

# Hitachi Energy India Limited

## What Hitachi Energy India Limited does

Hitachi Energy India Limited is the Indian subsidiary of Zurich-headquartered Hitachi Energy Ltd, operating in India since 1949. The company designs, manufactures, commissions and services products and systems across the entire power value chain – transformers, high-voltage switchgear, HVDC systems, grid integration, automation and digital solutions. It has 19 manufacturing facilities across 8 locations in India, 12 sales offices, 7 sales touchpoints, and 2,481 employees as of FY2025. The company serves utilities, renewable energy developers, industries, data centers, railways and metros domestically, and exports to over 70 countries.

The company's purpose is to advance a sustainable energy future for all. It is aligned with Hitachi Energy's global mission and India's energy transition goals, including the target of 500 GW non-fossil capacity by 2030. Hitachi Energy India has been instrumental in key nation-building projects over seven decades, from the first HVDC link between Rihand and Delhi in 1990 to the commissioning of India's first city infeed HVDC project in Mumbai in 2026.

The company operates through four business units – Transformers, High Voltage Products, Grid Integration, and Grid Automation – with a fifth Services business unit added effective April 1, 2025. Its order intake mix by offering in FY2025 was 52% products, 45% projects, and 3% services. Exports accounted for 27% of total revenue in FY2025, and when excluding large HVDC orders, exports are consistently in the 25-30% range.

## Business segments

### Transformers

This is the largest segment by revenue. It covers the design, manufacture and supply of power transformers (up to 765 kV, 500 MVA single-phase units), distribution transformers, traction transformers for railways, dry-type transformers, and converter transformers for HVDC. The segment serves utilities like POWERGRID and state transmission companies, renewable energy parks, data centers, and industrial customers. The company has historically manufactured transformers at its Maneja facility in Vadodara and is now investing in a new greenfield large power transformer facility in Karjan, Vadodara, which will produce both large power transformers and HVDC converter transformers. This segment benefits from strong domestic demand for grid expansion, renewable evacuation, and emerging sectors like data centers.

### High Voltage Products

This segment manufactures and supplies high-voltage switchgear (gas-insulated switchgear or GIS up to 420 kV, air-insulated switchgear), circuit breakers, capacitors, filters, and instrument transformers. It includes the EconiQ range of SF6-free GIS, which is a game-changing sustainable technology. The segment serves utilities, industries, data centers, and renewable projects. Hitachi Energy India exports a significant portion of its high-voltage products through its global feeder factory and allocated market strategy, including products like 66 kV circuit breakers manufactured only in India for the global group.

### Grid Integration

This segment provides system-level solutions including HVDC systems, STATCOM, FACTS, grid connections, and turnkey substation projects covering design, engineering, supply, erection and commissioning. It is the segment that

book the large HVDC orders – the 6,000 MW Bhadla-Fatehpur HVDC project for Adani Energy Solutions, the Marinus Link order from Australia, and the Mumbai city infeed HVDC project. The segment also delivers renewable substations, battery energy storage systems (BESS), and STATCOM projects. Grid Integration is the second-largest segment and carries high complexity, long execution timelines (48-54 months), and significant revenue visibility from the record order backlog.

## Grid Automation

This segment covers automation, control, protection, SCADA, and digital solutions for power grids. It includes relays (such as the COMBIFLEX range manufactured in India), RTUs, substation automation, and digital platforms. This segment serves utilities, industries, data centers, and railways. It is a smaller segment compared to Transformers and Grid Integration but is strategically important for expanding digital capabilities and service-led growth. The company also offers a modular compact mobile 400 kV substation concept, which is gaining traction.

## Services

Services became a separate business unit on April 1, 2025, to intensify lifecycle engagement with customers. It covers maintenance, repair, retrofitting, upgrades, annual maintenance contracts, and digital services for the large installed base across all segments. Service orders have grown strongly – 90% year-on-year in Q1 FY26 – and contribute a high single-digit percentage to the total order book. The company sees significant potential in service as it helps maintain continuity and provides recurring revenue with better margins. Key service orders include SCADA upgrades, equipment replacement, and the first EconiQ order in India.

