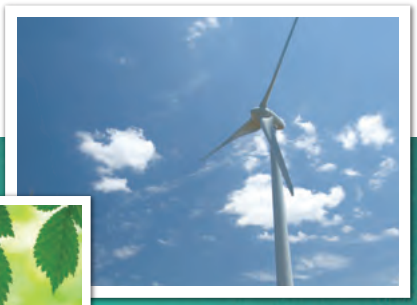
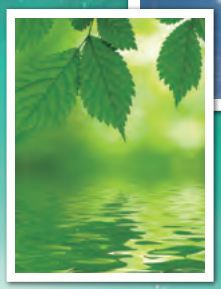
J-POWER
EPDC








J-POWER Group Integrated Report

2019

J-POWER Group Integrated Report

Our mission	We will meet people's needs for energy without fail, and play our part for the sustainable development of Japan and the rest of the world.
Our Credo	We value integrity and pride, which drive everything we do. We pursue harmony with the environment, and thrive in the trust of communities where we live and work. We regard profits as the source of our growth, and share the fruits with the society. We refine our knowledge constantly, to be the pioneering leader in technologies and wisdom. We unite diverse personalities and passions as one, and dare create a better tomorrow.

Reporting period: April 1, 2018 to March 31, 2019 (also contains reporting on material matters after this period)

Reporting cycle: One year

Publication of previous report: September 30, 2018

Guidelines referenced: GRI Standards (Global Reporting Initiative), Guidance for Collaborative Value Creation (Ministry of Economy, Trade and Industry), International Integrated Reporting Framework (International Integrated Reporting Council)

Forward-Looking Statements: Statements in this integrated report, other than those of historical fact, are forward-looking statements about the future performance of the J-POWER Group that are based on management's assumptions and beliefs in light of information currently available, and involve both known and unknown risks and other uncertainties. Actual events and results may differ materially from those anticipated in these statements.

Presentation of Monetary Amounts and Other Figures: For monetary amounts and electric power sales, figures less than the indicated unit are rounded down. For other amounts, figures less than the indicated unit are rounded to the nearest unit unless otherwise mentioned.

Contents

Editorial Policy

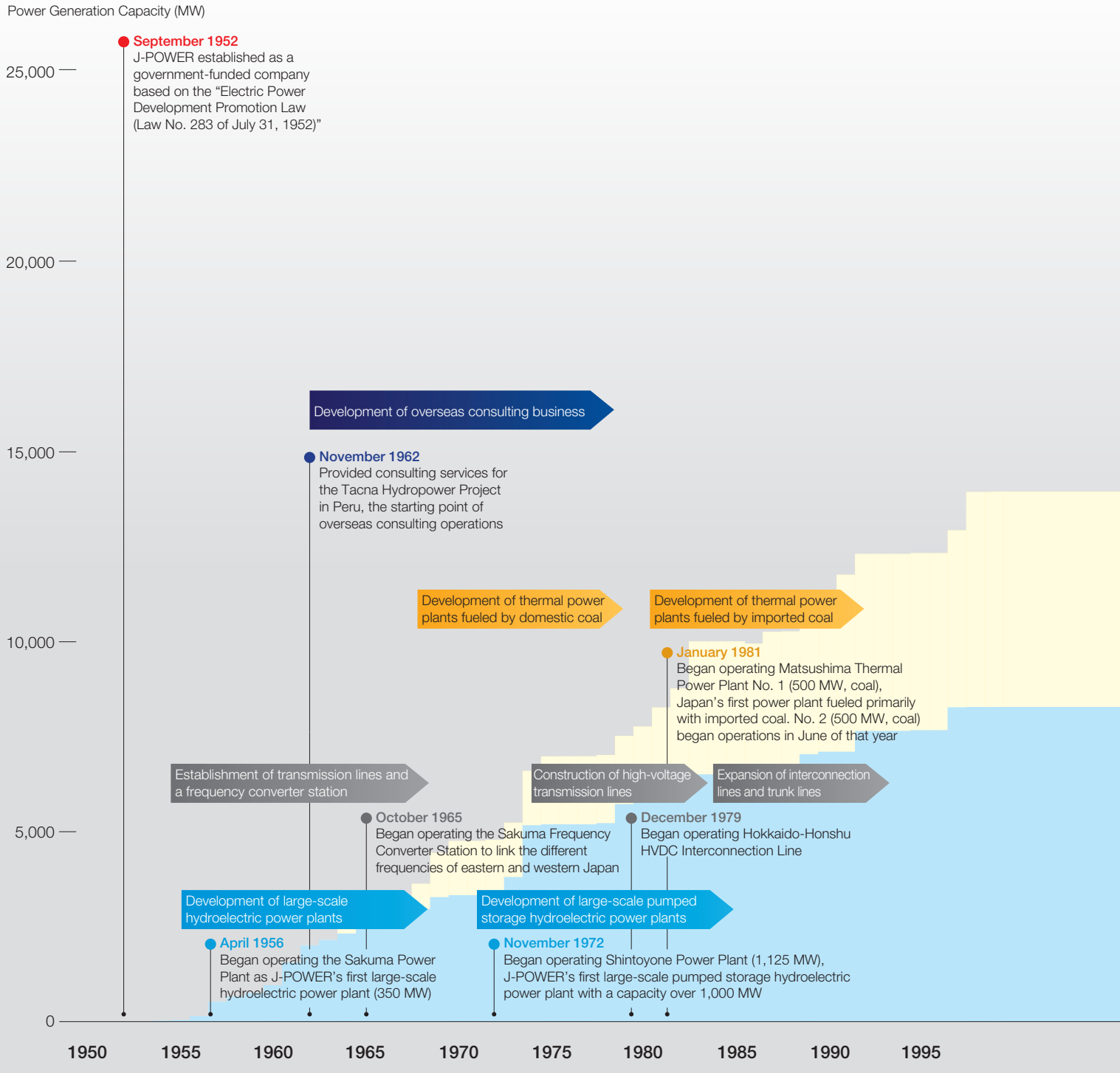
Since fiscal 2017, the J-POWER Group has integrated its *CSR Report* into its *Annual Report*, which previously focused mainly on financial information.

From fiscal 2019, the report is being published as the *J-POWER Group Integrated Report* as a vehicle for communicating both financial and non-financial data in a structured and consistent manner. In preparing the integrated report, we referenced such guidelines as the Global Reporting Initiative's GRI Standards, the Ministry of Economy, Trade and Industry's Guidance for Collaborative Value Creation, and the International Integrated Reporting Council's International Integrated Reporting Framework. We sought to convey the Group's medium- to long-term growth story while furnishing structured, consistent disclosure of ESG-related topics, which have been of increasing interest to stakeholders in recent years. Going forward, we will continue working to enhance the report's content to foster deeper understanding of the Company among our shareholders, investors, and other stakeholders.

Since its establishment by the government in 1952 to overcome the power shortages in postwar Japan, the J-POWER Group has developed its business in the wholesale supply of hydroelectric and thermal power, conducted a power transmission business through its trunk transmission lines that connect each domestic region, and contributed to the stable supply of electric power in Japan.

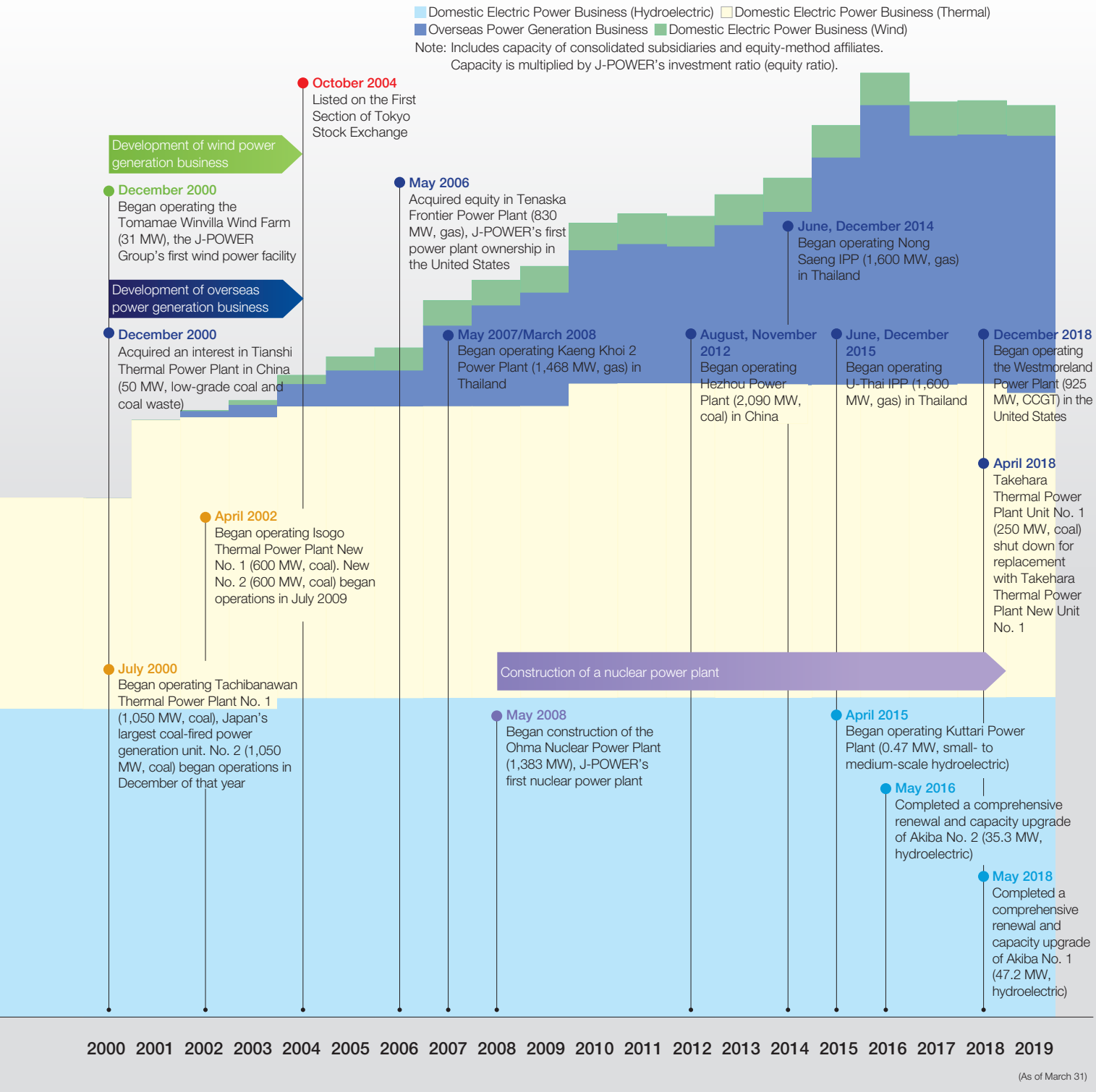
Listed on the Tokyo Stock Exchange's First Section and thus becoming fully privatized in 2004, the J-POWER Group has been developing new businesses, including electric power generation businesses in foreign countries where growth is expected, and renewable energy, such as wind and geothermal power.

Power Generation Capacity



Over the decades, the J-POWER Group has contributed to the solution of a variety of energy-related challenges through its businesses, adapting to changes in the world while expanding its businesses and continuing to grow.

Currently, Japanese electric utilities are facing a variety of changes in the business environment, including electricity system reform. By making the most of its expertise regarding leading-edge technologies developed throughout the world and its proven record of trustworthy performance, the J-POWER Group is making steady and farsighted progress on the basis of its "coexistence of energy and the environment" concept.



(As of March 31)

Actively advancing initiatives toward the achievement of our Medium-Term Management Plan, we will ensure the further growth of the J-POWER Group.

In recent years, the business environment surrounding the J-POWER Group has been undergoing major changes. On the domestic front, since the full liberalization of electricity retailing in April 2016, the government has been advancing discussions regarding the establishment of new markets as part of electricity system reform.

Global concern about climate change grows with each passing year. Based on the Paris Agreement, an international agreement on mitigating climate change, every participating country is taking measures aimed at reducing greenhouse gas emissions. Japan has set the medium-term goal of reducing greenhouse gas emissions to 26% below fiscal 2013 levels by fiscal 2030. A long-term goal was also set with the aim of reducing emissions 80% by 2050.

While CO_2-free energy sources like renewable energy and nuclear power will be necessary to steadily reduce greenhouse gas emissions, these alone will not be able to meet global power demand over the long term. We will need to decarbonize the generation of power from coal, natural gas, and other fossil fuels at the source.

In July 2015, the J-POWER Group established a Medium-Term Management Plan to address the challenge of achieving further growth over the next decade. As for the direction of the plan, there are three concepts: “Realize growth in Japan by winning out over the competition in a liberalized market,” “Enhance overseas business expansion,” and “Further low-carbon technologies enabling greater business growth globally.” We have been actively promoting initiatives in line with these concepts. Having reviewed the medium-term management plan in April 2018, we will continue to work toward those same goals, seeking to ensure the ongoing growth of the J-POWER Group through the development and promotion of even more superior projects in Japan and abroad.

I believe that the J-POWER Group should seek to always understand the changing market landscape, build on experience and technical expertise to innovate, grow globally, and demonstrate its usefulness in society. We will continue to do our utmost to fulfill our mission: “We will meet people’s needs for energy without fail, and play our part for the sustainable development of Japan and the rest of the world.”

We are grateful as always for your continued support and patronage.

