

A strategy fuelled by vision, powered by energy

A few days ago, India overtook Japan to become the world's fourth largest economy. Since 2014, under Prime Minister Narendra Modi's leadership, India's GDP has more than doubled to \$4.3 trillion in 2025. This is the result of a decade-long strategy centred on reforms, resilience and relentless pursuit of self-reliance.

India has not only become the world's fastest-growing major economy but is also a strategic force. The energy sector, integral to this rise, has undergone a structural transformation during the first year of Modi 3.0, building on 10 years of foundational change.

More importantly, India's growth rate of 6.7% in the last quarter places it on a fast trajectory that none of the other countries can remotely hope to achieve in the coming years.

Outlining an energy strategy

India is now the third largest energy and oil consumer, fourth-largest refiner, and fourth-largest LNG importer globally. With energy demand expected to grow two and a half times by 2047 and 25% of incremental global demand set to come from India, the road map is clear: energy security is development security.

The Modi government's energy strategy addresses the energy trilemma of availability, affordability, and sustainability through a four-pronged approach – diversification of sources and suppliers, expansion of domestic production, transition to renewables, and affordability. In the upstream oil and gas sector, India's exploration acreage has doubled from 8% in 2021 to 16% in 2025. With a goal of covering one million square kilometres by 2030, the government aims to unlock 42 billion tonnes of oil and oil-equivalent gas. This expansion has been enabled by landmark reforms such as the reduction of 'No-Go' areas by 99%, streamlined licensing through Open Acreage Licensing Policy (OALP) rounds, and attractive pricing incentives for new gas wells.

The revised gas pricing mechanism – linking prices to 10% of the Indian crude basket and offering a 20% premium for new wells – has enhanced gas availability for city gas networks and industrial usage. To reduce costs and accelerate monetisation, new revenue-sharing contracts allow shared infrastructure among Exploration and Production (E&P) players.

Technological and geophysical efforts have complemented policy reforms. The National Seismic Programme, Mission Anveshan, airborne gravity gradiometry (AGG) surveys, and continental shelf mapping have expanded data and exploration confidence, especially in frontier



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India's energy sector can be defined in three words – confidence, self-reliance and strategic foresight

basins such as the Andamans, the Mahanadi, and the Cauvery.

The Oil and Natural Gas Corporation Limited (ONGC) and Oil India have together made over 25 hydrocarbon discoveries across the Mumbai Offshore, Cambay, Mahanadi, and Assam basins in the last four years. Noteworthy among these are the Suryamani and Vajramani wells on the west coast offshore and the Utkal and Konark fields on the east coast deep waters. These discoveries add over 75 MMtoe (million metric tonnes of oil equivalent) and 2,700 MMSCM (million metric standard cubic metres) of gas to India's reserves.

Collaborations with global majors are bearing fruit. ONGC's partnership with bp is projected to boost output from Mumbai High by 44% for oil and 89% for gas. A data centre at the University of Houston now facilitates access to India's exploration datasets for international investors.

Downstream infrastructure has seen parallel expansion. India now operates 24,000 kilometres of product pipelines, nearly 96,000 retail outlets, and has significantly strengthened its strategic reserves and LPG storage. Over 67 million people visit petrol pumps daily, which is testimony to the scale and efficiency of India's fuel supply ecosystem.

India's city gas network has grown from 55 geographic areas in 2014 to 307 in 2025, with piped natural gas (PNG) connections up from 25 lakh to 1.5 crore and over 7,500 compressed natural gas (CNG) stations in operation. Unified pipeline tariffs and city gas expansions have ensured affordable access even in distant States.

The focus of the green strategy

Biofuels have emerged as a cornerstone of India's green strategy. Ethanol blending in petrol has surged from 1.5% in 2013 to 19.7% in 2025. Blending quantities have expanded from 38 crore litres to 484 crore litres. This has saved 1.26 lakh crore in foreign exchange, reduced emissions by 643 lakh MT, and paid ₹1.79 lakh crore to distillers and over ₹1 lakh crore to farmers.

Feedstock diversification ranging from molasses to maize has created a robust ethanol ecosystem. Parallely, the Sustainable Alternative Towards Affordable Transportation (SATAT) initiative has commissioned over 100 compressed biogas (CBG) plants and aims for a 5% CBG blending mandate by 2028. Central support for biomass procurement and CBG-pipeline connectivity is accelerating circular energy adoption.

Green hydrogen has been given a massive thrust with 8.62 lakh tonnes of production and 3,000 MW of electrolyser tenders awarded. Oil

public sector undertakings are leading from the front – Indian Oil Corporation Ltd. (IOCL) recently awarded a landmark 10 kilo-tonnes per annum (KTPA) green hydrogen tender to Larsen & Toubro for its Panipat refinery. Bharat Petroleum Corporation Limited (BPCL), Hindustan Petroleum Corporation Limited (HPCL), and GAIL India Limited are similarly progressing with large-scale hydrogen projects, while the Numaligarh Refinery Limited (NRL)'s green hydrogen unit in Assam is poised to become a first in the northeast.

India's natural gas pipeline network now spans over 25,000 km; it targets 33,000 km by 2030. Strategic pricing reforms and inclusion of gas in the 'No Cut' category for transport and domestic segments are ensuring supply stability. Gas production has increased steadily from 28.7 billion cubic metre (BCM) in 2020-21 to 36.4 BCM in 2023-24, with further growth projected.

No other country has so drastically altered its 'Systems' as India, as evinced by the Oilfields (Regulation and Development) Amendment Act 2024 which has enabled hybrid leases, allowing renewables alongside hydrocarbons. Discovered small fields (DSF) fields now operate under simplified contracts with minimal compliance burdens, unlocking marginal fields across basins. These sweeping policy reforms show that we are ready to tweak and do more to make India's upstream sector as competitive as any in the world.

Through PM Gati Shakti, the Ministry of Petroleum and Natural Gas has digitally mapped over one lakh assets and pipelines. Integration with the National Master Plan ensures real-time project visibility and synergy across ministries. Key projects such as the Indo-Nepal pipeline and Samruddhi Utility Corridor have benefited from route optimisation and cost savings of over ₹169 crore.

A consumer outlook

Affordability remains central. Despite global LPG prices rising by 58%, Pradhan Mantri Ujjwala Yojana (PMUY) beneficiaries pay ₹553 per cylinder, supported by targeted subsidies and compensation to oil companies. Fuel prices in India have been kept stable through excise cuts, insulating citizens from volatility seen in neighbouring countries.

Eleven years into the Prime Minister's transformative leadership, India's energy sector is no longer defined by anxiety. It is now marked by confidence, self-reliance and strategic foresight. Energy is not just a commodity. It is a catalyst for sovereignty, security and sustainable development.