## Products and business detail

The product portfolio is broad and deep. The marquee product is large power transformers, including 765 kV 500 MVA single-phase units supplied to POWERGRID for transmission projects. The company also manufactures HVDC converter transformers for both LCC and VSC technologies at its Maneja facility and will produce them at the new Karjan facility. These converter transformers are critical components for the Bhadla-Fatehpur, Mumbai infeed, and Marinus Link HVDC projects.

In high-voltage switchgear, the company offers GIS from 66 kV to 420 kV, including the SF6-free EconiQ GIS. In February 2026, the company announced the groundbreaking of a new high-voltage products facility in Savli, Gujarat, to expand capacity for GIS and other products. The EconiQ range is particularly important for customers seeking low-global-warming-potential solutions, and the company won its first EconiQ order in India in Q2 FY26.

For railways, the company manufactures Scott-connected and V-connected traction transformers for the 2x27.5 kV electrification system. It rolled out its 1,000th locomotive transformer in February 2025 from the Savli facility, underscoring its long-term partnership with Indian Railways. These transformers enable higher power delivery, faster train speeds, and lower CO2 emissions.

Grid automation products include the COMBIFLEX relay range manufactured in India and supplied globally as a feeder factory product. The company develops localized versions of global products like Grid-eXpand and Grid-eMotion for the Indian market. It also offers digital substations and consulting services.

The company has invested heavily in manufacturing capabilities. In October 2024, it announced a Rs 2,000 crore capex program. In June 2026, the Board approved an additional Rs 2,000 crore, taking total cumulative capex to Rs 4,000 crore. The flagship project is a greenfield large power transformer facility in Karjan, Vadodara, to be completed by the last quarter of calendar 2028, with an additional capacity of 30-40 GVA. The company is also adding two new lines at its Bangalore factory for power quality products.

Manufacturing facilities are spread across Maneja, Savli, Halol (Vadodara), Chengalpattu (Chennai), Peenya and Doddaballapura (Bengaluru), and Thandavapura (Mysuru). All facilities are certified for ISO 9001, ISO 14001, ISO 45001, and ISO 50001. The company achieved 100% renewable electricity in its operations through rooftop solar and power purchase agreements.

## Customers

Hitachi Energy India serves a diverse customer base with no single customer exceeding 15% of revenue. The largest customer segments by order intake in FY2025 were utilities (including POWERGRID, state transmission utilities like MSETCL, OPTCL, and distribution companies like Tata Power Delhi Distribution), followed by renewables, industries, data centers, and railways.

The buying relationship is characterized by high switching costs, especially for complex projects like HVDC and large substations. Customers choose Hitachi Energy for its technology leadership (particularly in HVDC and SF6-free solutions), local manufacturing capabilities, proven execution track record, and comprehensive lifecycle support. The company has deep relationships with key customers built over decades – it has supplied transformers to Indian Railways for decades, and is the exclusive partner for many HVDC projects.

Contract structures vary: large HVDC projects are multi-year contracts (48-54 months) with milestone-based revenue recognition using percentage-of-completion method. Shorter-cycle product orders (transformers, GIS, relays) are typically executed within 6-18 months. More than 70% of the portfolio has price escalation clauses to protect margins from commodity and freight inflation. The company's record order backlog of Rs 29,555 crore as of March 31, 2026 provides strong revenue visibility for several quarters.

Key named customers include POWERGRID (for 765 kV transformers and HVDC projects), Adani Energy Solutions (for the Bhadla-Fatehpur HVDC and Mumbai city infeed HVDC), Tata Power Delhi Distribution, Indian Railways (for Vande Bharat transformers and traction equipment), state transmission utilities, and data center operators in India and Southeast Asia. Export customers span Europe, the Americas, and Asia, covering utilities, data centers, and industries.