Toshifumi Watanabe
Representative Director
President and Chief Executive Officer
August 2019

Progress under the Medium-Term Management Plan and Business Strategy Going Forward

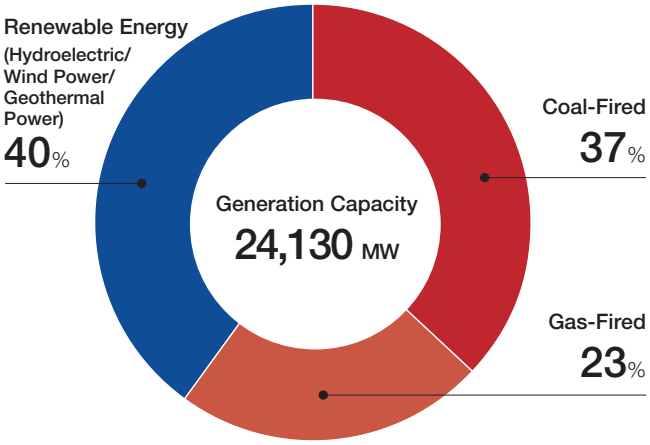
The Current J-POWER

From its foundation in 1952 up to the present day, the J-POWER Group has been developing large-scale hydroelectric power plants and thermal power plants in Japan. Since 2000, the Group has also actively engaged in overseas power generation and the renewable energy business, such as domestic wind power generation businesses. Currently, these power generation facilities have grown to approximately 24 GW in Japan and overseas, of which domestic power generation facilities account for around 17 GW. Half of this domestic capacity is renewable energy, namely, large-scale hydroelectric power generation, wind power generation, and geothermal power generation, and the other half is coal-fired thermal power generation. Overseas power generation facilities are at around the 7 GW level and are owned in Asian countries, including Thailand, and the United States. Approximately 80% of our overseas capacity is gas-fired thermal power generation. I think that, in Japan and abroad, the J-POWER Group as a whole has a well-balanced power generation facility portfolio that includes coal-fired thermal power, gas-fired thermal power, and renewable energy.

In the power transmission and transformation business, we own interconnection lines that link Honshu with Hokkaido, Shikoku, and Kyushu, a frequency converter station connecting regions with different frequencies, and other such power grid facilities. We work to maintain the sound function of our distribution facilities, which support part of the wide-area power distribution network. We were selected in 2016 as the main contractor to develop the New Sakuma Frequency Converter Station and increase the capacity of related transmission lines under the Cross-regional Network Development Plan published by the Organization for Cross-regional Coordination of Transmission Operators. At present, we are conducting evaluations in preparation for construction.

Composition of J-POWER Group Electric Power Generation Assets in Japan and Overseas (Owned Capacity Basis)

(As of June 30, 2019)



Response to Electricity System Reform: The Changing Competitive Environment Due to Electricity Deregulation

Market competition in the power generation business has been hastened by the electricity system reform, and the J-POWER Group has to compete with and win out over other power generators. Coal-fired thermal power generation, which is less expensive and has a more stable fuel supply than oil or LNG (liquefied natural gas) power generation, and large-scale hydroelectric power generation, which is a form of renewable energy, account for the majority of the J-POWER Group's domestic power generation facilities. We thus possess sufficient cost-competitiveness, which is the key to surviving amid intensifying market competition. To boost our supply capacity, we are steadily developing new coal-fired thermal power plants, such as the Takehara Thermal Power Plant Unit New No. 1 replacement facility and Kashima Power.

In addition, we have diversified our sales methods by investing in Suzuyo-Power Co., Ltd. and ENERES Co., Ltd. The J-POWER Group is expected to play a major role in enlivening the wholesale power trading market by participating in the baseload power market, which began accepting bids in fiscal 2019. We will continue working to enhance our corporate value by accessing the new markets, including the capacity markets, to be created going forward.

Amid intensifying market competition, the J-POWER Group is enhancing cost-competitiveness through such measures as reducing the number of days needed for regular inspections and streamlining its operation and maintenance frameworks while maintaining the absolute prerequisites of stable supply and safety. At the same time, we are steadily developing new coal-fired thermal power plants, diversifying our sales methods, and tapping new markets with the aim of achieving even greater growth.

Progress under the Medium-Term Management Plan

In April 2018, three years since we formulated the Medium-Term Management Plan in July 2015, the J-POWER Group reviewed the progress made under the plan thus far and published a forecast for the three years ending with fiscal 2020.

We believe we will be able to achieve our fiscal 2020 forecasts thanks to the profit contributions of domestic and overseas projects that will have begun operation by fiscal 2020 and thanks to our efforts to reduce costs by such means as reducing the number of days needed for regular inspections and streamlining operation and maintenance frameworks.

Furthermore, we have new development projects lined up for fiscal 2021 and beyond. Going forward, we will continue to achieve growth toward fiscal 2025 while flexibly responding to the rapidly changing business environment.

Note: For an overview of the Medium-Term Management Plan, please refer to pages 16–17.

Medium-Term Management Plan

	Indicator	Target
Growth	J-POWER EBITDA*	Increase to around **1.5x** the level of FY2014 in **FY2025** (FY2014 result: ¥181.8 billion)
Soundness	Interest-bearing debts / J-POWER EBITDA	Improve from level at end of FY2014 by **end of FY2025** (End of FY2014 result: **9.5x**)

Three-Year Forecasts and Results

		Growth Indicator	Soundness Indicator
FY2015-2017	Forecast	**¥185.0 billion /year** (FY2015-2017 three-year average)	Maintain same level as results at end of FY2014 (**9.5x**) at end of FY2017
	Result	**¥186.7 billion/year** (FY2015-2017 three-year average)	**8.0x** (FY2017 result)
FY2018-2020	**Forecast**	**≥¥210.0 billion** **(FY2020)**	Maintain same level as results at end of FY2017 (**8.0x**) **End of FY2020**

* J-POWER EBITDA= Operating income + Depreciation and amortization + Equity in earnings of affiliates

Completed in Fiscal 2018

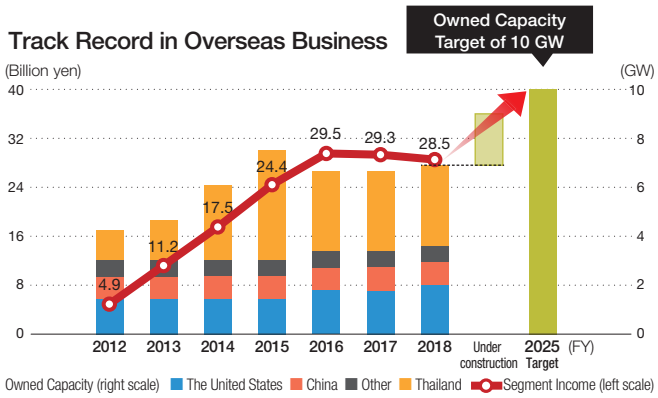
Hydroelectric	• Began construction on the Shinkatsurazawa hydroelectric plant project (22 MW; from April 2019) • Completed combined renewal construction of the Akiba No. 1 and No. 2 power plants (2 MW capacity increase) • Began construction on the Ashoro Power Plant repowering project (2 MW capacity increase; from April 2019) • Hinoemata-Chinabora dam water intake facility improvement (increase capacity of 27 GWh/year).
Wind	• Acquired a stake in the Triton Knoll Offshore Wind Farm in the United Kingdom (860 MW) • Began environmental assessments for the Wajima, Youra, and Kunimiyama projects (maximum total of 206 MW) • Progressed with preparations for construction of the Kaminokuni No. 2 Wind Farm Project (42 MW; construction began in May 2019) • Progressed with construction of Setana-Ohsato (50 MW) and Nikaho No. 2 (41 MW) projects (both scheduled to begin operation in January 2020), as well as the Kuzumaki No. 2 Project (45 MW; scheduled to begin operation in December 2020) • Signed memorandum of understanding on collaboration with ENGIE of France on floating offshore wind power generation business in Japan
Geothermal	• Progressed with construction of the Wasabizawa Geothermal Power Plant (46 MW; started operation in May 2019) • Began construction on the replacement of Onikobe Geothermal Power Plant (14.9 MW; from April 2019) • Progressed with commercialization of the Appi Geothermal Power Plant (14.9 MW)
Overseas	Began operation of the Westmoreland Power Plant in the United States (started operation in December 2018)

Projects Under Construction Scheduled to Begin Operation by Fiscal 2020

Power Plants	Type	Location (Prefecture)	Output Capacity (MW)	Ownership (%)	Owned Capacity (MW)
Domestic					
Takehara Unit New No. 1	Coal-fired	Hiroshima	600	100	600
Kashima Power	Coal-fired	Ibaraki	645	50	323
Setana-Ohsato Wind Farm	Wind	Hokkaido	50	90	45
Nikaho No.2	Wind	Akita	41	100	41
Kuzumaki No.2	Wind	Iwate	45	100	45
Overseas					
Central Java IPP	Coal-fired	Indonesia	2,000	34	680

Overseas Business Development

We are steadily advancing projects in development and working to secure new development projects in order to achieve the 10 GW target for overseas owned capacity by fiscal 2025, as stated in the Medium-Term Management Plan.



Notes: 1. Owned capacity is calculated by multiplying the capacity of the facility by J-POWER's investment ratio.
2. To better indicate the actual status of segment income, foreign exchange gains and losses are excluded from figures for the Overseas business (overseas power generation business, etc.).

There are currently three projects in development.

The first is a coal-fired thermal power plant project in Central Java, Indonesia, a country where electricity demand is expected to rise sharply going forward. The construction of the 2,000 MW high-efficiency coal-fired thermal power plant, which will be fueled by Indonesia's abundant coal reserves, is progressing smoothly toward the commencement of operations in 2020. By leveraging the J-POWER Group's high-efficiency advanced environmental technologies, we hope to help solve Indonesia's energy problems in a way that suits the country's circumstances.

The second project is the U.K.-based Triton Knoll offshore wind power project—in which the J-POWER Group has a 25% equity stake—which is making steady progress toward operational startup in 2021.

As for the third project, we finalized plans for and began construction on the Jackson Power Plant, a 1,200 MW gas combined cycle plant located in the U.S. state of Illinois. The project site is near the suburbs of Chicago, an area of high power demand. Moreover, it will be constructed within the PJM market, which is the country's largest electricity market, and next to the Elwood Energy facility, in which J-POWER owns a stake. This gives us the advantageous position of having a deep understanding of the local market situation.

In addition to these projects, we are considering multiple other projects. Along with business expansion in Thailand and the United States, where we already have established business platforms, we are working to find potential new greenfield projects in new markets with robust energy demand, mainly in Asia. Furthermore, using the technological expertise we have developed in our domestic business, we hope to expand our overseas renewable energy businesses, including wind power and geothermal.

Going forward, as we strengthen our frameworks and broaden our fields of activity, we aim to achieve the fiscal 2025 goals for our overseas power generation business.

Expanding Use of Renewable Energy

In April 2018, we established the numerical target of approximately 1 GW in new renewable energy development by fiscal 2025. Initiatives are being further bolstered and accelerated with the Renewable Energy Business Strategy Department at the core.

In the hydroelectric power business, we are striving to better utilize hydroelectric resources by developing small- and medium-sized hydroelectric power generation projects that utilize untapped river flows and unused waterheads and by repowering existing facilities through the installation of cutting-edge technologies to increase capacity.

In wind power generation, we are currently constructing four wind farms in Japan with a combined capacity of 173 MW. We are also planning eight additional projects with a combined maximum capacity of 791 MW, including the Kitakyushu Hibikinada Offshore Wind Farm in Kitakyushu City in Fukuoka Prefecture. Overseas, J-POWER acquired a 25% equity stake in August 2018 in the Triton Knoll Offshore Wind Farm construction project in the United Kingdom. Leveraging the expertise in the construction, maintenance, and operation of offshore wind power farms gained from our participation in this project, we will be positioned to more actively join offshore wind projects in Japan.

In the geothermal power business, we began construction in April 2019 to replace the Onikobe Geothermal Power Plant, which was in service for over 40 years. In addition, the Appi Geothermal Power Plant—a new development project jointly funded with Mitsubishi Materials Corporation and MITSUBISHI GAS CHEMICAL COMPANY, INC.—is in preparations for construction, and we are conducting surveys for new geothermal projects.

We are also working to expand the use of biomass fuels to reduce CO_2 emissions by producing solid fuel from, for example, general waste, sewage sludge, and woodchips, and co-firing it with coal at coal-fired thermal power plants.

As one of the top companies of 100% domestically produced CO_2-free energy, the J-POWER Group continues to proactively develop renewable energy through its abundant operational experience and the adoption of the latest technologies.

Wasabizawa Geothermal Power Plant (Akita Prefecture)

Achieving Japan's Planned Energy Mix while Combating Climate Change

Japan has a low energy self-sufficiency rate and relies on imports for most of its fossil fuels. It is therefore essential that the country utilize diverse sources of energy in a well-balanced manner. As a widely produced resource throughout the world, coal presents the lowest geopolitical risk among fossil fuels. Furthermore, as coal can be stably procured at the lowest prices among fossil fuels upon arrival in Japan, coal-fired thermal power generation serves as an excellent baseload power source. Even in the energy mix that Japan is targeting for fiscal 2030, it is assumed that the use of coal-fired thermal power generation will account for 26%.

On the other hand, global concern about climate change has recently begun to intensify. Based on the Paris Agreement, an international agreement on mitigating climate change, Japan set the medium-term goal of reducing greenhouse gas emissions to 26% below fiscal 2013 levels by fiscal 2030. A long-term goal was also set with the aim of reducing emissions by 80% by 2050.

