

L&T Energy Green Tech Wins IOCL's First Green Hydrogen Tender

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Winner: L&T Energy Green Tech (L&T Green)

Client: Indian Oil Corporation Ltd (IOCL)

Location: Panipat Refinery & Petrochemical Complex, Haryana

Capacity: 10,000 MTPA (10 KTPA) green hydrogen

Winning Rate: ₹397/kg (~\$4.66/kg)

Contract Type: Build-Own-Operate (BOO) · 25 years

Auction Result Announced: May 9, 2025

L&T Energy Green Tech (L&T Green), a wholly owned subsidiary of Larsen & Toubro, has emerged as the winning bidder in **Indian Oil Corporation's (IOCL) first major green hydrogen tender** — to develop a 10,000 tonnes per annum (KTPA) green hydrogen production facility at its Panipat Refinery and Petrochemical Complex in Haryana.

The company won the **entire 10-KTPA capacity** at a competitive rate of **₹397 per kilogram (~\$4.66/kg)** of green hydrogen — approximately **27% lower than the global average** cost of producing green hydrogen. The result of the reverse e-auction was announced by IOCL on the afternoon of May 9, 2025.

Project Details

The green hydrogen plant will be executed on a **Build-Own-Operate (BOO)** basis, with L&T supplying green hydrogen to IOCL for **25 years**. The facility will operate **round the clock on**

renewable energy and produce green hydrogen through **high-pressure alkaline electrolysers** manufactured domestically at L&T Electrolysers Ltd's advanced unit in **Hazira, Gujarat** — reinforcing India's Aatmanirbhar Bharat strategy.

The project must be completed within **30 months** of contract execution. L&T has also established a new wholly owned subsidiary — **Panipat Green Hydrogen Pvt Ltd** — to spearhead this and related green hydrogen ventures.

Capacity	10,000 MTPA (10 KTPA)
Winning Bid Rate	₹397/kg (~\$4.66/kg)
Contract Duration	25 years (BOO mode)
Completion Timeline	30 months from contract start
Electrolyser Type	High-pressure alkaline
Other Bidders	ReNew E Fuels, NTPC Renewable Energy
Tender Issued	September 11, 2024
Bid Closing Date	January 6, 2025 (extended twice)



Tender History

This win marks a significant milestone as **IOCL's first successfully concluded green hydrogen tender**. IOCL had previously cancelled **two earlier green hydrogen tenders** due to limited industry participation. The current tender was issued in September 2024, and the bid deadline was extended twice — ultimately closing on January 6, 2025 — following requests from participating firms.

Strategic Significance

The Panipat Refinery & Petrochemical Complex has a current capacity of **15 million metric tonnes per annum (MMTPA)**, with plans to expand to **25 MMTPA**. The additional hydrogen requirement of 84,000 MTPA will be partially fulfilled by this 10,000 MTPA green hydrogen plant.

IOCL plans to generate **350 KTPA of green hydrogen by 2030**, transitioning 50% of its total hydrogen demand to green sources. This 10 KTPA project would comprise a meaningful portion of that target. IOCL is also exploring conversion of existing natural gas pipelines to accommodate hydrogen-blended fuel transport. "This is a significant business win for L&T in the green hydrogen sector," said an official familiar with the auction process.

Subramaniam Sarma, Deputy Managing Director and President of L&T, said the development "validates the group's strategy to lead India's energy transition."

Broader Impact

The price of ₹397/kg discovered in this tender is around **27% lower than the global average** cost of producing green hydrogen — a significant signal for the viability of green hydrogen projects in India. The auction is seen as a pathfinder for similar end-user offtake tenders that other oil majors like **BPCL and Mangalore Refinery and Petrochemicals** are also expected to issue.

L&T could also leverage the **90,000 MTPA green hydrogen capacity** it secured under SIGHT Mode-I Tranche-II in March 2025 under India's National Green Hydrogen Mission. The project aligns with the government's goal of producing **5 million tonnes of green hydrogen annually by 2030**.

