15 Years of Impact | FOURTH PARTNER ENERGY

Powering L&T Valves
With Reliable, Clean Energy

A Case Study of Fourth Partner Energy's Rooftop Solar Solution at L&T's Kanchipuram Facility, Tamil Nadu

Introduction to **L&T Valves**

India's manufacturing journey has always leaned on strong engineering partners, and Larsen & Toubro has been central to that story for more than eight decades. From building critical infrastructure to advancing high-technology manufacturing, L&T's work has quietly shaped the backbone of modern India.

Within this legacy sits **L&T Valves.** With over six decades of experience in designing and manufacturing flow-control solutions, the company has grown into a globally trusted name. Its products operate in plants and projects across 61 countries, supported by a manufacturing footprint that now extends beyond India, including a recently commissioned facility in Saudi Arabia, a natural progression of a brand built on precision, reliability and long-term partnerships.

L&T Valves' **Sustainability Commitment**

L&T Valves has surpassed all sustainability targets set for the 2021–26 period, demonstrating strong leadership in energy efficiency and emissions reduction. The business achieved a 29% reduction in energy intensity, a 50% reduction in water intensity, and a 60% reduction in greenhouse-gas emission intensity, all significantly outperforming its goals. Renewable energy accounted for 52% of total energy consumption, reflecting the company's focus on clean operations.

In FY25, these efforts prevented 2,406 metric tonnes of CO_2- equivalent emissions. L&T Valves' continuous progress reflects a strong commitment to operational sustainability and supports L&T's broader climate and resource-efficiency agenda.

How the L&T Group **Prioritises Sustainability**

Sustainability is a core pillar of the L&T Group's long-term strategy, with targets to achieve **Carbon Neutrality by 2040 and Water Neutrality by 2035.** In FY25, the company sourced **69mn kWh of renewable energy,** accounting for **15%** of total consumption, and increased renewables usage by 60%. It also recycled **2.6mn kL** of wastewater and expanded the use of cleaner fuels such as biodiesel and CNG.

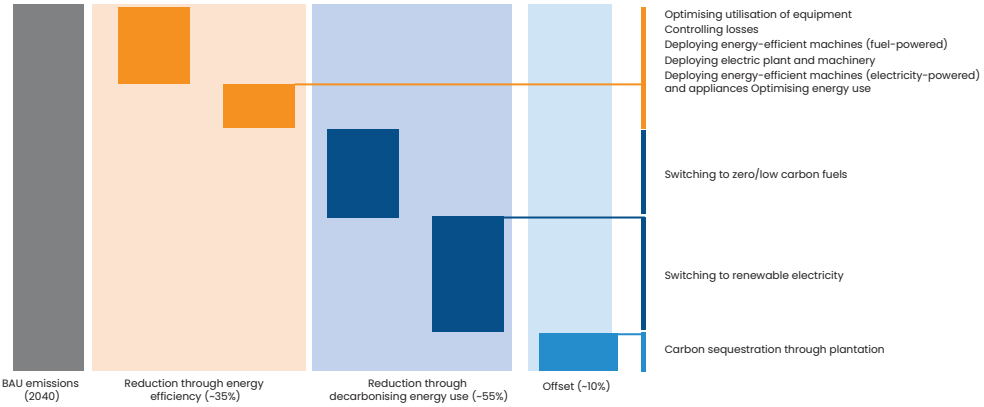
Water Neutrality by 2035

Carbon Neutrality by 2040

60% **Increase in** Renewables usage in FY25

Strategic **Priorities**

- **Dedicated Sustainability roadmaps** supported by an investment of **₹36.9 crore** in environment-related initiatives in FY24
- **Achieved a 16%** reduction in energy consumption intensity
- Advancing the **Lakshya 2026** target of **50% Renewable Energy** while progressing towards a **25%** reduction in emissions intensity



L&T's Carbon Neutrality Path

FPEL's Collaboration **with L&T Valves**

The partnership between Fourth Partner Energy and L&T began with a simple technical request that gradually evolved into a strong collaboration. L&T had an existing CAPEX solar plant at their Chennai facility, but its output was limited due to low-efficiency technology. They approached FPEL to explore improvement options, and our assessment and recommendations opened the door to deeper discussions and a long-term association.