It is true that coal produces a greater volume of CO_2, a greenhouse gas, than other fossil fuels. For Japan to achieve the 2050 goals and ensure a stable supply of electric power, it needs to significantly reduce CO_2 emissions from, but continue to use, fossil fuels, such as coal and natural gas. The electricity industry is building a voluntary framework so that the industry as a whole will be able to reach the government's greenhouse gas reduction target for fiscal 2030. As part of the electricity industry, the J-POWER Group is both working to fulfill its responsibilities under this framework, and taking measures aimed at achieving the long-term 2050 goals.

We decided to work toward carbon reduction and even full decarbonization in coal use. To this end, we are currently taking the following measures. We are replacing aging coal-fired thermal power generation facilities with high-efficiency coal-fired power generation facilities employing world-leading technologies and building new, high-efficiency coal-fired thermal power plants. Furthermore, we are utilizing mixed combustion with biomass fuels at coal-fired thermal power plants, aiming to realize up to 10% mixed combustion at the Takehara Thermal Power Plant Unit New No. 1, which is scheduled to commence operations in fiscal 2020.

At the same time, we aim to reduce CO_2 emissions from coal use to zero by the 2050s. To this end, we are working toward the commercialization of oxygen-blown integrated coal gasification combined cycle (IGCC) technology, and advancing R&D into carbon capture, use, and storage (CCUS) technologies, and technologies to manufacture and utilize forms of carbon-free energy, such as hydrogen, from low-grade coal.

Note: For details on IGCC, CCUS, hydrogen, and other technologies aimed at reducing carbon emissions, please refer to pages 20–25.

The J-POWER Group has constantly been at the forefront in adopting cutting-edge technologies over the decades. As a result, we possess not only high-efficiency power generation technologies that emit less CO_2, but also environmental technologies that reduce emissions of such atmospheric pollutants as sulfur oxides (SOx) and nitrogen oxides (NOx) to levels on par with gas-fired thermal power generation.

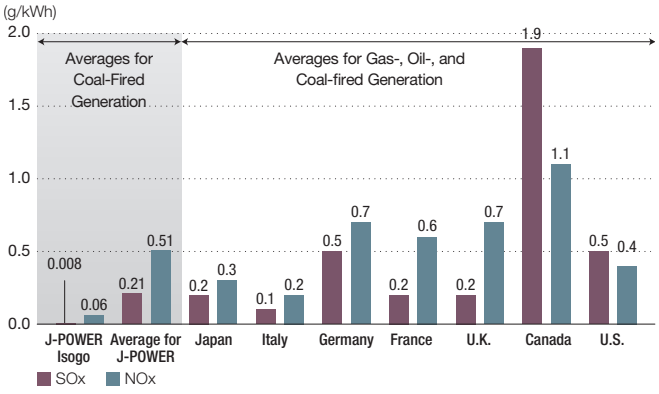
Taking the initiative, we will contribute to the realization of a well-balanced energy mix and ambitiously work toward the decarbonization of fossil energy sources, aiming to help solve global environmental problems.

Furthermore, recognizing that our business activities are strongly related to the state of the global environment, we have worked to enhance our climate change-related disclosures. In May 2019, we agreed to and signed the recommendations of the TCFD.* Going forward, we will continue to further enhance these disclosures to fulfill our responsibilities to our stakeholders regarding climate change-related information.

* Task Force on Climate-Related Financial Disclosures

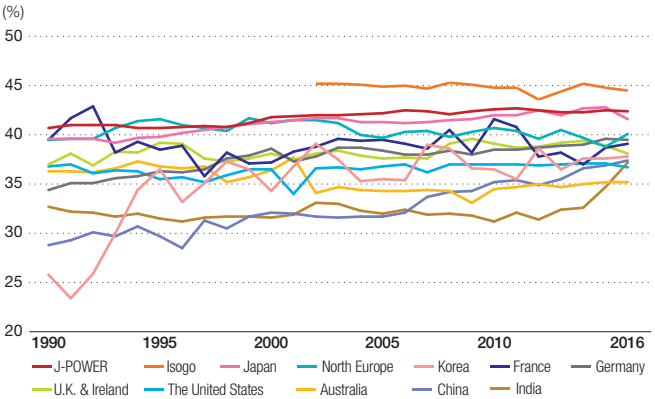
TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

SOx and NOx Emissions per Unit of Thermal Power Generation



Notes: 1. Emissions: OECD StatExtracts
Power generated: IEA Energy Balances of OECD Countries, 2018 Edition
2. J-POWER and Isogo figures are fiscal 2018 results.

Average Gross Thermal Efficiency (LHV*) of Coal-Fired Thermal Power Plants by Country



Source: Ecofys International Comparison of Fossil Power Efficiency and CO_2 Intensity 2018
* Lower heating value (LHVs) estimated using higher heating value (HHV) records and the coefficients in the Comprehensive Energy Statistics (fiscal 2004 edition)

The Ohma Nuclear Power Plant Project

From the perspective of ensuring a stable supply of energy for mineral resource-poor Japan, nuclear power generation is an indispensable baseload power source. At the same time, nuclear power plants represent a power source that helps to address the issue of global warming, as their operation emits no CO_2.

Some plutonium remains in the spent fuel from nuclear power plant operations. In principle, due to nuclear non-proliferation considerations, Japan does not hold surplus plutonium. For this reason and to use resources effectively, Japan promotes a nuclear fuel cycle in which spent fuel is reprocessed so that the plutonium and other useful materials are recovered and utilized.

Nuclear power plants are commonly able to use up to about one-third uranium-plutonium mixed oxide (MOX) fuel. As we are aiming to use only MOX fuel at the Ohma Nuclear Power Plant, it will play an important role in the nuclear fuel cycle.

The Ohma Nuclear Power Plant is currently under construction and undergoing reviews of its compliance with new regulatory standards by the Nuclear Regulation Authority. In addition to appropriately responding to the results of reviews, we are constantly working to further improve safety and steadily advancing plans toward the commencement of operations.

Construction status of the Ohma Nuclear Power Plant Project (as of June 2019)

Corporate Governance

Establishment of the Nomination and Compensation Committee

In response to the June 2018 amendment to the Corporate Governance Code, the J-POWER Group's management held numerous discussions on issues related to our form of corporate governance. As a result, in December 2018, the J-POWER Group revised its own basic policy on corporate governance and, as part of said revision, on April 1, 2019, established the Nomination and Compensation Committee. The establishment of this committee, which mainly comprises independent directors and Audit & Supervisory Board Members, enhanced the independence and objectivity of the functions of the Board of Directors as they pertain to the appointment and compensation of directors and Audit & Supervisory Board Members.

Measures to Ensure the Effectiveness of the Board of Directors

The J-POWER Group is implementing a variety of measures to ensure the effectiveness of the Board of Directors. We have raised the standard monetary level for investment projects to be discussed by the Board of Directors with the aim of enhancing discussions related to the Company's strategies and hold meetings about specific themes at which directors can freely exchange opinions. In these and other ways, we are striving to create a productive environment.

To enable the outside directors and Audit & Supervisory Board members to fulfill their duties, we provide them with information on the J-POWER Group's Corporate Philosophy, medium-term management plans, businesses, financial affairs, organizational structure, and other topics whenever needed, with the aim of deepening their understanding of said matters. Additionally, we provide opportunities, such as inspections of J-POWER Group facilities.

Every year, we analyze and assess the effectiveness of the Board of Directors. In 2019, we evaluated the Board's fiscal 2018 performance. Based on the status of initiatives implemented in response to the previous year's analysis and assessment as well as the results of interviews with and questionnaires given to all members of the Board of Directors and Audit & Supervisory Board, including their respective outside members and chairpersons, the Board of Directors found that the effectiveness of the Board of Directors was sufficiently secured.

Going forward, we will continue to make efforts to improve the effectiveness of the Board of Directors while enriching discussions based on changes in the business environment.

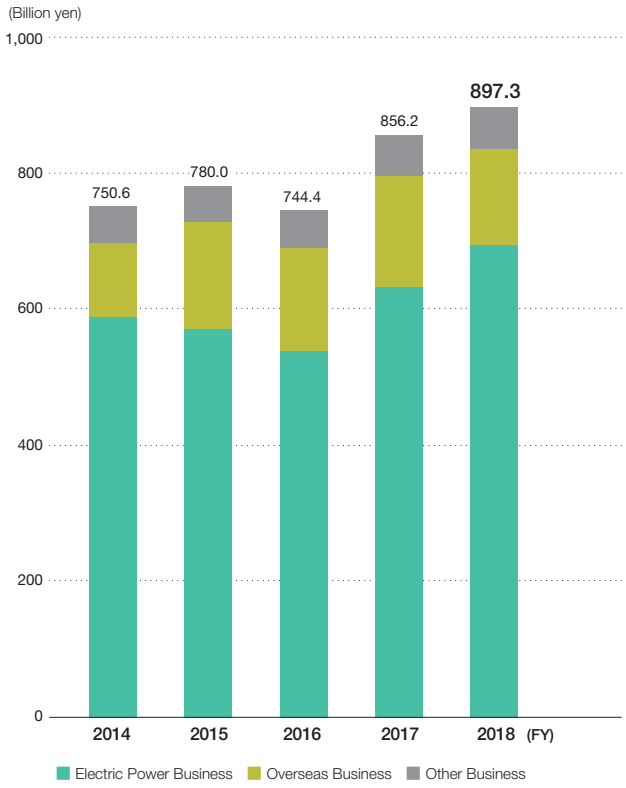
Returns to Shareholders

In fiscal 2017, we established a new approach to shareholder returns. The approach states, "Taking into account such factors as the level of profit, earnings forecasts, and our financial condition, we strive to enhance stable, ongoing returns to shareholders in line with a consolidated payout ratio of around 30%, excluding factors causing short-term profit fluctuations." Also in fiscal 2017, we increased the per-share dividend from ¥70 to ¥75. For fiscal 2018, we once again paid a per-share dividend of ¥75.

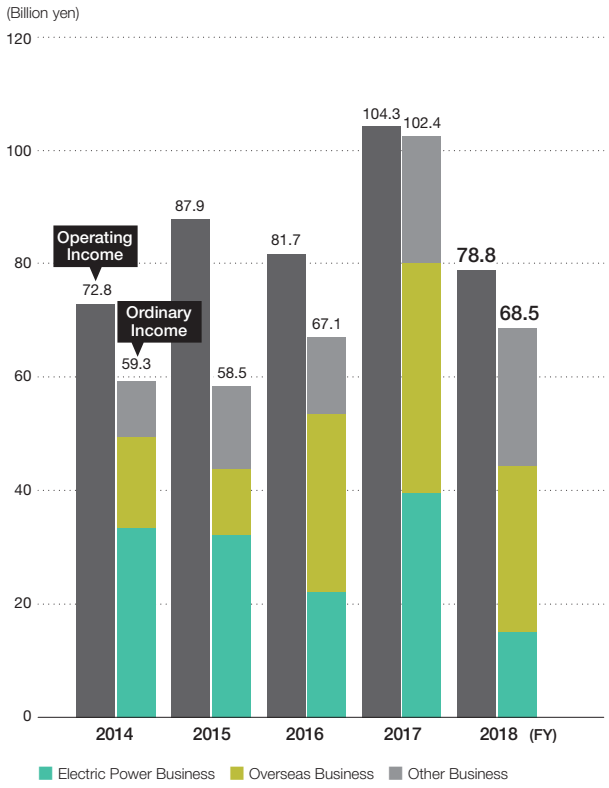
Going forward, we will continue working to achieve sustained improvement in corporate value and to enhance shareholder returns based on growth.

Financial Highlights

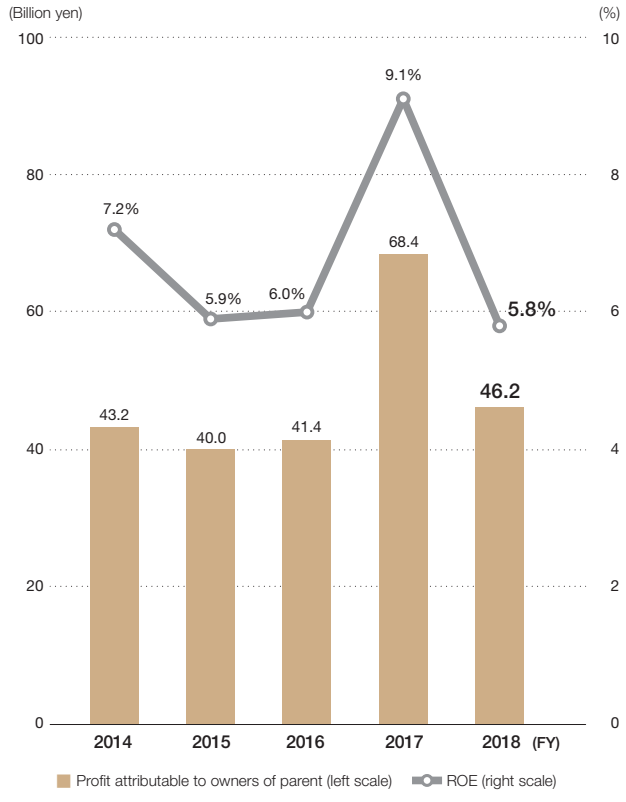
Operating Revenue (By Segment)