## Competitive landscape

The power equipment industry in India is moderately concentrated, with Hitachi Energy India competing against Siemens Energy, GE Vernova (formerly GE T&D India), Toshiba, BHEL, and Chinese OEMs like TBEA and XD Group, as well as Crompton Greaves (CG Power).

Hitachi Energy wins on technology and quality. It is the only company with end-to-end HVDC capability in India, including converter valves, converter transformers, and control systems. It has a strong local manufacturing base and a 75-year track record. The SF6-free EconiQ portfolio gives it a differentiation in sustainability-conscious segments like data centers and utilities.

However, the company faces intense competition on price, especially from Chinese OEMs if import restrictions were relaxed. Management has stated that as long as there is a level playing field, the company can compete effectively. BHEL is both a partner (on HVDC projects) and a competitor in conventional power equipment. GE Vernova has lower royalty payments (around 1% of revenue vs Hitachi Energy's ~4%), which gives them a structural cost advantage. Management defends the royalty as necessary for access to cutting-edge global technology and continuous innovation.

In the base order segment (transformers, GIS, automation), competition is intense as many domestic and international players vie for utility contracts. Hitachi Energy has been expanding its capacity to meet demand, while competitors are also adding capacity. The company differentiates through its service network and lifecycle support.

## Industry

India is the third-largest producer and consumer of electricity worldwide, with total installed capacity surpassing 500 GW in September 2025. Electricity demand is projected to surpass 700 GW by 2047, growing at a CAGR of 5-9%. The transmission segment is on the cusp of massive expansion, with an estimated Rs 9.1-9.2 lakh crore investment required over the next decade to double inter-regional transmission capacity from 2,530 GVA to over 5,000 GVA by 2032, as per the National Electricity Plan 2024.

The key demand drivers are:

- Renewable energy capacity target of 500 GW non-fossil by 2030, requiring large-scale transmission expansion, HVDC corridors, and STATCOM solutions. India added 29.5 GW of renewable capacity in FY2025 alone.
- Data center growth: India currently has less than 2 GW of data center capacity, expected to grow to 13-18 GW (6-9x) by 2030. Each data center represents an addressable market of 15-20% of its capex for Hitachi Energy.
- Railway electrification and modernization: Indian Railways targets 100% electrification and is expanding high-speed rail corridors. The budget proposed seven high-speed rail corridors.
- Battery energy storage systems: Expected 80 GW of BESS over the next 5-6 years, driven by renewable integration requirements.
- Industrial capex cycle in steel, cement, semiconductor, and automobile manufacturing.

India is traditionally a net importer of high-end power equipment, but government policies (Make in India, PLI for high-efficiency solar PV modules and ACC batteries) promote localization. Hitachi Energy India exports about 25-30% of its revenue (excluding large HVDC orders) and is well-positioned to benefit from the EU-India Free Trade Agreement and the US-India trade deal, which reduce tariffs on Indian exports.

Regulatory environment includes the National Electricity Plan, PM-KUSUM, National Green Hydrogen Mission, PLI schemes, SEBI listing regulations, and ESG reporting requirements (BRSR). The government is also pursuing DISCOM privatization, starting with Uttar Pradesh.

The industry exhibits moderate cyclicity linked to transmission project awards and industrial capex cycles. However, structural drivers – energy transition, electrification, data center buildout, and grid modernization – provide multi-year growth visibility and reduce cyclicity. The HVDC pipeline alone is expected to see 2-3 projects per year for at least the next few years, as management stated in the Q2 FY26 call: "to manage the complexity of the Indian network, we need to have two to three HVDCs per year." This structural demand underpins the company's capacity expansion plans and margin improvement trajectory.

