cost reduction can free up ₹1–1.5 lakh crore in investment capacity. Each GW of solar saves about 1.3 million tonnes of CO₂

annually; faster deployment enabled by GST rationalisation could therefore avoid an additional 50–70 million tonnes of CO₂ emissions per year by 2030.

By making renewable energy more affordable and accessible, this reform aligns with India's international commitments under the Paris Agreement while advancing the nation's target of 500 GW of non-fossil fuel capacity by 2030. It firmly positions India as a leader in the global fight against climate change.

The revised GST rates will come into effect from 22nd September 2025. This landmark decision will directly benefit millions of consumers, farmers, developers, and manufacturers, while contributing to the twin goals of green growth and energy independence. It underscores the Government's commitment to ensuring that clean, affordable, and sustainable energy becomes the foundation of India's journey towards Viksit Bharat.

Government of India Notified National Policy on Geothermal Energy (2025) to Accelerate Clean Energy Transition, Supporting India's Net Zero 2070 Commitment

The Government of India has notified the National Policy on Geothermal Energy (2025), reinforcing its commitment towards achieving the ambitious 2070 Net Zero Goal and strengthening the country's energy security through diversified renewable energy sources.

India, with its untapped geothermal resources, is poised to leverage this clean and reliable energy source for power generation and direct-use applications such as district heating, agriculture, aquaculture, and space cooling and heating via Ground Source Heat Pumps (GSHPs). The newly unveiled policy provides a comprehensive framework to promote exploration, development, and utilization of geothermal energy in India.

Key Highlights of the Policy

- **Research and Best Practices:** Encourages research, inter-ministerial collaboration, and adoption of global best practices for geothermal energy development. Regulatory and stewardship responsibilities for geothermal energy will rest with the Ministry.
- **Integration with National Goals:** Targets integration of geothermal energy with India's Net Zero (2070) and renewable energy objectives.
- **Diverse Applications:** Focus on electricity generation, space heating/cooling, agriculture (greenhouses, cold storage), tourism, and desalination.
- **Technological Innovation:** Promotes R&D of advanced systems such as hybrid geothermal-solar plants, retrofitting abandoned oil wells, and Enhanced/Advanced Geothermal Systems (EGS/AGS).
- **Local Innovation and Partnerships:** Emphasis on local innovation, joint ventures, and repurposing existing oil/gas infrastructure.
- **Collaboration:** Partnerships with international geothermal bodies and pioneering nations, as well as collaboration with state governments, oil and gas companies, and research institutions.
- **Ecosystem Development:** Building a robust public-private ecosystem for the long-term development of the geothermal sector.
- **Capacity Building:** Promotes knowledge sharing and human resource development in the sector.

As a first step towards exploration of geothermal energy, the Ministry has sanctioned five projects in the sector. These include both pilot initiatives and resource assessment projects aimed at exploring the viability and potential of geothermal energy in India.

The Ministry of New and Renewable Energy (MNRE) will continue to monitor the progress while providing a conducive environment for developers, industries, and research institutions to actively participate in India's clean energy transition.

With Scientific Solar Mapping and Training Initiatives, India is Building a Self-Reliant Clean Energy Future: Union Minister Pralhad Joshi

Union Minister of New & Renewable Energy, Shri Pralhad Joshi, said that India is writing a new chapter in clean energy history with the release of the updated Solar PV Potential Assessment Report and the launch of the first Training Programme on Solar Cell and Module Manufacturing at the National Institute of Solar Energy (NISE), Gurugram under the aegis of Seva Parv.

He was addressing a gathering at MNRE headquarters where the report "Solar PV Potential Assessment of India (Ground-Mounted)" was released and the training programme was formally inaugurated. Shri Joshi underlined that these initiatives mark a decisive step towards achieving India's target of 500 GW non-fossil fuel capacity by 2030, ensuring energy independence by 2047 and fulfilling the net-zero commitment by 2070.

The Minister highlighted that India has already crossed 250 GW of non-fossil installed electricity capacity and achieved the NDC target of 50% non-fossil share in installed capacity, five years ahead of the 2030 deadline. He noted that India has created a strong domestic manufacturing base with over 100 GW of solar PV module capacity and more than 20 GW of wind turbine manufacturing capacity annually, showcasing the vision of Atmanirbhar Bharat.