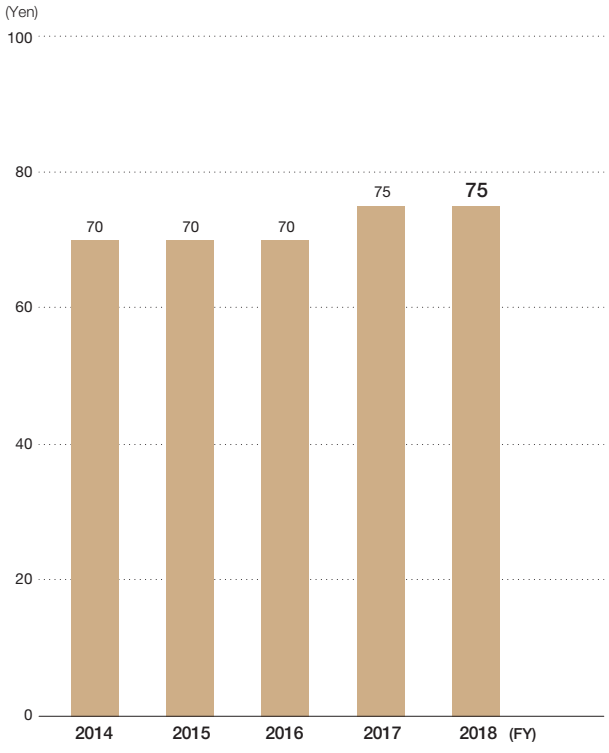
Operating Income and Ordinary Income



Profit Attributable to Owners of Parent and ROE

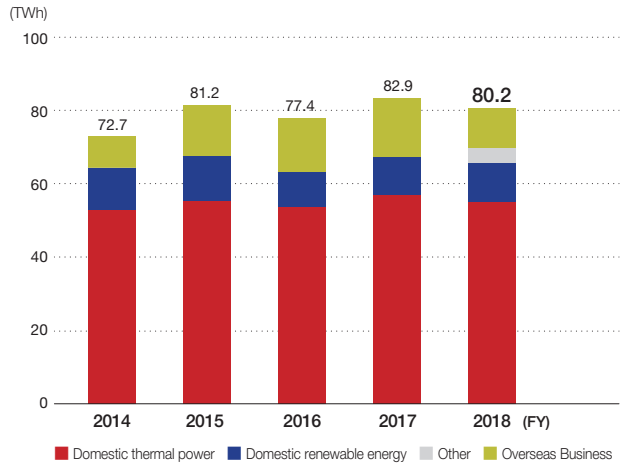


Dividends Per Share

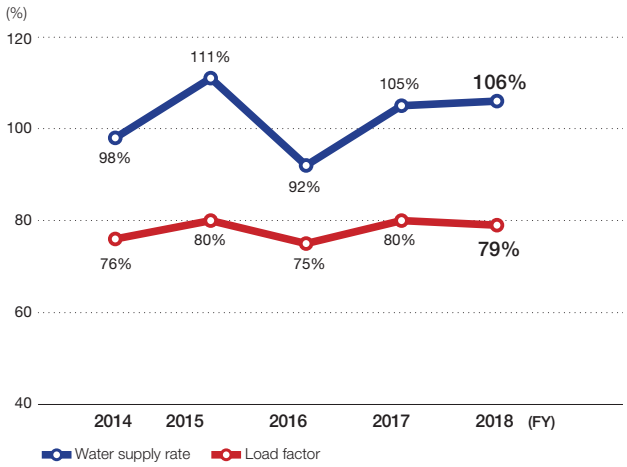


Non-Financial Highlights

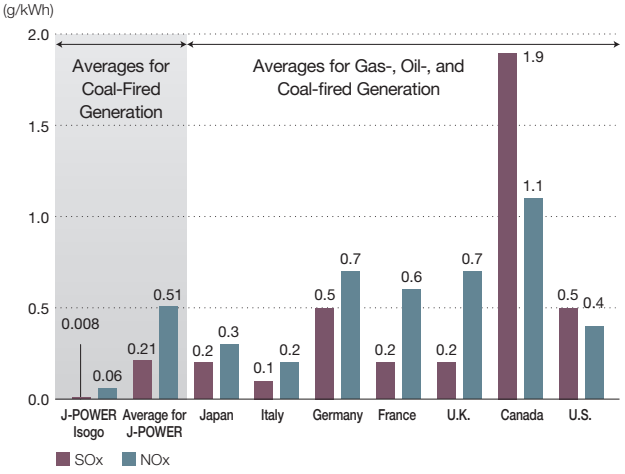
Electricity Sales Volume



Water Supply Rate/Load Factor



SOx and NOx Emissions per Unit of Thermal Power Generation



Notes: 1. Emissions: OECD StatExtracts
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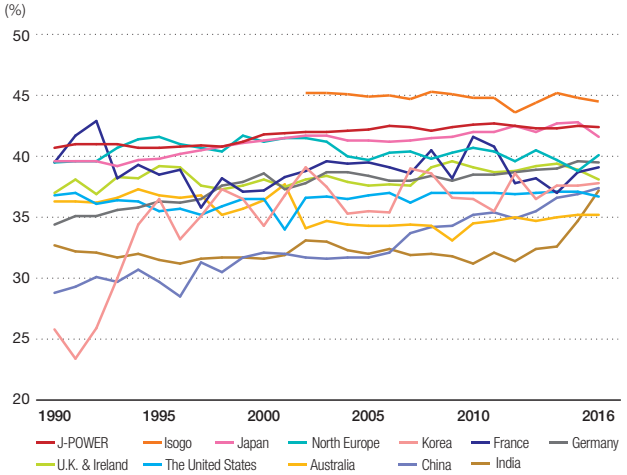
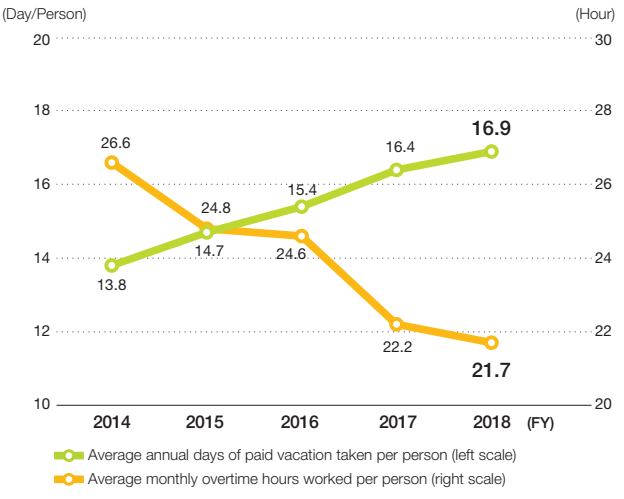
2. J-POWER and Isogo figures are fiscal 2018 results.

Average Gross Thermal Efficiency (LHV) of Coal-Fired Thermal Power Plants by Country

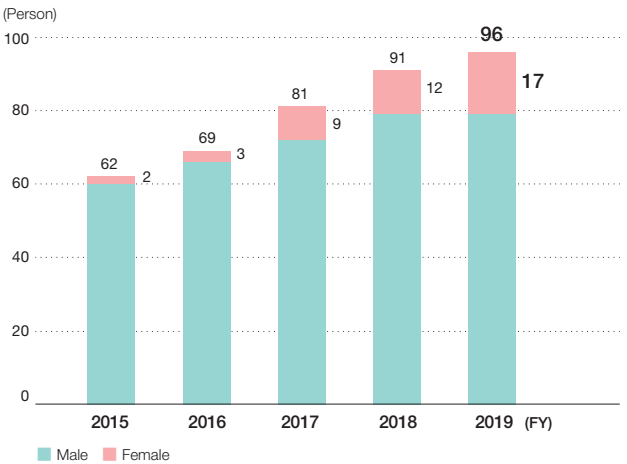


Source: Ecofys International Comparison of Fossil Power Efficiency and CO_2 Intensity 2018
* Lower heating value (LHVs) estimated using higher heating value (HHV) records and the coefficients in the Comprehensive Energy Statistics (fiscal 2004 edition)

Overtime Hours Worked and Days of Paid Vacation Taken



New Graduates Hired



Social Issues

- Stable power supply
- Energy security
- Building wide-area power networks in Japan
- Power shortages in emerging nations
- Climate change
- Atmospheric pollution and other environmental problems

Capital Invested

Financial Capital

Manufactured Capital
- Power generation facilities in Japan and overseas
- Power transmission and substation facilities connecting regions of Japan

Intellectual Capital
- Facility development, operation, and maintenance know-how
- Research and development to establish new technologies

Human Capital
- Technological capabilities and their underlying human resources

Social and Relational Capital
- Relationships with local communities and other stakeholders

Natural Capital
- The wind, water, coal, forests, and other resources used for power generation

Area of Business

As an electric power generation transmission utility, the J-POWER Group supplies the power it generates to electric power retailers and the wholesale power trading market, through which it reaches its final users.

Fuel procurement | Power generation | Transmission and transformation | Distribution (General electricity transmission and distribution utilities) | Retail (Electricity retailers)

Other Business, Business Creation Initiatives, Technology Development

J-POWER Group Strengths

- Stably operating, competitive power generation facilities with superior environmental technologies
- Balanced energy mix

Facility development, operation, and maintenance know-how, and technological capabilities

Strong track record in overseas business development

Organizations and human resources

Foundation for Value Creation

- **E** Environmental management
- **S** Human resource development, health and safety management, social contribution
- **G** Corporate governance, compliance, risk management

Output

Stable power supply

Value Provided to Society

End users

- Power that supports everyday living
- Support for sustained economic growth in Japan
- Advancing economic development in emerging nations
- Helping create wide-area power networks in Japan

Business partners

- Affordable, stable, and high-quality power supply
- Synergy through business collaboration

Shareholders and investors

- Stable, ongoing shareholder returns
- Transparent IR/SR information

Local Communities

- Contributing to regional economic development and revitalization

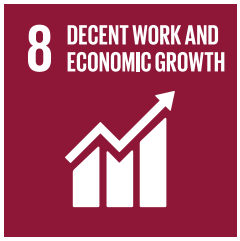
Employees

- Workplaces that are safe, healthy, and rewarding
- Opportunities to improve abilities and labor productivity

Nature and the environment

- Contributing to the realization of a sustainable world through technological development aimed at the expansion of renewable energy and decarbonization
- Addressing atmospheric pollution and other environmental problems by using power sources based on sophisticated environmental technologies

Related SDGs



The Flow of Power

Fuel procurement → Power generation

The J-POWER Group's Businesses

Coal Procurement

Upstream investment to ensure steady fuel procurement

To ensure the stable, long-term procurement of coal, a key fuel, we maintain interests in Australian coal mines through a coal mining subsidiary. (Please refer to page 33.)

Coal Mining Projects

Three locations

Fiscal 2018 Sales Volume

25.59 million t

Power Generation Business

The J-POWER Group's Electric Power Business—Supporting the Stable Supply of Electric Power in Japan

• Domestic Power Generation Business

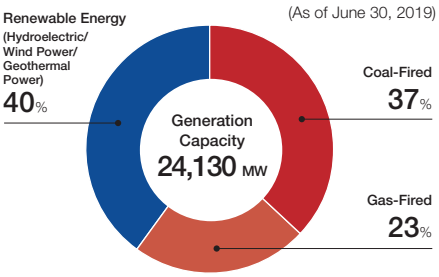
The J-POWER Group's core business is its electric power generation business, comprising the power plants it owns and operates throughout Japan that supply electricity to electric power retailers based on contracts that set out the generating capacity/electric power and fees for each retailer. We also sell some power on the wholesale power trading market. (Please refer to pages 18–19 and 31.)

Global Business Development

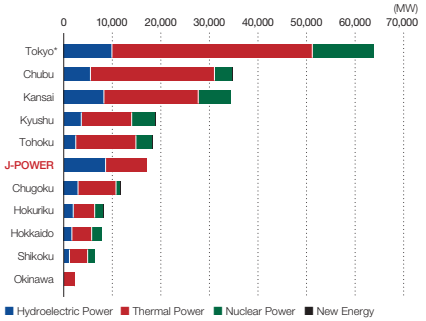
Overseas Business

The J-POWER Group is leveraging its more than 50 years of overseas achievements and know-how as it engages in its overseas power generation business and overseas consulting business, contributing to the stable supply of electric power and sustainable development throughout the world. (Please refer to pages 28–29.)