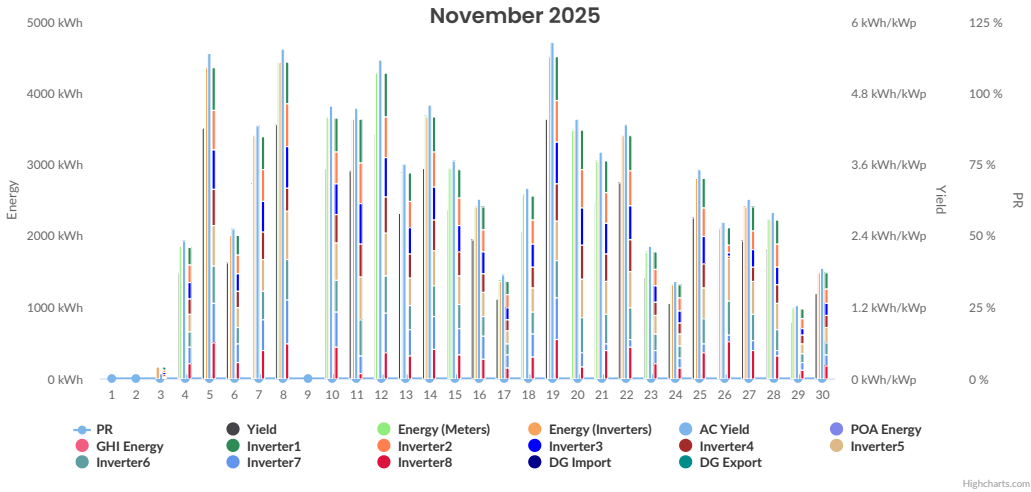
As the dialogue progressed, the L&T team visited several FPEL project sites to understand our execution quality, engineering capability and operational standards. Impressed with the consistency and professionalism and having their board echo the same – L&T decided to partner with FPEL for 2 initial Rooftop Solar systems for L&T Rubber and L&T Valves, together adding up to around 2 MWp of capacity.

Executed with precision, strong safety practices and smooth coordination, the L&T Valves project further reinforced FPEL as a trusted renewable energy partner in L&T's sustainability journey.

Key Highlights of the **L&T Valves Project**

Capacity **1.03 MWp**	Location **Enathur, Kanchipuram, Tamil Nadu**	CoD **26th Sep 2025**	Number of days for Execution **100 Days**
Percentage of RE in **Energy Mix: ~29%**	Annual Generation **~1.5 Mn Units**	Type of Roof **RCC Precast slab**	Cost Savings **~₹40 Lks annually**

L&T Valves' **Solar Power Generation**



FPEL Management **Speak**

"Our association with L&T Valves is a clear example of how we approach complex projects with technical depth and disciplined execution. The assignment came with its own construction-related challenges, such as working on a sloped roof, which our teams managed through structured planning, agile coordination and a strong emphasis on safety and quality. Despite these complexities, we delivered the 1.03 MWp system within the committed timelines, ensuring smooth implementation without affecting plant operations. The outcome reinforces the trust in our partnership with L&T Valves and strengthens our shared commitment to cleaner and more sustainable manufacturing."

Ankit Sharma
South Lead, Projects — DBU

Environmental
Impact Dashboard (Annual)

This **1.03 MWp Rooftop Solar** project delivers measurable environmental benefits by significantly reducing emissions and conserving natural resources.

1,426 tons
of reduced Carbon emmissions

684 kgs Coal reduction

33.5 Lk lts of
Water conserved

Equivalent to planting **65,500 Trees** (Lifetime)

Overcoming Challenges in Project Execution

Challenge

The plant had a roof with a steep 21-degree slope, making it difficult for workers to move and operate safely. The angle posed a high risk of slips, falls, and restricted mobility during the installation process.

How FPEL Tackled It

To ensure complete safety, FPEL installed a permanent lifeline system right at the beginning. Temporary tie-ropes were also set up across the working area so that workers could anchor themselves while moving. These measures enabled the team to work safely and efficiently despite the challenging slope.

Challenge

The site had RCC pre-cast slab roofs with bitumen waterproofing. Drilling on this type of roof is extremely sensitive because any improper drilling can damage the structural slab, which was only 50 mm thick. The thin slab made load distribution difficult and raised concerns about structural safety during installation.

