J-POWER Group Businesses

Power Generation Business

The Value We Provide

- Realizing economical and stable power supply through CO_2-free power sources and high-efficiency thermal power sources
- Contributing to ensuring energy security and preventing regional environmental issues such as air pollution

Recognition of Business Environment

Opportunities
- Widespread use and expansion of CO_2-free power sources and CO_2-free hydrogen aimed at achieving carbon neutrality
- Expansion of new markets and forms of selling

Risks
- Greater earnings fluctuations resulting from increased volatility in resource and electricity market prices
- Earnings deterioration due to CO_2 emissions regulations
- Higher operating costs due to inflation

Strengths
- Well-balanced power source portfolio consisting of renewable energy and thermal power
- Comprehensive technological capabilities that can be executed within the Group from development to operation
- The highest level of engineering and execution capabilities gained from involvement in global development
- Relationships of trust with local communities

Direction of Responses

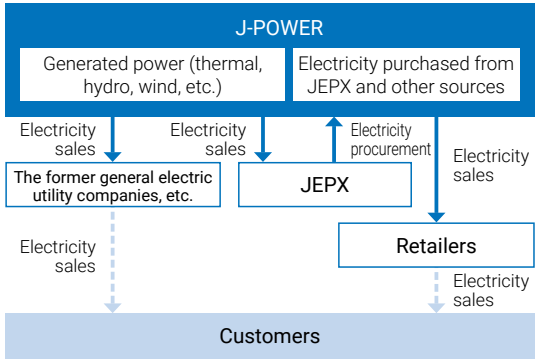
- Preferentially allocate investment funds to renewable energy
- Aim for improved profitability and further growth by increasing the volume of power generation from renewable energy sources* and realizing environmental value
- Phase out of inefficient coal-fired thermal power plants and select optimum technologies for high-efficiency coal-fired thermal power plants based on characteristics specific to their sites to reduce CO_2 emissions and realize decarbonization
- Establish existing thermal power plants as intermediate load power sources that help regulate power supply and realize value that is aligned with their operational formats
- For Ohma Nuclear Power Plant, put the highest priority on ensuring safety, while considering the effective use of the Long-term Decarbonization Power Source Auction system

*An increase of 4.0 billion kWh by FY2030 (from the FY2022 level)

Overview of Power Generation Business

The J-POWER Group generates electricity from various power sources, including renewable energy and thermal power, and sells it to the former general electric utility companies (EPCOs) and the Japan Electric Power Exchange (JEPX) to ensure a stable supply of electricity in Japan. J-POWER also sells electricity procured from JEPX and other sources to retail electricity suppliers.

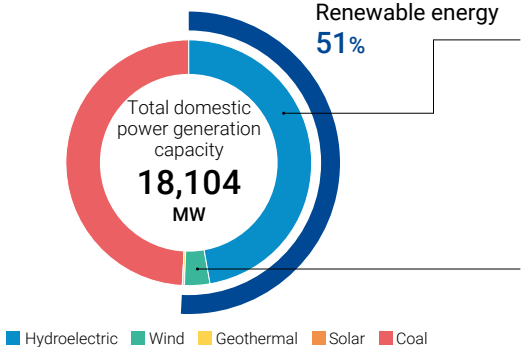
Flow of electricity sales



In principle, the structure of sales charges to EPCOs consists of a baseline charge based on the value of power generation capacity (kW) and a metered charge based on the electric power sales volume (kWh). For the portion equivalent to fuel costs, which account for the majority of the metered charge for thermal power generation, we have introduced a system that reflects fluctuations in market conditions related to fuel procurement as appropriate.

The sales price of the electricity procured from JEPX is determined through discussions with retailers and is revised in a timely manner.

Domestic power generation capacity

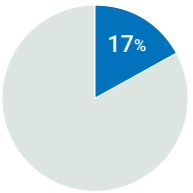


As of March 31, 2025

Share of hydroelectric power generation capacity

No. 2 in Japan

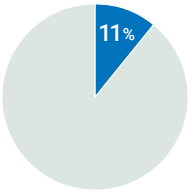
8,582 MW



Share of wind power generation capacity

No. 2 in Japan

587 MW



J-POWER Group Businesses

Power Generation Business

Renewable Energy

Hydroelectric power

Over the past 70 years or so, the J-POWER Group has engaged in the development and operation of hydroelectric power plants. Hydroelectric power plants can be started quickly and their output is adjustable, and pumped storage hydropower plants play an important role as a regulating power source to absorb surplus power and compensate for power shortages. With no available land left for large-scale developments in Japan, the Group is engaged in increasing the power generation volume through the development of small hydroelectric power plants and the comprehensive renewal of main facilities.