Composition of J-POWER Group Electric Power Generation Assets (Owned Capacity Basis)



Power Generating Capacity of J-POWER and 10 Electric Power Companies (EPCOs) (March 2019)



Sources: Compiled from Electric Power Survey Statistics (Agency for Natural Resources and Energy)

* Total of Tokyo HD, Tokyo FP, Tokyo PG, and Tokyo EP

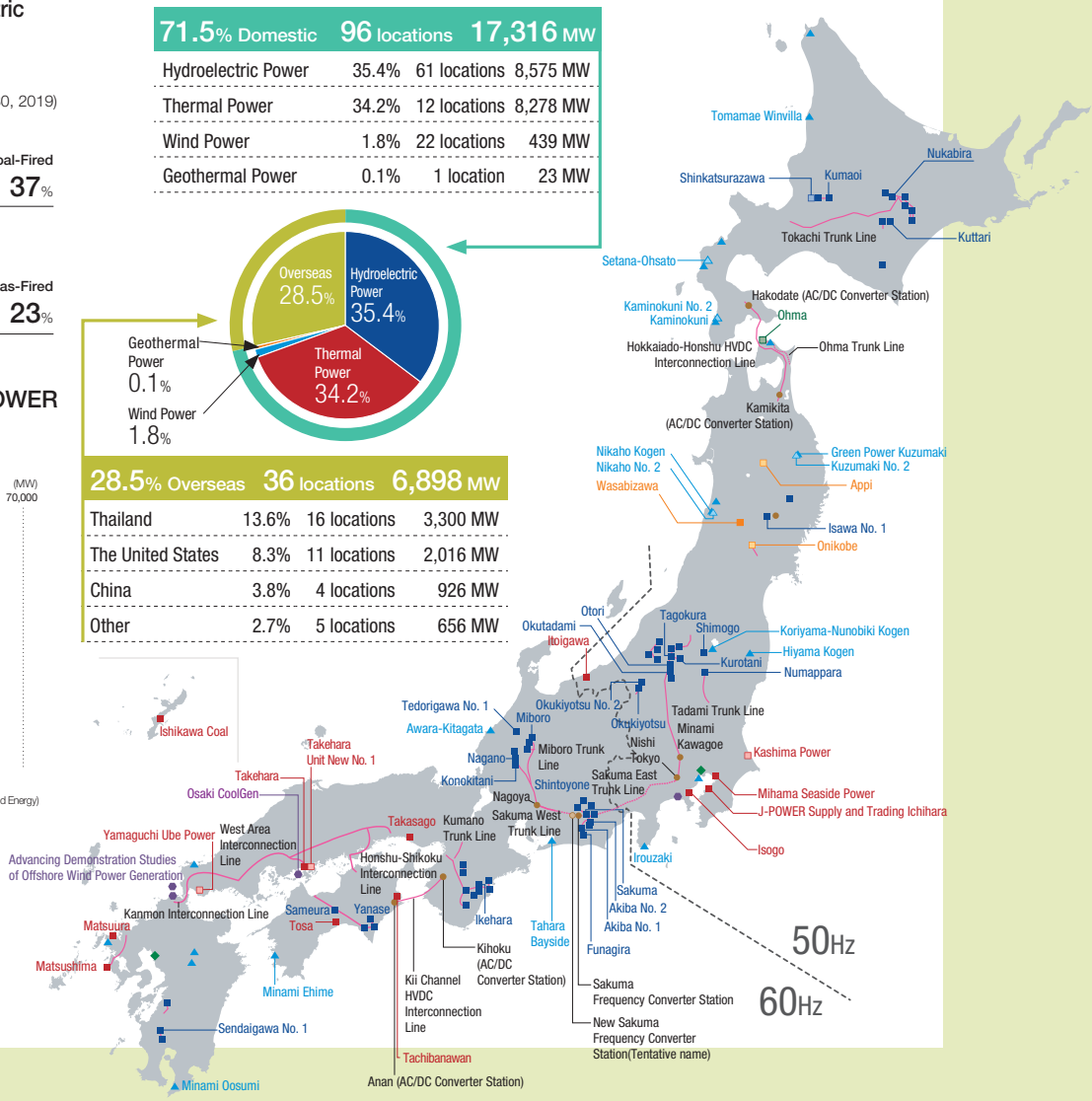
Main Facilities (As of June 30, 2019)

- Hydroelectric power plant
- Hydroelectric power plant (Under construction/Planned)
- Thermal power plant
- Thermal power plant (Under construction/Planned)
- Nuclear power plant (Under construction)
- Geothermal power plant
- Geothermal power plant (Under construction/Planned)
- Wind power farm/plant
- Wind power farm/plant (Under construction)
- Other power generation facilities
- Transmission line
- Transmission line (Under construction/Capacity increase planned)
- Substation, frequency converter station, AC/DC converter station
- Frequency converter station (Planned)
- Research facilities, etc.
- Research facilities, etc. (Under construction)

Power Generation Capacity in Operation (Owned Capacity Basis)

71.5% Domestic	96 locations	17,316 MW
Hydroelectric Power	35.4%	61 locations 8,575 MW
Thermal Power	34.2%	12 locations 8,278 MW
Wind Power	1.8%	22 locations 439 MW
Geothermal Power	0.1%	1 location 23 MW

28.5% Overseas	36 locations	6,898 MW
Thailand	13.6%	16 locations 3,300 MW
The United States	8.3%	11 locations 2,016 MW
China	3.8%	4 locations 926 MW
Other	2.7%	5 locations 656 MW



Transmission and transformation | Distribution (General Electricity Transmission and Distribution Utilities) | Retail (Electricity Retailers) | Consumers

Other Business, Business Creation Initiatives

Transmission/Transformation

Core Infrastructure Supporting Japan's Electric Power Network

The J-POWER Group has major transmission lines, including interconnection lines that connect Honshu with Hokkaido, Shikoku, and Kyushu. We also own a frequency converter station that links the different frequencies of eastern and western Japan. These facilities are key infrastructure elements that play extremely important roles in the comprehensive management of Japan's nationwide power grid. The Company employs its transmission and transforming facilities to provide transmission services based on contracts with general electricity transmission and distribution utilities. The Company also maintains a nationwide communications network for use in facility protection, monitoring, control, and operational management. (Please refer to page 32.)

(As of June 30, 2019)

Transmission lines:	2,404.6 km
AC power transmission lines:	2,137.4 km
DC power transmission lines:	267.2 km
Substations:	4,301 MVA
Frequency converter station:	300 MW
AC/DC converter stations:	2,000 MW
Wireless communication facilities (circuit length):	5,833 km

Electricity Sales

Entering the Retail Business through Collaboration with Partners

The J-POWER Group has long engaged in retail sales of electricity though its consolidated subsidiary J-POWER SUPPLY & TRADING Co., Ltd. To diversify our sales channels, we have now invested in Suzuyo-Power Co., Ltd. and ENERES Co., Ltd. Using the insight gained through market transactions in the power generation business, we are helping customers realize optimized power procurement.

In addition, aiming to take advantage of growth opportunities in new business areas arising from decentralization, in March 2019, the Company invested in VPP Japan, Inc.

Through these investments, the Company will also advance initiatives in the virtual power plant (VPP) business.

Other Business

Initiatives in Environment-Related Businesses

The J-POWER Group is engaged in such multi-faceted businesses as biomass fuel production, waste-fueled power generation and cogeneration systems that employ sewage sludge and unused forestry products. (Please refer to page 34.)

Business Creation Initiatives

Investment in Startups

Looking ahead to coming changes in the business environment and industrial structures, we are expanding our network of business relationships with startups. This new initiative is aimed at turning change into growth opportunities.

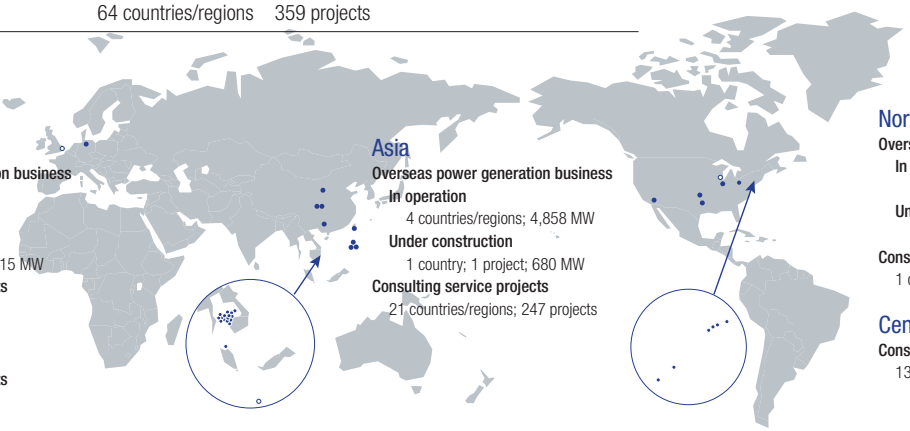
- Formed partnership agreement with Plug and Play Japan (November 2018)
- Invested in Green Earth Institute Co., Ltd. (February 2019)
- Invested in Coral Capital II, L.P. (March 2019)
- Invested in WOTA CORP. (May 2019)

Overseas Power Generation Business (As of June 30, 2019)

● In operation	6 countries/regions	36 projects	Owned capacity 6,898 MW
○ Under construction	3 countries	3 projects	Owned capacity 2,095 MW

Overseas consulting service projects (As of June 30, 2019)

64 countries/regions 359 projects



Europe
Overseas power generation business
In operation
1 country; 24 MW
Under construction
1 country; 1 project; 215 MW
Consulting service projects
14 countries; 20 projects

Middle East/Africa
Consulting service projects
15 countries; 42 projects

Asia
Overseas power generation business
In operation
4 countries/regions; 4,858 MW
Under construction
1 country; 1 project; 680 MW
Consulting service projects
21 countries/regions; 247 projects

North America
Overseas power generation business
In operation
1 country; 2,016 MW
Under construction
1 country; 1 project; 1,200 MW
Consulting service project
1 country; 1 project

Central and South America
Consulting service projects
13 countries; 49 projects

The J-POWER Group established a Medium-Term Management Plan in July 2015 to address the challenge of achieving further growth over the next decade by leveraging the increase in capital carried out in March 2015. In April 2018, the Company conducted a review of initiatives conducted under the plan thus far.

Based on this review, the Company has designated initiatives to address the risks and business opportunities arising from the tremendous changes ongoing in the business environment as well as new targets for fiscal 2020.

The J-POWER Group's Business Environment

Opportunities	Risks
Advance of deregulation of the domestic electricity market	Intensifying competition in the domestic electricity market
Booming growth in power demand, mainly in emerging nations	Growing costs of climate change countermeasures, funding difficulties
Advance of digital technologies	Decrease in sales prices and volumes due to falling domestic demand

The J-POWER Group's Strengths

- Competitive power plants that generate large amounts of electricity
- Wealth of development projects
- Superior environmental technologies that will enable future business development
- Strong track record in overseas business development

Addressing Risks

Further carbon reduction and decarbonization initiatives

Key Concepts

- Realize growth in Japan by **winning out over the competition in a liberalized market**
- Enhance **overseas business expansion**
- Further **low-carbon technologies** enabling greater business growth globally

Initiatives Going Forward

- Further expansion of renewable energy (pages 18–19)
- Striving toward zero emissions in coal use (page 20–22)
- Promotion of the Ohma Nuclear Power Plant Project, with safety as a major prerequisite (pages 26–27)
- Expansion of overseas business (pages 28–29)
- Value maximization of current assets (pages 30–34)

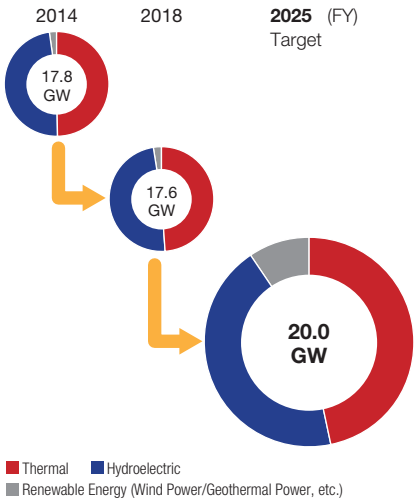
1. Growth Targets of Power Generation Assets

Domestic Power Generation Capacity:
FY2025 Target **20 GW**

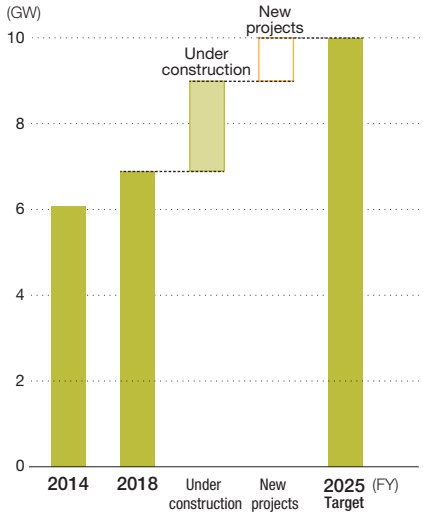
Overseas Owned Capacity:
FY2025 Target **10 GW**

Domestic/Overseas Owned Capacity:
FY2025 Target **30 GW**

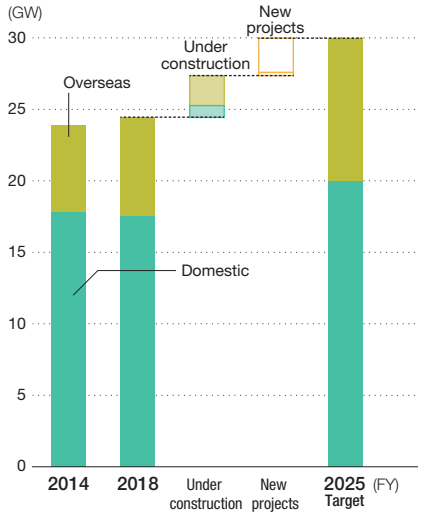
Composition of Domestic Power Generation Assets



Owned Capacity (Overseas)

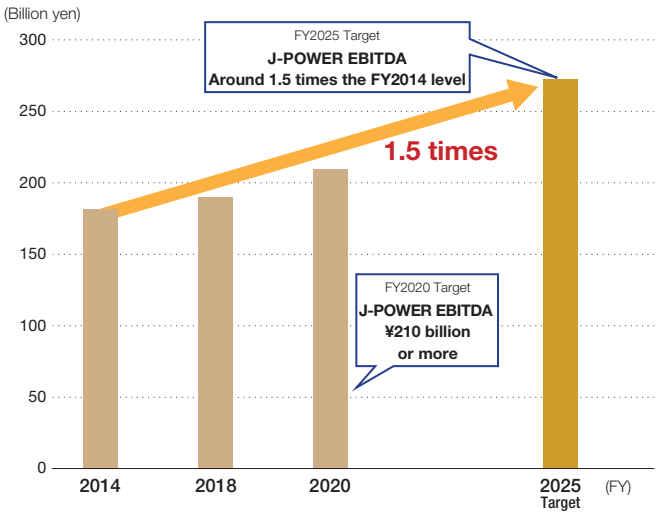


Owned Capacity (Total)

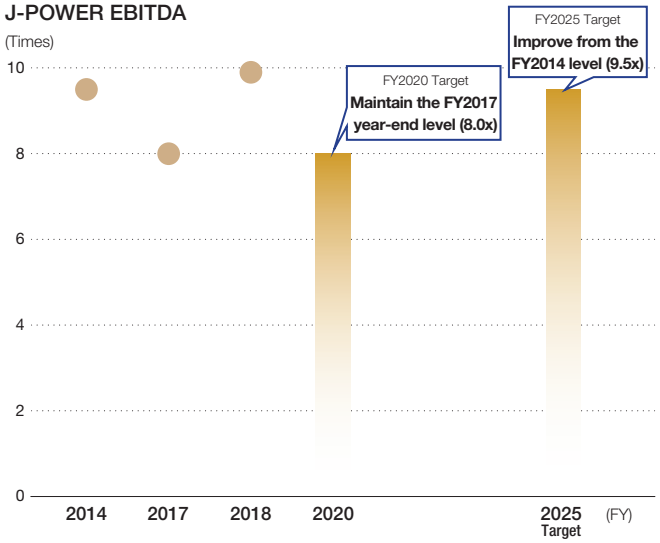


2. Growth and Soundness Indicators Targets

Growth Indicator: J-POWER EBITDA*



Soundness Indicator: Interest-Bearing Debt/ J-POWER EBITDA



* J-POWER EBITDA = Operating income + Depreciation and amortization + Equity in earnings of affiliates

3. Shareholder Returns

Shareholder Returns

During the period leading up to fiscal 2020, in light of the significant changes to its business environment, the J-POWER Group has been striving to ensure stable dividends while forming a competitive business asset portfolio and maintaining and improving its financial soundness. However, in anticipation of changes in its business environment, such as industry liberalization in Japan, the Company formulated a new shareholder return policy in fiscal 2017. Under the new policy, we increased the per-share dividend in fiscal 2017, from ¥70 to ¥75.