Release of Report: Solar PV Potential Assessment of India (Ground-Mounted)

India possesses one of the world's richest solar resources, with average irradiance ranging from 3.5 to 5.5 kWh/m²/day across much of the country. Recognizing this opportunity, National Institute of Solar Energy (NISE) (an autonomous institute of Ministry of New and Renewable Energy (MNRE) has undertaken an updated, scientific, and spatially resolved assessment of India's ground-mounted solar PV potential.

The new report builds on the earlier 2014 estimate of **749 GWp** and incorporates cutting-edge methodologies, including high-resolution GIS, satellite-derived datasets, and refined land-use models.

Key methodological features:

- High-resolution geospatial analysis to identify feasible solar sites.
- Integration of infrastructure and technical design factors, such as inter-row spacing, shading, proximity to substations and road networks.

Major findings:

- Feasible ground-mounted solar potential: ~3,343 GWp, using approximately 6.69% of the total identified feasible wasteland
- The report shows that apart from well-known desert regions in Rajasthan and Gujarat a large number of states have very high potential for ground mounted solar PV.
- The potential is very well spread all over the country. Apart from the well-known regions of Rajasthan, Maharashtra, and Gujarat due to availability of vast wastelands, and high irradiance, a large number of other states also show significant capacity owing to favorable solar geometry and land-use efficiency.

This assessment provides a policy-linked, investment-ready framework to guide project siting, infrastructure development, and private sector participation. The results are directly aligned with India's Panchamrit commitments announced at COP26 and support the nation's long-term goals of energy independence by 2047 and net-zero emissions by 2070.

Inauguration of Training Program on Solar Cell and Module Manufacturing

The Hon'ble Minister also inaugurated the first Training Program on Solar Cell and Module Manufacturing at NISE. This initiative has been designed to build technical capacity and develop a skilled workforce in line with India's growing solar manufacturing sector, which has already achieved 100+ GW of installed module manufacturing capacity and 15 + GW of solar cell manufacturing capacity.

The course will provide hands-on training in advanced manufacturing processes, quality control protocols, and global best practices, thereby contributing to the creation of a self-reliant and globally competitive solar manufacturing ecosystem.

Women Empowerment and International Cooperation

The Minister interacted with 28 women trainees from 15 nations participating in the International Training Programme on Solar Energy Technologies and Applications for Women. He emphasised that India's clean energy transition is not only about technology, but also about people and empowerment.

Highlighting PM Modi's vision of Solar Didi, he said Nari Shakti is at the forefront of the renewable energy journey. He also noted the significance of launching the initiatives during Seva Parv and Navratri, reflecting the spirit of collective service and the strength of divine feminine energy in driving India's clean energy transition.

The Union Minister said that the dual initiatives of releasing the updated Solar PV Potential Assessment Report and launching the training programme on solar manufacturing mark a defining moment in India's renewable energy journey. He underlined that these steps will provide the scientific roadmap, skilled manpower, and manufacturing strength required to realise the vision of Viksit Bharat. With sustained efforts, partnerships with global and domestic stakeholders, and the active participation of citizens, India is poised to emerge as a global leader in the clean energy transition while ensuring energy security, economic growth, and environmental sustainability.

56th GST Council Decisions to Benefit both Coal Producers and Consumers

The 56th meeting of the GST Council held in New Delhi has brought significant changes to the taxation structure of the Coal sector. Earlier, Coal attracted 5% GST along with a compensation cess of Rs. 400 per ton. The Council has now recommended the removal of GST Compensation cess and an increase in the GST rate on coal from 5% to 18%.

The new reforms reduce the overall tax on coal grades G6 to G17, which is in the range of Rs.13.40 per ton to Rs.329.61 per ton. The average reduction for power sector is Rs.260 per ton, which will reduce the cost of generation by 17 to 18 paise /kWh.

The reforms will also help in rationalization of tax burden on coal vis-à-vis its pricing. Previously, a flat rate of Rs. 400 per tonne was imposed as GST compensation cess without considering coal quality. This disproportionately affected low-quality and low-priced coal. For example, G-11 non-coking coal, which is the majority coal produced by Coal India Limited, had a tax incidence of around of 65.85% compared to G2 coal where incidence was 35.64%. With the cess removed, tax incidence across all categories of coal has now been rationalized to a uniform of 39.81%.