## Growth triggers

- **HVDC pipeline remains robust with 3-4 projects expected over the next two years in India.** The company's leadership in both LCC and VSC technology, plus a dedicated HVDC factory in Chennai and a new transformer greenfield facility, positions it to capture these large orders. (Q2 FY26 concall, Nov 2025; Q4 FY26 concall, May 2026)

- **Data center capacity expansion is accelerating in India.** The addressable market is 15-20% of data center capex, and India's data center capacity is projected to grow 6-9x from under 2 GW to 13-18 GW by 2030. The company already supplies transformers, GIS, and automation for data centers domestically and exports components to Southeast Asia and the US. (Q3 FY26 concall, Feb 2026; Q4 FY26 concall, May 2026)
- **The Board approved an additional Rs 2,000 crore capex in May 2026, taking cumulative capex to Rs 4,000 crore.** This includes a greenfield large power transformer and HVDC converter transformer facility in Karjan, Vadodara, to be operational by the last quarter of calendar 2028. Management expects this to roughly double the existing transformer capacity. (Q4 FY26 concall, May 2026)
- **The services business unit, launched in April 2025, is gaining traction.** Service orders grew 90% year-on-year in Q1 FY26 and contribute a high single-digit percentage to the order book. This unit targets lifecycle engagement across the installed base, including upgrades and digital services. (Q1 FY26 concall, Aug 2025)
- **Export strategy leverages a three-pronged approach: allocated markets, global feeder factories, and component feeder factories.** Excluding large HVDC projects, exports contribute around 25-30% of revenue. The EU-India Free Trade Agreement and US-India trade deal are expected to reduce tariffs and enhance export competitiveness. (Q3 FY26 concall, Feb 2026; Q4 FY26 concall, May 2026)
- **India's transmission segment is set for massive investment.** The National Electricity Plan envisions Rs 9.1-9.2 lakh crore investment over the next decade to double inter-regional transmission capacity. Hitachi Energy's strong order backlog (Rs 29,555 crore as of March 2026, up 53.6% YoY) provides multi-year revenue visibility. (Q4 FY26 concall, May 2026; FY25 Annual Report)

## Key risks

- **Geopolitical and supply chain disruptions** – The ongoing Middle East tensions, particularly the Strait of Hormuz situation, are driving elevated freight costs and commodity price inflation. While over 70% of the portfolio has price escalation clauses, freight costs are not fully pass-through, which could pressure margins if disruptions persist. (Q4 FY26 concall, May 2026)
- **Execution risk on large HVDC projects** – The company has three large HVDC orders (Adani Bhadla-Fatehpur, Marinus Link in Australia, and the recently commissioned Mumbai city infeed project) with execution timelines of 48-54 months. Any delays in engineering, localization, or supplier development could affect revenue recognition and margins. (Q2 FY26 concall, Nov 2025; Q4 FY26 concall, May 2026)
- **Royalty and technology dependency** – The company pays a royalty of roughly 4% of revenue to access global technology from its parent Hitachi Energy. This is higher than peers like GE Vernova (around 1%). The royalty is necessary for continuous innovation but structurally impacts margins compared to local competitors. (Q1 FY26 concall, Aug 2025)
- **Competition from Chinese imports if policy changes** – Currently, imports from border-sharing countries are restricted due to security concerns. However, any relaxation could allow Chinese OEMs (TBEA, XD Group) into the Indian transformer market, putting pricing pressure on domestic players. Management has expressed confidence in maintaining a level playing field. (Q3 FY26 concall, Feb 2026)
- **Cybersecurity threats** – Inadequate modernization and governance around cybersecurity could lead to data loss, financial impact, and reputational harm. The company is ISO 27001 certified, but the evolving threat landscape requires continuous investment. (FY25 Annual Report Risk Management section)

- **Capacity expansion and capital deployment delays** – The large capex program (Rs 4,000 crore cumulative) requires timely execution. In FY26, initial capital deployment was slower than planned (Rs 155 crore vs. a Rs 700 crore target), though management expects a ramp-up in subsequent quarters. Delays could result in cost overruns and missed market opportunities. (Q3 FY26 concall, Feb 2026)
- **Health, Safety and Environment (HSE) incidents** – A zero-fatality culture is non-negotiable, but operational risks remain. Any major incident could affect the company's license to operate, customer confidence, and regulatory standing. (Q2 FY26 concall, Nov 2025)

## Walk the talk

In November 2025 (Q2 FY26), management stated that it would enter double-digit EBITDA margins by the fourth quarter of FY26, ahead of its own target. The actual outcome was stronger than promised.