P.28 NEXUS Sakuma Project

Wind power

The J-POWER Group began engaging in the wind power generation business early in Japan. Even now, we are engaged in many development projects while also advancing facility upgrades at its initial operation sites. In terms of offshore wind power, we are working on the construction of the Kitakyushu Hibikinada Offshore Wind Farm Project to start commercial operation in FY2025, utilizing the expertise gained through our participation in the Triton Knoll Offshore Wind Farm Project in the United Kingdom. In addition, we are working to realize the offshore wind power project off the coast of Oga City, Katagami City, and Akita City, Akita Prefecture, for which J-POWER was selected as a business operator in December 2023.

P.28 Wind power project

Geothermal power

Geothermal energy is a domestically produced CO_2-free energy source, and utilized as a baseload power source that is capable of stable power generation without being affected by weather conditions. Currently, the J-POWER Group operates the following three geothermal power plants: Wasabizawa Geothermal Power Plant, Onikobe Geothermal Power Plant, and Appi Geothermal Power Plant. In addition, we are currently conducting research for new geothermal power development in the Takahinatayama region in Miyagi Prefecture.

Solar power

The J-POWER Group currently operates the Kitakyushu Hibikinada Solar Power Plant and Himeji Oshio Solar Power Plant. We are also promoting the on-site PPA model, where we install solar power generation equipment on the roofs or in open spaces of customers' facilities to supply power, thereby contributing to their needs for self-consumption of renewable energy.

Thermal Power

Coal, which supports power supply in Japan, is considered an important energy source due to its superiority in stable supply and economic efficiency, as its relatively low geopolitical risk in procurement, comparatively low unit price per calorific value, and ease of storage.

The J-POWER Group has contributed to the stable supply of electric power while curbing emissions of air pollutants such as SOx and NOx using our advanced technologies, and reducing CO_2 emissions by employing the highest-efficiency technologies available at the time of construction.

In addition, the Group is promoting mixed combustion of sewage sludge and biomass fuel, having worked on 10% mixed combustion of biomass fuel at the Takehara Thermal Power Plant New Unit No. 1. From the perspective of sustainably and stably procuring biomass fuel, the Group is also engaged in the business of producing sustainable biomass fuels such as woody fuels using underutilized forest offcuts.

Furthermore, by upcycling our existing coal-fired thermal power plants toward decarbonization, we aim to convert to hydrogen power generation. The first step toward this goal is our work in Nagasaki Prefecture on the GENESIS Matsushima Plan.

P.31 Biomass certification
P.31 GENESIS Matsushima Plan

Nuclear Power

The J-POWER Group is implementing the Ohma Nuclear Power Plant Project with safety as our top priority, aiming to expand CO_2-free power sources.

P.29 Ohma Nuclear Power Plant Project


Tagokura Dam


New Nikaho Kogen Wind Farm


Appi Geothermal Power Plant


Takehara Thermal Power Plant New Unit No. 1

J-POWER Group Businesses

Transmission and Transformation Business

The Value We Provide

- Contributing to stabilizing electric power networks and expanding the introduction of renewable energy in Japan through trunk transmission lines and cross-regional interconnection facilities

Recognition of Business Environment

Opportunities
- Expansion of renewable energies
- Growing need to achieve carbon neutrality

Risks
- Impact of intensifying natural disasters on facilities
- Aging of facilities

Strengths
- A broad range of technologies related to power transmission and transformation facilities, including ordinary AC transmission lines and DC transmission lines, submarine cables, cables laid on bridges, and frequency converter stations enabling the exchange of electricity between eastern and western Japan which operate at different frequencies.
- Relationships of trust with local communities cultivated through over 70 years of experience in the construction, maintenance, and management of power transmission and transformation facilities

Direction of Responses

- Based on the premise of ensuring economic efficiency, contribute to the enhancement of electric power networks through efforts leveraging a broad range of technologies, including the expansion of trunk transmission lines and cross-regional interconnection lines, DC transmission facilities, and frequency converter stations.