The reforms will also help in promoting Aatmanirbhar Bharat by import substitution. Earlier, due to flat rate of GST compensation cess at Rs. 400/ton, landing cost of High Gross Calorific value imported coal was lesser as compared to Indian Low-grade Coal. This used to place Indian Coal in disadvantageous position. The removal of cess levels the playing field, strengthening India's self-reliance and curbing unnecessary imports.

The reforms also remove the Inverted Duty Anomaly by raising GST Rate to 18%. Earlier Coal attracted 5% GST but the input services used by coal companies used to attract higher GST rates, normally at 18%. This, meant that huge amount of unutilized tax credit was standing in the books of these coal companies as output GST liability was lower.

Since, the outward GST liability of Coal companies was lower as compared to GST paid on input services, this amount was continuously increasing and with no refund of this amount, this implied blockage of funds of coal companies. Now this unutilized amount can be used for some years to pay of the GST tax liability, leading to release of blocked liquidity. This will also help in staving off loss of coal companies due to accumulation of such unutilized GST credit.

Despite increase in GST Rates from 5% to 18%, the reforms will have lower overall tax incidence on final consumer, due to removal of GST compensation Cess. Similarly, the removal of cess, rationalization of duty, and correction of the inverted structure release liquidity, eliminate distortions, and prevent large accounting losses for coal producers. The decisions of the GST council represent a balanced reform that benefit both coal producers and consumers alike.

GST reform in Coal Sector – A Transformative Step Towards AatmNirbharta in Coal

The Ministry of Coal has welcomed the landmark decisions taken at the 56th meeting of the GST Council held in New Delhi, which have brought significant changes to the taxation structure of the coal sector.

These reforms mark a transformative step towards AatmNirbharta in Coal and represent a balanced approach that benefits both coal producers and consumers alike.

Key Decisions of the 56th GST Council Meeting

- Removal of GST Compensation Cess: The Council has eliminated the ₹400 per tonne Compensation Cess previously levied on coal.
- Increase in GST Rate on Coal: The GST rate on coal has been raised from 5% to 18%.

The impact of the new reform on coal pricing and the power sector is a substantial reduction in overall tax burden, with coal grades G6 to G17 seeing decreases in the range of ₹13.40 per tonne to ₹329.61 per tonne. For the power sector, the average reduction is around ₹260 per tonne, translating into a cut of 17–18 paise per kWh in the cost of generation.

The rationalization of tax burden across coal grades ensures equitable treatment, replacing the earlier flat rate of ₹400 per tonne Compensation Cess which disproportionately affected low-quality and low-priced coal. For instance, G-11 non-coking coal produced in the largest quantity by Coal India Limited had a tax incidence of 65.85% compared to 35.64% for G2 coal. With the cess removed, tax incidence across all categories has now been aligned to a uniform 39.81%.

The boost to Aatmanirbhar Bharat and import substitution is evident as the removal of the cess levels the playing field, eliminating the earlier scenario where the flat rate of GST Compensation Cess at ₹400 per tonne resulted in the landing cost of high gross calorific value imported coal was lower than that of Indian low-grade coal. This reform strengthens India's self-reliance and curbs unnecessary coal imports.

The reforms have also removed the Inverted Duty Anomaly by raising the GST rate on coal to 18%. Earlier, coal attracted 5% GST while input services used by coal companies attracted higher GST rates, normally at 18%. This disparity led to a huge accumulation of unutilized tax credit in the books of coal companies due to their lower output GST liability.

With no provision for refund, this amount kept increasing, blocking valuable funds. Now, the unutilized amount can be used over the coming years to pay off GST tax liability, leading to the release of blocked liquidity and helping coal companies mitigate losses due to the accumulation of unutilized GST credit and enhances financial stability.

The overall effect of the reforms, despite the increase in GST rates from 5% to 18%, is a lower tax incidence for final consumers, combined with a correction of the inverted duty structure that releases liquidity, eliminates distortions, and prevents large accounting losses for coal producers.

The decisions of the GST Council are expected to positively impact the coal sector by strengthening India's self-reliance, supporting producers, benefiting consumers and aligning with the vision of Aatmanirbhar Bharat, making this a truly balanced reform.

Research, analysis & compilation by:

Economic Policy & Planning Team - FIPI

Email: pankhuri@fipi.org.in

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