How FPEL Tackled It

FPEL conducted a detailed structural assessment and adopted a controlled installation method. This included carefully lifting portions of the bitumen sheet, performing precise drilling and secure fixing, and restoring the waterproofing immediately. Workforce movement was limited to one person per section to avoid stressing the thin slab. This careful approach ensured safe installation while protecting the structural integrity of the roof.

FPEL—L&T Valves:
The Partnership Strengthens

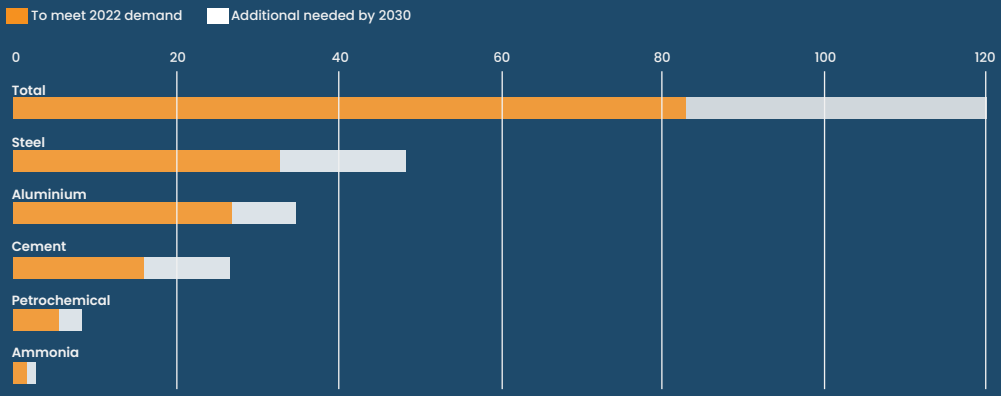
With both entities committed to deepening the relationship, deliberations are underway for additional projects in Tamil Nadu; with and teams evaluating feasible locations and capacities where Renewable Energy can further support L&T's sustainability and operational goals. With L&T steadily advancing its clean-energy transition and FPEL offering a wide range of renewable energy solutions, the partnership is well positioned to grow meaningfully in the coming years.

India's Industries and Their
Increasing Demand for Clean Energy

India's industrial and manufacturing sectors are expanding rapidly, pushing up energy demand and emissions. In 2024, India's energy-related CO_2 emissions rose by 5.3%, the highest among major economies. The manufacturing economy is valued at US$ 1.62 trillion in 2025 and is projected to reach **US$ 2.30 trillion by 2030**, with nearly 920 million tonnes of CO_2 emitted annually.

With the energy sector contributing over 75% of India's total greenhouse gas emissions, renewable energy adoption offers the largest decarbonisation opportunity. Renewable energy solutions can cut up to 180 million tonnes of CO_2 by 2030, around 17% of heavy industry emissions. To meet this need, India's heavy industries currently require 83 GW of renewable energy capacity to decarbonise electricity consumption, a requirement expected to increase to **120 GW by 2030.**

Renewable Energy capacity (GW) required to meet the electricity demand of different industrial sectors



Source: Ember's estimates based on electricity consumption data for various industries for 2022 (latest year with data availability) and industry growth projections to 2030.
RES refers to renewable energy sources, which includes solar, wind, small hydro and bioenergy.

FPEL's On-Site Solar
(Distributed) Highlights

- **~600 MWp** of executed on-site projects across sectors like automobile, manufacturing, cement, IT and more.
- Flexible **CAPEX and zero-investment OPEX** models tailored to client needs.
- End-to-end execution from **design, engineering to construction, operation & maintenance.**
- **Diverse solutions:** Rooftop Solar, Ground-Mount, Solar Carports, Floating Solar, and Solar + BESS.
- Strong pan-India presence with projects delivered across **25+ States for 200+ Corporate clients.**

Why Choose FPEL as
Your Energy Transition Partner?

- A trusted leader in the C&I Renewable Energy space, consistently holding over 18.5% market share since 2020
- A scaled and diversified clean energy portfolio with **1.6 GW+** operational capacity, spanning on-site, open access solar and wind assets
- Proven execution capability with **3,000+ projects** delivered over **15 years,** including complex industrial installations
- A single partner offering the entire clean energy spectrum, from solar and wind to hybrid, storage, RTC, power trading and carbon credits
- A strong ESG foundation with global best-practice health and safety standards embedded across the RE value chain

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