Overview of Transmission and Transformation Business

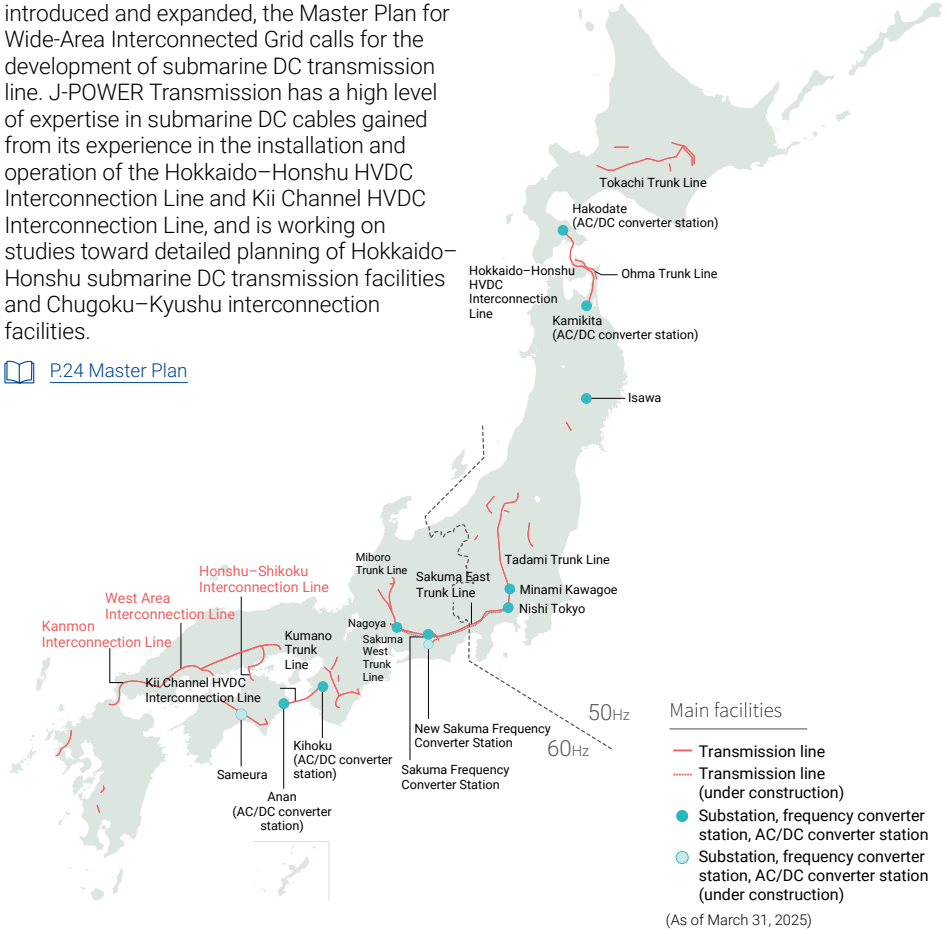
J-POWER Transmission Network Co., Ltd. (J-POWER Transmission) is a company which is independent of the J-POWER Group's power generation and retailing divisions, handling its transmission business from a neutral position. With nine substations and converter stations, and approximately 2,400 km of transmission lines across Japan, J-POWER Transmission contributes to the cross-regional operation of Japan's overall power grid.

In particular, cross-regional interconnection facilities connecting Honshu with Hokkaido, Shikoku, and Kyushu, and the Sakuma Frequency Converter Station, which was the first in Japan to enable the flexible ex-change of power with different frequencies between eastern Japan (50 Hz) and western Japan (60 Hz), are important in enabling the cross-regional operation of power grid in Japan.

High Voltage Direct Current (HVDC)

To deliver renewable energy to major consumption areas from Hokkaido, Tohoku, Kyushu, and other regions where it is being introduced and expanded, the Master Plan for Wide-Area Interconnected Grid calls for the development of submarine DC transmission line. J-POWER Transmission has a high level of expertise in submarine DC cables gained from its experience in the installation and operation of the Hokkaido–Honshu HVDC Interconnection Line and Kii Channel HVDC Interconnection Line, and is working on studies toward detailed planning of Hokkaido–Honshu submarine DC transmission facilities and Chugoku–Kyushu interconnection facilities.

P.24 Master Plan



(As of March 31, 2025)

J-POWER Group Businesses

Overseas Business

The Value We Provide

- Contributing to stable power supply through consulting business and the development of power plants overseas
- Contributing to reducing CO_2 emissions and addressing environmental issues through the development of renewable energy and the construction and operation of state-of-the-art environmentally friendly high-efficiency thermal power plants overseas

Recognition of Business Environment

Opportunities	• Strengthened international initiatives to achieve carbon neutrality • Growing power demand primarily in emerging economies
Risks	• Increasingly volatile resource prices • Tighter international environmental regulations
Strengths	• Project development capabilities • Project promotion capabilities • Ability of management to control risk and replace assets in response to changes in the business environment to increase profitability and sustainability

Direction of Responses

- Move forward with the development of primarily renewable energy in Southeast Asia, the U.S., Australia, Europe, and Middle East
- Aim to acquire developer's profits by selling part of interests after completion of development projects

Overview of Overseas Business

Overseas Consulting Business

Leveraging the experience and technical prowess acquired through its domestic electric power business, the J-POWER Group conducts businesses including basic design study, feasibility studies, design, construction management, and transfer of environmental technologies on development of power sources and transmission and transformation facilities around the world. Since its first project in 1962, the Group has conducted 376 projects in 64 countries and regions.