*"We will enter double-digit EBITDA margins, and we have entered much ahead of our own target." – MD & CEO, Q2 FY26 concall (Nov 2025)*

By the end of FY26, the company reported an operational EBITDA margin of 15.4% for the full year and 16.4% for Q4 FY26. This was well above the "double-digit" guidance, confirming that the margin improvement was not a one-off but a sustained trend driven by operational efficiency, better product mix, and export momentum.

On the Mumbai HVDC city infeed project, management in February 2026 said commissioning would happen "in just another two to three weeks."

*"We will commission the project. So, in just another two to three weeks, we will commission the project." – MD & CEO, Q3 FY26 concall (Feb 2026)*

The project was indeed commissioned in Q4 FY26, as confirmed in the May 2026 call. Management noted that the entire board had visited the site the day of the call and that "the project is pumping the power." This demonstrated execution capability on a complex first-of-its-kind VSC-based HVDC project in India.

On the capex front, the company announced an initial Rs 2,000 crore investment plan in October 2024. By May 2026, it had not only progressed on that but also announced an additional Rs 2,000 crore, taking cumulative capex to Rs 4,000 crore.

*"Board approved an additional investment of Rs. 2,000 Crores. This includes among other initiatives, the establishment of greenfield large power transformer facility in Karjan, Vadodara in Gujarat." – MD & CEO, Q4 FY26 concall (May 2026)*

This more than doubled the original commitment, signaling that the demand visibility was even stronger than initially assessed. The new facility is expected to be operational by the last quarter of calendar 2028, with a groundbreaking ceremony scheduled for June 12, 2026.

The services business unit, launched on April 1, 2025, was a promise to intensify lifecycle engagement. In Q1 FY26, service orders grew 90% year-on-year, confirming early traction. By the May 2026 call, management reiterated that services remain a key pillar for continuity and resilience.

## Scenarios

### Bull case

India's transmission and renewable sectors accelerate faster than expected. The government awards four HVDC projects over the next two years instead of three, and Hitachi Energy wins at least half of them. The new Karjan transformer factory comes online ahead of schedule, enabling the company to capture both domestic and export demand for large power transformers. Data center capacity in India doubles every two years, driving sustained orders for GIS, transformers, and automation. Margins improve further as the fixed-cost base is spread over higher revenue and the service business scales. The company maintains its export momentum at 30% of revenue, benefiting from the EU-India FTA and US-India trade deal. Earnings grow consistently, and the company emerges as the dominant player in India's grid infrastructure.

### Base case

The company executes its strong order backlog smoothly over the next 3-4 years. HVDC projects progress as scheduled, with one or two new orders won each year. Data center growth is steady but not exponential, contributing a high single-digit share of orders annually. Margins stabilize in the 13-16% EBITDA range as royalty and other expenses remain a constant percentage of revenue. The capex program is completed on time, adding 30-40 GVA of transformer capacity by 2029. Exports stay in the 25-30% band. The business grows in line with India's power demand and transmission investment, delivering consistent but not spectacular improvements.

### Bear case

Geopolitical tensions escalate further, causing prolonged supply chain disruptions and sharp commodity price spikes. The Strait of Hormuz issue leads to freight costs that cannot be passed through, compressing margins. Execution on one of the large HVDC projects hits a delay due to supplier or localization issues, attracting liquidated damages and customer dissatisfaction. The government, facing fiscal constraints, slows down transmission project awards. Chinese transformer imports get a policy relaxation, and Chinese OEMs undercut prices by 15-20%, squeezing domestic margins. The company's royalty burden remains a structural disadvantage. The large capex program overruns in cost and time, leading to lower returns on invested capital. Competition from peers like Siemens Energy and GE Vernova intensifies in the data center and transmission segments. The company's growth rate decelerates, and margins decline towards single digits.