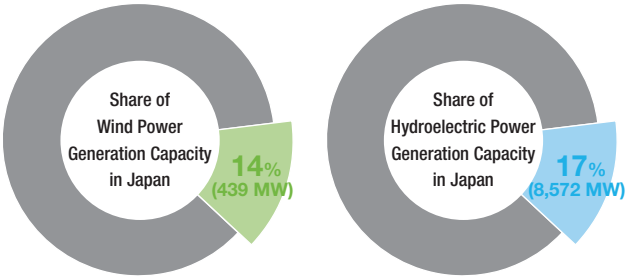
Our Approach to Shareholder Returns

Taking into account such factors as the level of profit, earnings forecasts, and our financial condition, we strive to enhance stable, ongoing returns to shareholders in line with a consolidated payout ratio of around 30%, excluding factors causing short-term profit fluctuations.

The J-POWER Group utilizes hydroelectric power, wind power, and geothermal power—all sources of renewable energy—across Japan. Nationwide, the Group owns 61 hydroelectric power plants with a total capacity of 8,572 MW and 22 wind power facilities with a total capacity of 439 MW, making it Japan's second-ranked company in terms of both hydropower and wind power generation capacity.

As a leader in renewable energy, the J-POWER Group will continue to help reduce CO_2 emissions while contributing to Japan's energy security using these fully domestically produced, CO_2-free forms of energy.

Second in Japan in both Hydroelectric and Wind Power Generation Capacity, and a Leader in Renewable Energy



Sources: Compiled from Electric Power Survey Statistics (Agency for Natural Resources and Energy) (Owned capacity basis, as of March 31, 2019)

Social Issues

- Global warming
- Energy security

Value That the J-POWER Group Provides

- Contributing to reducing CO_2 emissions by expanding the use of renewable energy
- Contributing to energy security by providing fully domestically produced energy

Initiatives Aimed at Achieving the Target of 1 GW in New Development

Hydroelectric Power

The J-POWER Group boasts a track record in the building and operation of hydroelectric power plants that extends back more than half a century. Beginning in the mid-1950s, in a bid to solve postwar power shortages, the Company developed many large-scale conventional hydroelectric power plants. Subsequently, from the 1970s onward, the Company developed large-scale pumped storage hydroelectric power plants, such as that at Shintoyone.

The salient features of hydroelectric power plants are that they are capable of changing output extremely quickly to respond to demand fluctuations and can cover peak demand in daily and seasonal supply-demand balancing in Japan's grid. Furthermore, for resource-poor Japan, hydroelectric power represents a valuable, fully domestic energy resource and, as a CO_2-free power source, plays a central role in renewable energy.

In addition to continuing the efficient maintenance and management of existing hydroelectric power generation facilities, the Company is carrying out comprehensive renewals (repowering) of its main power generating machinery to increase capacity and the power generated through optimal designs utilizing the latest technologies. The Company is also undertaking the development of small- to medium-scale hydroelectric power plants that utilize untapped hydroelectric resources in order to effectively utilize this precious resource to the maximum extent possible.

Completed	Generation Capacity	Remarks
Akiba No. 1 Repowering (Shizuoka Prefecture)	45 MW ▶ 47 MW	Construction completed in May 2018

Under Construction (2 Projects)	Generation Capacity	Remarks
Shinkatsurazawa/Kumaoi (Hokkaido Prefecture)	22 MW	Scheduled to start operations in June 2022
Ashoro Repowering (Hokkaido Prefecture)	40 MW ▶ 42 MW	Scheduled for completion in FY2022

Akiba No. 1 Repowering (Shizuoka Prefecture)

Geothermal Power

The J-POWER Group has a track record of operating geothermal power plants that goes back more than 40 years. Leveraging the comprehensive know-how developed though this business, encompassing geothermal resource surveying and management as well as power plant planning, construction, and operations, we are carrying out stable plant operations from a long-term perspective while actively advancing new development.

The Wasabizawa Geothermal Power Plant (capacity 46 MW) in Yuzawa City, Akita Prefecture, a joint venture with Mitsubishi Materials Corporation and MITSUBISHI GAS CHEMICAL COMPANY, INC., began operations in May 2019. In addition, we are working with these partners in preparation for construction from August 2019 of the Appi Geothermal Power Plant (capacity 14.9 MW) in Hachimantai City, Iwate Prefecture (operations are scheduled to begin around spring 2024).

Furthermore, in non-joint-venture projects, we began construction to replace the Onikobe Geothermal Power Plant (capacity 14.9 MW) in April 2019. Located in Osaki City, Miyagi Prefecture, the existing plant had been in continuous operation for more than 40 years.

We continue to proactively survey the geothermal resources at new candidate sites with the aim of creating new projects down the line.

Completed	Generation Capacity (Owned capacity)	Remarks
Wasabizawa (Akita Prefecture)[1]	46 MW (23 MW)	Began operations in May 2019

Under Construction or in Preparation for Construction	Generation Capacity (Owned capacity)	Remarks
Onikobe Replacement (Miyagi Prefecture)	14.9 MW	Scheduled to start operations in FY2023
Appi[2] (Iwate Prefecture)	14.9 MW (2 MW)	Scheduled to start operations in FY2024

Resource Surveys in Progress	Generation Capacity (Owned capacity)	Remarks
Geothermal resource surveys at Takahinatayama site (Miyagi Prefecture)	—	—

Wasabizawa Geothermal Power Plant (Akita Prefecture)

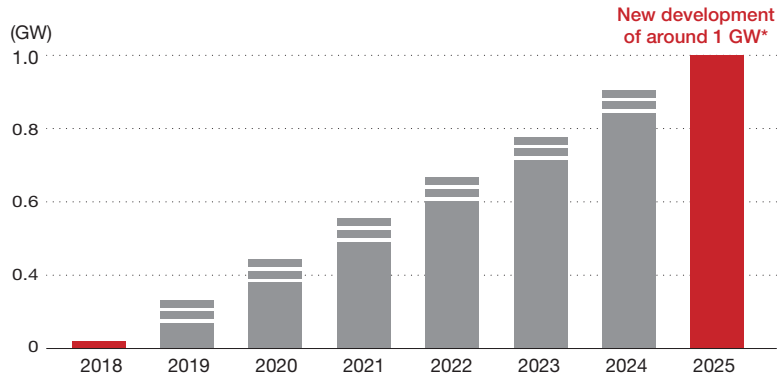
1. J-POWER's stake in the project is 50% 2. J-POWER's stake in the project is 15%

Renewable Energy Expansion Target in the Medium-Term Management Plan

The J-POWER Group established the Renewable Energy Business Strategy Department in April 2019 and is reinforcing new project development and the technological development that supports such projects. Through these efforts, we are steadily advancing toward the achievement of the Medium-Term Management Plan's target for fiscal 2025 of approximately 1 GW in new development (0.3 TWh/year increase in hydroelectric and 2.5 TWh/year increase in wind and others).*

* Compared to 2017 results

Renewable Energy Expansion Target



* Owned capacity basis

Wind Power

The J-POWER Group is a pioneer in the wind power generation business, having commenced operations at its first wind farm in 2000 and steadily expanded this business since then. Drawing on its many years of experience, expertise, and technologies in the building, operation, and maintenance of power plants and transmission lines, the Company has created a system that covers the full gamut of the wind power business, from surveys of wind conditions to wind farm design, construction, and operation and maintenance (O&M). Leveraging its diverse experience, the Company is making its O&M systems more efficient while working to improve utilization rates and enhance profitability. The feed-in tariff system took effect in 2012, and the Company has acquired facility accreditation under the system for both new and existing wind power facilities.

In terms of onshore wind power, we are steadily advancing new development and replacement projects. Currently, four projects are under construction, and 10 projects are in the construction preparation or assessment stages of development. The Company will continuously seek locations that possess wind conditions suitable for new facilities and steadily develop new projects in the years to come.

With regard to offshore wind power, a consortium that includes the Company has been selected as preferred bidder following a public tender for the installer and operator of the Hibikinada Offshore Wind Farm off the coast of Kitakyushu in Fukuoka Prefecture. In the years to come, we will be conducting surveys on the wind conditions and marine areas toward the commercialization of offshore wind power generation in Hibikinada. Furthermore, in August 2018, J-POWER acquired a 25% stake in the Triton Knoll offshore wind project in the United Kingdom. We are also focusing efforts on the commercialization of offshore wind power in Japan through such efforts as conducting sea area surveys aimed at open-water development.

Completed	Remarks
Participation in the Triton Knoll offshore wind power project in the United Kingdom	Interest acquired in August 2018
Signed memorandum of understanding on collaboration with ENGIE of France on floating offshore wind power generation business	Signed in September 2018

Under Construction (5 projects)	Generation Capacity (Owned capacity)	Remarks
Setana-Osato[1] (Hokkaido Prefecture)	50 MW (45 MW)	Start of operations planned for FY2019
Nikaho No. 2 (Akita Prefecture)	41 MW	Start of operations planned for FY2019
Kuzumaki No. 2 (Iwate Prefecture)	45 MW	Scheduled to start operations in FY2020
Kaminokuni No. 2 (Hokkaido Prefecture)	42 MW	Scheduled to start operations in FY2021
Triton Knoll Offshore Wind Farm[2] (U.K.)	860 MW (215 MW)	Scheduled to start operations in 2021

1. J-POWER's stake in the project is 90% 2. J-POWER's stake in the project is 25%

Artist's rendering of Hibikinada Offshore Wind Farm (Fukuoka Prefecture)

In Preparation for Construction or Under Assessment (8 new development projects, 3 replacement projects)	Generation Capacity (Owned capacity)
Minami Ehime No. 2 (Ehime Prefecture)	Max. 41 MW
Kaminokuni No. 2[3] (Hokkaido Prefecture)	Max. 78 MW
Hibikinada Offshore[4] (Fukuoka Prefecture)	Max. 220 MW (88 MW)
Seiyo Yusuhara (Ehime and Kochi Prefectures)	Max. 163 MW
Kita-Kagoshima (Kagoshima Prefecture)	Max. 215 MW
Wajima (Ishikawa Prefecture)	Max. 90 MW

In Preparation for Construction or Under Assessment (8 new development projects, 3 replacement projects)	Generation Capacity (Owned capacity)
Youra (Oita Prefecture)	Max. 65 MW
Kunimiyama (Kochi Prefecture)	51 MW
New Tomamae (Replacement) (Hokkaido Prefecture)	31 MW
New Sarakitomanai (Replacement) (Hokkaido Prefecture)	15 MW
New Shimamaki (Replacement) (Hokkaido Prefecture)	4 MW

3. In addition to the Kaminokuni No. 2 project (42 MW) currently under construction, additional facilities are under consideration.
4. J-POWER's stake in the project is 40%.

The use of renewable energy is currently expanding on a global scale. However, CO_2-free renewables and nuclear power alone are not sufficient to meet power demand in Japan or around the world. As such, significantly reducing the CO_2 emitted from power generation using fossil fuels, such as coal and natural gas, is essential to meeting the goals of the Paris Agreement and Japan's greenhouse gas reduction targets.

