



Neom's industrial hub Oxagon, which will host the world's largest green hydrogen plant.

L&T clinches mega projects in region

Indian multinational conglomerate Larsen & Toubro (L&T) has established a foothold in the region's construction market thanks to its ability to take on challenging projects. Here, it outlines its scope of works on some of its most prestigious projects such as the world's largest green hydrogen plant being built in Neom.



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FROM building a state-of-the-art Fifa World Cup stadium in Qatar to being involved in the world's largest green hydrogen plant being built by Neom, multi-billion-dollar Indian multinational conglomerate Larsen & Toubro (L&T) has created a niche for itself as a major infrastructure player across the Gulf region.

The company has been showcasing its engineering prowess in a gamut of building and infrastructure projects – including landmark high-rise buildings, hospitals, stadiums, airports, roads, bridges, flyovers, power and water infrastructure – in the UAE, Saudi Arabia, Oman, Kuwait, and Qatar.

SAUDI ARABIA

Among its most striking projects in the

region is the world's largest green hydrogen plant being built at Saudi Arabia's \$500-billion futuristic city Neom.

L&T's Power Transmission & Distribution (PT&D) business vertical has achieved important milestones for the power elements and grid packages of the landmark project being developed by Neom Green Hydrogen Company (NGHC) at the city's industrial hub Oxagon. NGHC, an equal joint-venture between Acwa Power, Air Products and Neom, is setting up the mega plant to produce green hydrogen at-scale for global export in the form of green ammonia with a total investment of \$8.4 billion.

Commenting on L&T's growth and on the prestigious order, Chief Executive Officer and Managing Director S N Subrahmanyam tells *Gulf Construction*: "We

are committed to infrastructure development in the Middle East and are especially proud of some very enduring relationships we have forged with various global leaders in various countries. Being a part of standout initiatives like the Neom project, which possesses the potential to speed up global energy transition, is both hugely satisfying and resonates with our stated ESG objectives."

L&T said it received the nod to establish the renewable energy generation, storage and grid infrastructure for the project a few quarters ago, from Air Products, the system-integrating EPC contractor and exclusive off-taker of green ammonia to be produced at the plant. The value of the packages awarded to L&T aggregates to \$2.779 billion.

Indian Expertise

Since then, significant progress has been achieved in various activities including surveys, design and engineering, establishment of temporary facilities and procurement of long-lead items, according to the company.

Under these contracts, L&T will engineer, procure, and construct a 2.2 GWac PV solar plant, 1.65 GW wind generation balance of plant and a 400 MWh battery energy storage system (BESS) under the power elements package. The mandate includes constructing three 380 kV switching stations, 306 km of 380 kV overhead lines and underground cables required for the kingdom's grid network and an energy power monitoring system (EPMS) for the complete network.

Adding to its successes at Neom, L&T's Power Transmission & Distribution Business has secured another major deal last month at the city for the construction of a ± 525 kV high-voltage direct current (HVDC) transmission segment. This link is part of a large capacity, voltage source converter (VSC)-based HVDC system that connects Neom Industrial City and Yanbu city in western Saudi Arabia.

Elsewhere in Saudi Arabia, L&T is constructing a 1.6 GWac /1.8 GWp solar photovoltaic plant in Sudair, Riyadh Province, the first renewable energy project under the Public Investment Fund (PIF) Renewable Energy Programme, that is expected to power 185,000 homes and offset nearly 2.9 million tonnes of emissions annually, and a 300 MW floating PV project.

In Saudi Arabia's Red Sea port city of Jeddah, PT&D has completed a major portion of a large-scale international solar project that includes associated grid connection components, including a 33/110kV PV substation, a 110kV switching station, and a 110kV four-bay extension at the remote end.

Other vital contributions by L&T to Saudi Arabia's infrastructure development have been a significant section of the Riyadh Metro, executing vital substation and transmission line projects for key entities like the Saudi Electricity Company (SEC) and Saudi Aramco and developing major gas fields and processing facilities, including the Hasbah offshore gas field and the Midyan gas processing facilities.



Al-Rayyan Stadium, a venue for the 2022 Fifa Football World Cup ... a key L&T project.

Meanwhile, L&T's Minerals & Metals business vertical is putting the finishing touches to the Mansourah-Massarah gold project, the largest single EPC contract awarded in the metallurgical business internationally. The project was awarded by Ma'aden Gold and Base Metal Company (MGBM), a wholly-owned subsidiary of Saudi Arabia Mining Company (Maaden). L&T is working with Outotec, a global leader in gold processing plant technology, to develop the project that involves two open-pit mines and a gold processing plant – the largest in terms of capacity – that can handle up to four million tonnes of ore per year, producing up to 250,000 ounces of gold annually. The plant also includes a unique hybrid power plant of which the solar plant has been commissioned by the Power Transmission & Distribution vertical.

POWER & WATER

In the power, transmission and distribution space, L&T says it has already implemented 320 substations, 4,900-plus km of transmission lines with various voltages of up to 400 kV, and more than 2,028 km of cabling projects. Presently, the business is executing more than 85 substations, 1,504 km of transmission lines and 908 km of cabling projects for utilities such as Dubai Electricity and Water Authority (Dewa), Transco, Sharjah Electricity, Water, and Gas Authority (Sewa), Al Ain Distribution Company (AADC), SEC, Saudi Aramco, Qatar General Electricity and Water Corporation (Kahramaa) and Oman Electricity Transmission Company (OETC). L&T's other major partners include the Public Authority for Housing Welfare (PAHW), Ministry of Electricity and Water (MEW), Kuwait National

Petroleum Company (KNPC) and Kuwait Oil Company (KOC) in Kuwait; Meeras, Nakheel, Abu Dhabi National Oil Company (Adnoc) in the UAE; and Lusail and Qatar Petroleum (QP) in Qatar.

L&T has an enviable track record in the water infrastructure space in the UAE, Oman and Qatar, having successfully completed more than 10 water projects, including the Jebel Ali Sewage Treatment Plant in Dubai, with a capacity of 375 million litres per day and the largest wastewater treatment plant in the UAE.

The company's expertise has been utilised in Oman's Ad Dakhiliyah water transmission project, one of the largest undertaken in the country, involving the construction of 173 km of carbon steel (CS) and ductile iron (DI) pipelines, 15 water reservoirs with a total capacity of 440,000 cu m and five pumping stations. L&T says it has also successfully delivered water infrastructure projects for organisations such as Ashghal in Qatar, Oman Water and Wastewater Service Company, Madayn and Salalah free zone (SFZ) in Oman, and Dubai Municipality, Dewa and Abu Dhabi Distribution Company in the UAE.

STADIUM

A prominent project where L&T provided its building construction expertise is the 40,000-seat Al-Rayyan Stadium in Qatar, one of the venues for the 2022 Fifa Football World Cup, which it has built along with joint venture partner, Al Balagh Trading and Contracting. L&T points out that it received global recognition for its remarkable achievements in health and safety, sustainability, and player and spectator comfort. ■

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