India's LNG-powered trucks, fuel retail underperformed in 2025

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The performance of liquefied natural gas (LNG) in India last year was not encouraging from the environment point of view.

Outlets selling LNG, which, the oil industry says, has the potential to transform fuel use by 2030, and trucks running on this fuel have underperformed.

Unlike China, which has witnessed scorching growth, the Government of India does not offer any incentives for LNG in transport, industry sources said.

The number of LNG-powered trucks last year grew 75 per cent to around 1,309 from 747 in 2024. This is against at least three times growth expected in early 2025, according to the biggest industry players and Vahan estimates. That compares unfavourably with more than 178,000 heavy-duty gas trucks sold in China in 2024, according to Shell estimates.

Essar group-promoted Blue Energy Motors is planning to boost production to 10,000 trucks, both LNG-powered and electric, in the next few years in India while Tata Motors, Volvo, and Ashok Leyland have not disclosed details.

But retail owners are sceptical about the rapid proliferation of LNG-powered heavy-duty vehicles. "Getting 5,000 trucks on the road in the next few years is tough," a senior industry official involved in such outlets said.

"Even producing 1,000 trucks in 2026 is a big proposition. That's three trucks a day."

That hasn't been the case with China. LNG-powered trucks in 2024 accounted for 30 per cent of the heavy-duty truck market, roughly four times their 2022 share, according to Energy Intelligence, a provider of market intelligence in the United Kingdom.

It may touch one million in five years, according to Shell.

LNG consumption by such trucks in China increased 22 per cent in the year to reach 20.3 million tonnes. That is 80 per cent of India's LNG use of the fuel for all sectors.

The transport sector as a whole accounts for around 14 per cent of the emission of greenhouse gases in India.

In the slow lane

- India's LNG-powered trucks rose 75% to 1,309 in 2025, well below expectations and lagging China's rapid adoption
- Fewer LNG trucks have forced some retail stations to shut, prompting state-run refiners to pause expansion in 2026
- Firms like Ultra Gas and Think Gas are expanding via corridor-first and integrated truck-fuel strategies as PSUs hold back
- High upfront costs, funding constraints and LNG price volatility deter transporters from shifting to LNG

LNG retail

Fewer trucks on the road result in fewer LNG retail outlets. Some are temporarily shut for lack of customers. They include those of state-run Indian Oil, a company official said. India's biggest refiner is reviewing plans to build new outlets because of lack of adequate vehicles, the official said.

Of the 39 LNG retail outlets in India, 11 are operated by Indian Oil, followed by eight of Essar-promoted Ultra Gas & Energy (UGEL), according to an internal industry assessment.

But state-run refiners are hitting the pause button in 2026 until existing outlets enhance throughput, two officials from state refiners said.

The European Union has more than 700 such LNG retail outlets.

Internal industry forecasts predict around 50 operational outlets, led by private players, by the end of December. It is unclear how many more will close down this year. One needs 20-30 trucks to feed from each outlet, averaging 10-15 fillings daily for viability, a manager of an LNG retail outlet said.

Indian Oil had to shutter outlets in Chennai and Andhra Pradesh for lack of customers. It has since reopened one in Vijaywada and one in Namakkal (Tamil Nadu), a key trucking hub, and will open another in Hyderabad this month, a company official said. The outlet in Siriperumbudur has the maximum throughput of 80-100 tonnes a month, the official said.

There is less appetite for LNG-powered trucks from transporters because of high upfront capital costs, an official from a state-run refiner said.

Others raised concerns over funding for LNG-powered trucks, the confidence of transporters in deploying such vehicles, and volatility in LNG prices.

Private players

While state-run companies are hitting the pause button, private players like UGEL and Think Gas are deploying outlets. UGEL has committed ₹900 crore to build 100 LNG retail outlets, guided by a corridor-first strategy, prioritising high-density freight routes such as the Golden Quadrilateral, Delhi-Mumbai Industrial Corridor, and NH44/48, said Maqsood Shaikh, managing director and chief executive officer.

UGEL has adopted a circular strategy, an industry source said, by having its affiliate truck making and logistics firms.

Essar has invested in Blue Energy Motors and logistics company Greenline. The first builds the trucks and the second operates them. UGEL fills their tanks. The circular approach helps plan and control routes, the industry official said, something that an Indian Oil or Bharat Petroleum is unable to do.

Bharat Petroleum had to close down its outlet in Namakkal.

"Locations are selected using a multi-parameter scoring model covering freight demand, proximity to LNG terminals, regulatory readiness, land availability and assured customer off-take," Shaikh said. "Our next phase will cover states like Odisha, Jharkhand, Bihar, Chhattisgarh, and Andhra Pradesh, connecting the east-west and north-south freight corridors."

Shaikh dismissed fears of electric trucks cannibalising the LNG retail segment as seen in China this year. "Electric trucks are for the short haul while LNG is for the long haul. They complement each other."

UGEL has targeted 25 outlets by March next year, building capacity to refuel 15,000 LNG trucks compared to capacity of 4,800 trucks currently.