Social Issues

- Global warming
- Energy security
- Electricity shortages in emerging countries

Value That the J-POWER Group Provides

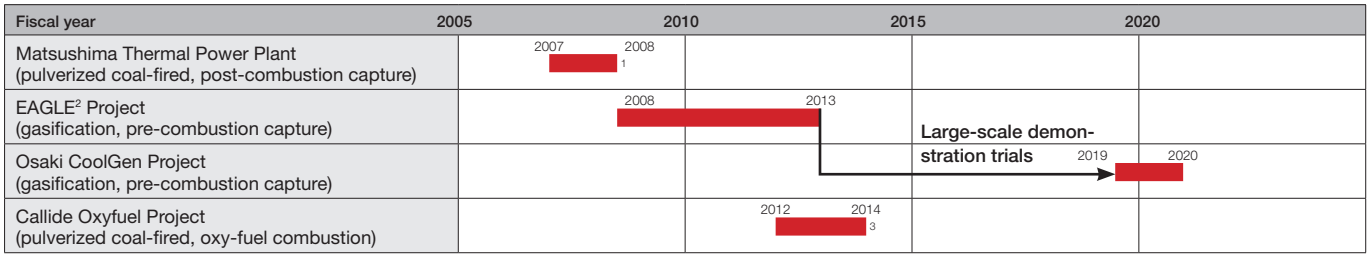
- Greatly reduces CO_2 emissions from coal-fired thermal power generation
- Contributes to energy security and resolving electricity shortages in emerging countries by enabling the continued use of coal-fired thermal power generation

CO_2 Separation, Capture, Utilization and Storage Initiatives

The J-POWER Group is developing CO_2 separation, capture, utilization, and storage (CCUS) technologies as it aims for major reductions in the CO_2 emissions from power generation using fossil fuels.

CO_2 Separation and Capture

The J-POWER Group has carried out significant testing related to the separation and capture of CO_2 emitted by coal-fired thermal power plants. Beginning in fiscal 2019, we plan to conduct large-scale demonstration trials at the Osaki CoolGen Project (please refer to page 21 for details).



1. Joint project with Mitsubishi Heavy Industries, Ltd.
2. Please refer to page 21 for details.
3. A public-private, Japanese-Australian joint project. The project conducted the world's first trials of an integrated process involving oxy-fuel and CCS at an actual power plant.

CO_2 Utilization and Storage

CO_2 that has been separated and captured must be handled appropriately so that it does not contribute to the greenhouse effect. To do this, we put this CO_2 to use and store it underground.

Utilization

Methods of utilizing captured CO_2 include injecting it into oil fields to increase crude oil production in a process known as enhanced oil recovery (EOR), using it directly as dry ice or in other forms, and using it as an input to manufacture chemicals, fuels, or other products.

The J-POWER Group is exploring several ways of utilizing CO_2. These include using captured CO_2 to increase the atmospheric concentration of CO_2 in agricultural greenhouses in order to boost crop yields and agricultural productivity as well as developing technologies to produce carbon-neutral jet fuel through the mass cultivation of photosynthesizing microalgae.

Storage

Storing a large amount of CO_2 deep underground has the potential to significantly reduce the escape of CO_2 to the atmosphere.

J-POWER took part in the Callide Oxyfuel Project, a project jointly conducted by the Japanese and Australian governments and private sectors, which conducted trials in 2014 in which separated and captured CO_2 from a coal-fired thermal power plant was stored underground in Australia.

Furthermore, Japan CCS Co., Ltd., in which J-POWER is an investor, is conducting large-scale CCS demonstration trials in Tomakomai City, Hokkaido, under contract with the national government. Japan CCS began injecting CO_2 into underground reservoirs in fiscal 2016, and aims to inject a total of 300,000 tons of CO_2 in the course of the trials.

Japan CCS is also surveying potential sites for CO_2 storage on behalf of the government.

Initiatives Aimed at Carbon Reduction and Decarbonization in Coal Use

Given that coal will continue to be necessary to Japan and the world going forward, the J-POWER Group believes that the decarbonization of coal use is of the utmost importance.

Aiming to reduce CO_2 emissions from coal use to zero by the 2050s, in addition to CCUS, the Group is implementing initiatives aimed at the commercialization of oxygen-blown integrated coal gasification combined cycle (IGCC),[1] developing integrated coal gasification fuel cell combined cycle (IGFC)[2] technologies, and advancing R&D in such areas the manufacture of hydrogen from brown coal.

Oxygen-blown IGCC offers high thermal efficiency, helping reduce CO_2 emissions. In addition, the gases produced contain a high concentration of carbon monoxide (CO), which facilitates the efficient separation and capture of CO_2. Thanks to these features, this generation technology is very well suited for CCUS.

Furthermore, at conventional coal-fired thermal power plants, we are introducing high-efficiency power generation technologies and using mixed combustion with biomass fuels to reduce carbon emissions. In addition to continuing the mixed combustion initiatives already in practice, we aim to realize up to 10% mixed combustion at the Takehara Thermal Power Plant New Unit No. 1, which is scheduled to commence operations in fiscal 2020.

1. Integrated coal gasification combined cycle (IGCC): A combined cycle power generation system with a twin-turbine configuration, comprising a gas turbine driven by the combustion of gas produced by gasifying coal and a steam turbine driven by the exhaust gases from the gas turbine. Oxygen-blown refers to the use of oxygen in the coal gasification process.
2. Integrated coal gasification fuel cell combined cycle (IGFC): An integrated power generation system that combines IGCC with fuel cells and achieves the highest level of thermal efficiency from coal-fired thermal power

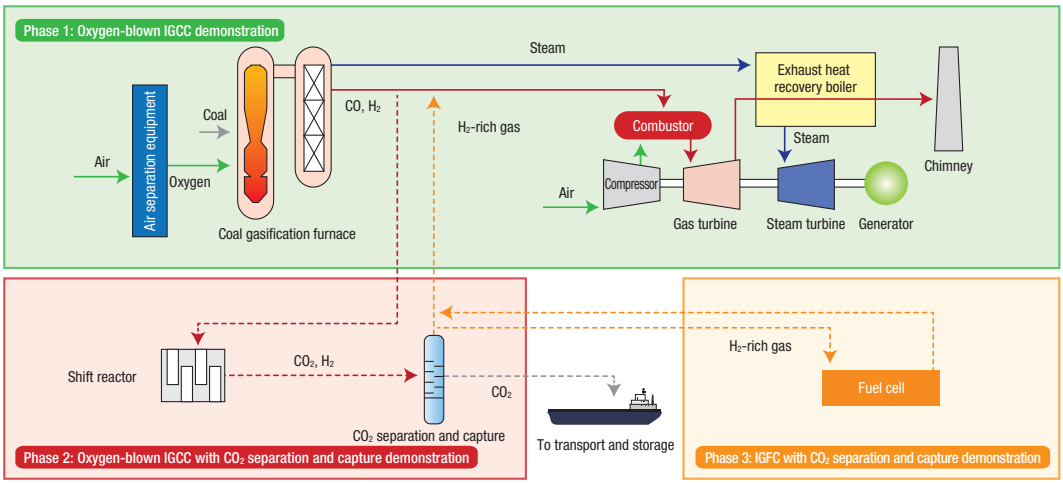
Osaki CoolGen Project

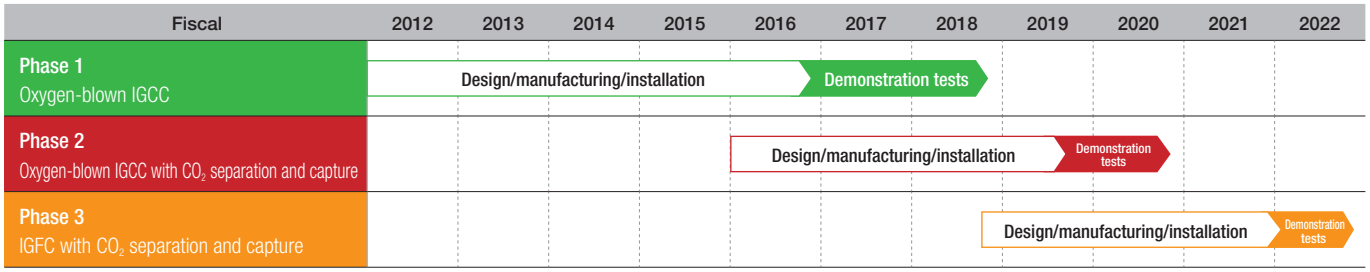
Beginning in fiscal 2002, J-POWER was engaged in the EAGLE[1] Project in collaboration with the New Energy and Industrial Technology Development Organization (NEDO), a national research and development body. This project was aimed at establishing technologies for realizing oxygen-blown IGCC.

Employing insights and results gleaned from the EAGLE Project, the Company has since been engaged in the Osaki CoolGen Project, with support from NEDO and in collaboration with The Chugoku Electric Power Co., Inc. Phase 1 of this project, a demonstration test of oxygen-blown IGCC (166 MW capacity, with a coal consumption volume of 1,180 tons per day), was completed in February 2019. In Phase 2, we plan to add CO_2 separation and capture facilities to conduct demonstration testing of IGCC with CO_2 separation and capture. Then, in Phase 3, we will use fuel cells to conduct further demonstration testing of IGFC with CO_2 separation and capture.

1. EAGLE: An oxygen-blown coal gasification project that was conducted at the Wakamatsu Research Institute. The name EAGLE is an acronym for coal Energy Application for Gas, Liquid & Electricity.

Osaki CoolGen Project demonstration test facilities
(Osakikamijima-cho, Hiroshima Prefecture)





Osaki CoolGen Project—Main Achievements and Targets

Phase 1: Oxygen-Blown IGCC Demonstration

Achievements

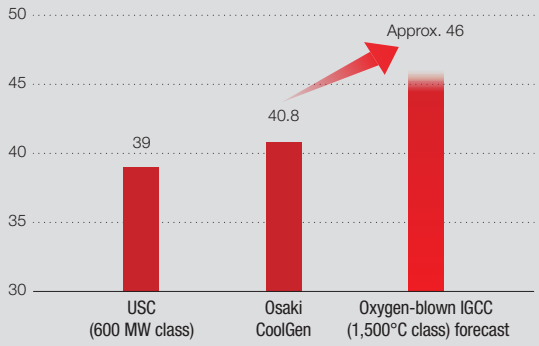
Reducing CO_2 Emissions via High Efficiency

■ Achieved 40.8% net thermal efficiency (HHV; gross thermal efficiency of 48.1%)
- Higher thermal efficiency than ultra-supercritical (USC) plants[1]
- Data obtained allowed us to estimate net thermal efficiency (HHV) of approximately 46% when these technologies are used with 1,500°C class gas turbines (gross thermal efficiency of approximately 53%)
- Increases in thermal efficiency are expected to lead to a reduction of CO_2 emissions in comparison with USC plants

1. Ultra-supercritical (USC): The current cutting-edge technology for pulverized coal-fired power generation (a conventional method of coal-fired thermal power generation in which finely crushed coal is combusted in a boiler)

Note: The graph at right is based on the thermal efficiency values for USC given in BAT reference materials published by the Ministry of Economy, Trade and Industry and Ministry of the Environment about cutting-edge power generation technologies already in use at commercial plants without economic or reliability issues as of February 2017.

Net Thermal Efficiency (HHV) (%)

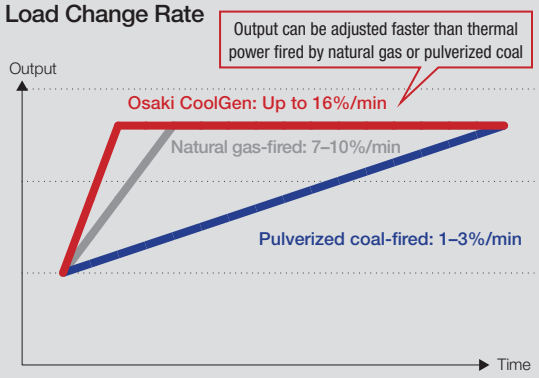


Facilitating the Adoption of Renewable Energy

■ Achieved load change rate[2] of up to 16% per minute
- Load change rate surpassing that of natural gas-fired thermal power generation
- Can be used to balance rapid fluctuations in output from renewables
- Expected to facilitate the adoption of renewable energy by alleviating instability in the power grid caused by the growing use of renewables

2. Load change rate: Ratio of output change to rated load per minute. A larger load change rate allows quicker output adjustment in response to changes in electricity demand.

Load Change Rate



Phase 2: Oxygen-Blown IGCC with CO_2 Separation and Capture Demonstration

Target

■ Gather data needed to design a new commercial plant (1,500°C class IGCC) that achieves 90% CO_2 capture while maintaining approximately 40% net thermal efficiency (HHV).*
* Approximately 48% gross thermal efficiency
- Capture rate of CO_2 at separation and capture equipment: Over 90%
- Purity of captured CO_2: Over 99%

Phase 3: IGFC with CO_2 Separation and Capture Demonstration

Target

■ Gather data needed to design an IGFC plant with CO_2 separation and capture (500 MW class) that achieves 90% CO_2 capture and approximately 47% net thermal efficiency (HHV).*
* Approximately 61% gross thermal efficiency

Australian Brown Coal Hydrogen Pilot Test Project (HESC* Project)

Hydrogen produces no CO_2 when combusted, can be manufactured from a variety of energy sources, and can be stored and transported. By employing CCS technology at the manufacturing stage, hydrogen can be used as a CO_2-free form of energy. Therefore, for Japan, a nation poor in mineral resources, hydrogen technologies are promising as a means of promoting energy security and combating global warming.

Aiming to build and commercialize a CO_2-free hydrogen supply chain, J-POWER is participating in a pilot test project to produce hydrogen by gasifying Australian brown coal, an abundant, underutilized resource, and transport it to Japan. Within this project, J-POWER is handling the gasification of the brown coal (sponsored by NEDO) and purification facilities for the hydrogen gas produced. The pilot test is scheduled to be carried out in 2020.

When this supply chain is commercialized, plans call for utilizing CCS to store the CO_2 produced during the manufacture of hydrogen from brown coal, avoiding its release to the atmosphere and thus achieving CO_2-free operations.