(As of March 31, 2025)

Overseas Power Generation Business

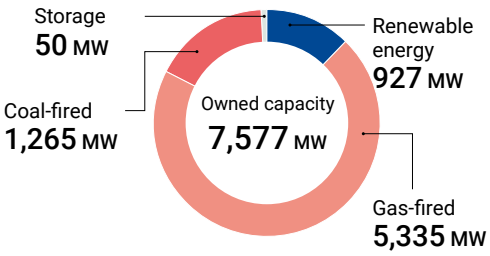
The J-POWER Group has actively identified and developed overseas power generation projects by leveraging its experience, credibility, and networks cultivated through its domestic operations and overseas consulting business.

When the Group first began its overseas power generation business in 1997, it was partial participation primarily in the construction of power plants or plant operations through relatively small-scale investment. The Group has gradually expanded the business, shifting from acquiring interests in existing profitable projects to greenfield development, mainly in Thailand, the U.S., China, and other Asian countries. More recently, the Group has been seeking to expand development opportunities and acquire developer's profits by participating in projects from the initial stage of development and selling interests in power plants and other projects.

Going forward, the overseas power generation business will engage in project development, primarily in the area of renewable energy, to further optimize our business portfolio.

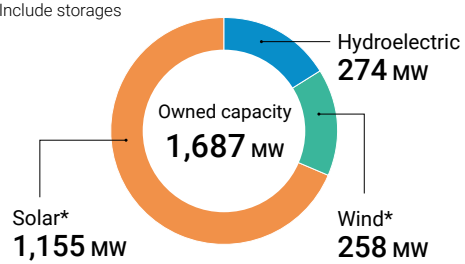
Results of overseas power generation business

Projects in operation



Projects under construction/development

*Include storages



J-POWER Group Businesses

Electric Power-Related Business

The Value We Provide

- Contributing to ensuring stable power supply and energy security through stable procurement of fuels

Recognition of Business Environment

Opportunities
- Low-cost and stable power supply
- Growing interest in energy security

Risks
- Increasingly volatile resource prices
- Tighter international environmental regulations

Strengths
- Stable and long-term fuel procurement based on diversified sources
- Proven technological capabilities cultivated through the electric power business, which requires high reliability

Direction of Responses

- Continue efforts to diversify procurement sources and methods in pursuit of stable supply and economic efficiency

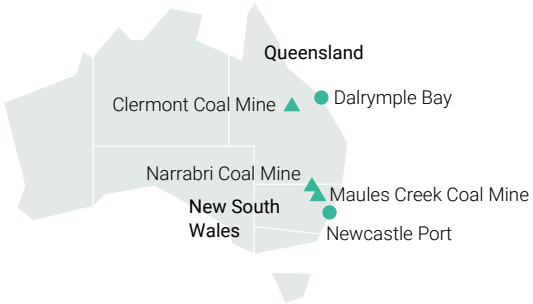
Overview of Electric Power-Related Business

The electric power-related business engages in businesses that complement the power generation and transmission and transformation businesses, and contribute to their smooth and efficient business execution.

Investments in Coal Mines

We have been investing in Australian coal mines since 1980 and currently hold interests in three coal mines in order to provide consistent, long-term supplies of high-grade coal as fuel for thermal power generation.

In the face of increasingly volatile resource prices, we are seeking to optimize the entire supply chain, spanning from fuel procurement to power generation.



Coal mining projects (as of December 31, 2024)

Coal mine	Location	Outport	2024 sales volume	Vested interest	Coal production start
Clermont	Queensland	Dalrymple Bay (Hay Point Port)	11.50 million tons	22.2%	2010
Narrabri	New South Wales	Newcastle Port	4.87 million tons	7.5%	2012
Maules Creek	New South Wales	Newcastle Port	8.12 million tons	10.0%	2014

Telecommunications Network Business

Telecommunications networks are essential infrastructure for operating power plants, as well as transmission and transformation facilities, and thus require high level of reliability. J-POWER Telecommunication Service Co., Ltd. undertakes the construction, maintenance, and management of the J-POWER Group's all telecommunications facilities for electric power systems, contributing to the stable supply of power.