*HESC: Hydrogen Energy Supply Chain

Conceptual rendering of the completed brown coal gasification facilities

The Paris Agreement, adopted at the 21st yearly session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) in December 2015, set the long-term goal of limiting global warming to well below 2°C compared with pre-industrial levels.

Furthermore, Japan has set the medium-term target of a 26% reduction in greenhouse gas (GHG) emissions in 2030 compared with 2013 levels, as well as the long-term target of an 80% reduction by 2050.

The J-POWER Group owns many coal-fired thermal power plants, which emit a relatively large amount of CO_2. As such, we believe that helping to address climate change proactively, as we increase corporate value, is a material issue and have prepared scenarios and strategies regarding the use of coal-fired thermal power going forward.

Energy Mix Scenarios

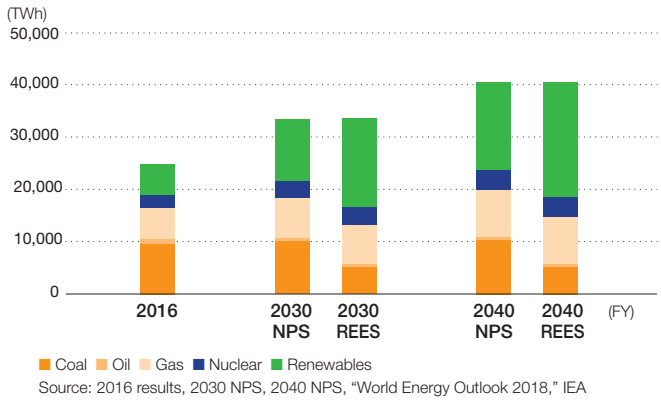
The energy mix is seen as particularly influential and important in addressing climate change, and is a significant factor impacting the J-POWER Group's power generation business strategy.

A wide range of possible scenarios exist for the future energy mix of any country, impacted by such factors as government policy, technological development, and cost. It is therefore impossible to predict the exact energy mix at any point in the future.

The International Energy Agency (IEA) publishes the World Energy Outlook (WEO), which includes a New Policies Scenario (NPS) that is regarded as the WEO's main scenario. Building on this, the J-POWER Group created its own scenario, the Renewable Energy Expansion Scenario (REES), in which the adoption of renewable energy accelerates further, and half of the coal-fired thermal power assumed in the NPS is replaced with renewable energy.

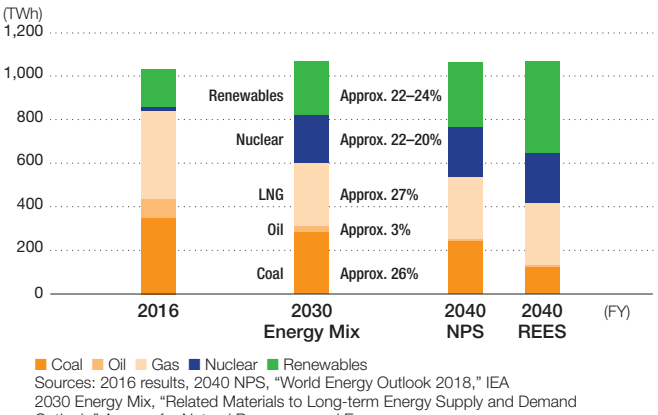
In addition, the Japanese government has established the Long-Term Energy Supply and Demand Outlook, which lays out an energy mix for 2030; we also took this into account.

World Energy Mix



Source: 2016 results, 2030 NPS, 2040 NPS, "World Energy Outlook 2018," IEA

Japan's Energy Mix



Sources: 2016 results, 2040 NPS, "World Energy Outlook 2018," IEA
2030 Energy Mix, "Related Materials to Long-term Energy Supply and Demand Outlook," Agency for Natural Resources and Energy

Under the NPS, the worldwide amount of coal-fired thermal power generation is expected to stay roughly flat until 2040. Under the REES, by 2040, it would decrease by half, but remain at approximately 5,200 TWh per year, or around 13% of the total energy mix.

Japan has few mineral resources, depends on imports for almost all its fossil fuels, and is not connected to any other country through an international power grid. As such, from an energy security perspective, a certain amount of coal-fired thermal power will remain necessary for the nation into the future. Japan's government therefore assumes that coal-fired thermal power will account for approximately 26% of total energy mix, or 281 TWh, in 2030.

Looking further to 2040, Japan's coal-fired thermal power is projected to decrease to approximately two-thirds of its current amount, or 240 TWh, under the NPS, and to approximately one-third of its current level, or 120 TWh, under the REES. As such, even under the REES, Japan's total reliance on coal-fired thermal power will be roughly twice the amount of power currently generated by the J-POWER Group's domestic coal-fired thermal power plants.

Risks Related to the Coal-Fired Thermal Power Business

In both the NPS and the REES, coal-fired thermal power is expected to retain a place in the energy mix. However, continuing to operate coal-fired thermal power businesses presents the following risks, to which it is necessary to implement forward-looking countermeasures.

Risk	Possible Developments
Decrease in sales volume	Intensifying competition between coal-fired thermal power plants due to decreased demand for electricity generated from coal
Decrease in sales prices	Falling prices in electricity markets due to increases in renewable energy
Increase in cost	Increasing costs associated with carbon pricing, such as carbon taxes and cap-and-trade
Regulations	Banning of new power plants that do not incorporate technologies for ensuring the lowest possible CO_2 levels
Funding	Lower share price due to decline in investment in stocks of companies that conduct coal-fired thermal power businesses, or decrease in available financing

Initiatives Aimed at Carbon Reduction and Decarbonization

The J-POWER Group is currently taking steps on many fronts to reduce and eliminate carbon emissions in its coal-fired thermal power business. These include the development of high-efficiency coal-fired thermal power, the development of oxygen-blown IGCC and IGFC technologies, and the development of technologies to separate and capture CO_2 from power generation and store it underground (CCS) or utilize it (CCU; jointly "CCUS").

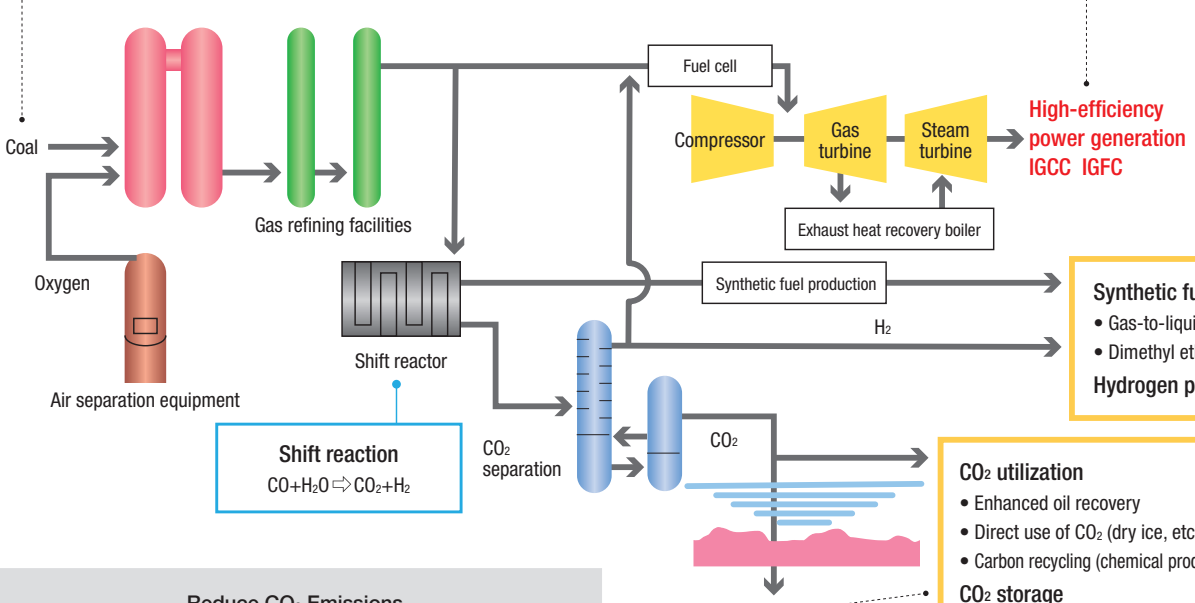
These initiatives present a wide range of merits beyond reducing CO_2 emissions.

Save Fuel Costs

High-efficiency coal-fired thermal power, especially oxygen-blown IGCC and IGFG, which promise higher efficiency than conventional coal technologies, will require less fuel and can run on cheap low-grade coal, saving fuel costs.

Superior Load Tracking

Oxygen-blown IGCC offers much better load tracking (the ability to quickly change output in response to changes in demand) than conventional coal-fired thermal power technologies.



Reduce CO_2 Emissions

Higher efficiency will reduce the amount of coal used. Separated and captured CO_2 can be stored or utilized to reduce CO_2 emissions.

Synthetic Fuel Ingredient Production

By combining oxygen-blown IGCC with CO_2 separation and capture, we will not only generate power, but enable the production of synthetic fuels and hydrogen.

Through these initiatives, we will prevent negative impacts from risks related to the coal-fired thermal power business and increase the competitiveness of the J-POWER Group's coal-fired thermal power business.

Risk	Effects of J-POWER Group's Initiatives
Decrease in sales volume	Because reducing fuel costs will secure cost competitiveness, demand is expected to remain strong among coal-fired thermal power.
Decrease in sales prices	Even if prices in electricity markets fall due to increases in renewable energy, decreased fuel costs will make it easier to secure a profit. Furthermore, sales of synthetic fuel ingredients will contribute to profit.
Increase in cost	Significant reductions in CO_2 emissions will allow the J-POWER Group to avoid costs related to carbon pricing, such as carbon taxes and cap-and-trade.
Regulations	By applying cutting-edge coal-fired thermal power generation technologies that reduce CO_2 emissions, we will meet regulatory requirements.
Funding	Significantly reducing CO_2 emissions and increasing competitiveness in coal-fired thermal power will remove the reasons behind coal-related reductions in investment and available financing.

Addressing Climate Change and Increasing Corporate Value

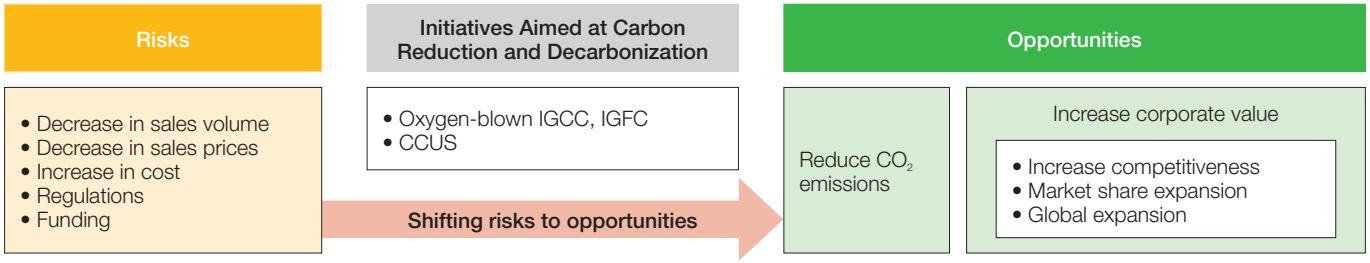
Coal will continue to be necessary to Japan and the world going forward. Given this, the J-POWER Group believes that significantly reducing carbon emissions from coal-fired thermal power using our cutting-edge initiatives will contribute greatly to addressing climate change.

In addition, because oxygen-blown IGCC offers better load tracking than conventional coal-fired thermal power, it is well suited to help stabilize the power grid, enabling greater use of renewable energy, such as solar and wind, which produce significantly varying output depending on weather conditions.

At the same time, by taking the lead in developing oxygen-blow IGCC and IGFC technologies, the J-POWER Group will be able to increase its market share in the coal-fired thermal power business, as these technologies will offer significant advantages in terms of meeting regulatory requirements and cost competitiveness.

Furthermore, by applying our low-CO_2 technologies to overseas coal-fired thermal power plants, we will contribute to reducing global CO_2 emissions while further increasing our corporate value.

The J-POWER Group's initiatives aimed at carbon reduction and decarbonization in coal-fired thermal power will help enhance its competitiveness. As such, even if coal-fired thermal power demand were to fall to the level assumed in the REES, we believe that we would be able to raise our corporate value by increasing our market share while contributing greatly to addressing climate change worldwide.



Reference: Initiatives to Reduce CO_2 in Japan

As one of Japan's electricity business operators, J-POWER takes part in the Electric Power Council for a Low Carbon Society and is contributing to the achievement of its targets.

GHG reduction target
- Reducing GHG by 26% in fiscal 2030 from fiscal 2013 level

Long-term Energy Supply and Demand Outlook (Energy Mix)
- The share of power generated by each power source in fiscal 2030 is estimated in line with the GHG reduction target (please refer to page 23)
- Thermal efficiency is estimated at high-efficiency generation levels (coal: USC, LNG: combined cycle)

Voluntary initiative

Generators | Grid operators | Retailers

The Electric Power Council for a Low Carbon Society (46 companies as of April 2019)
- Electricity business companies as a whole* aim for the carbon intensity in line with the energy mix (0.37kg-CO_2/kWh at user's end in fiscal 2030)

* Covering 96.0% of total electricity sales in Japan at the end of fiscal 2017

Governmental policy measures

Energy Conservation Act
- Newly built thermal power plants must employ the highest-efficiency technology presently in commercial operation (coal-fired thermal power: 42.0% [gross efficiency, HHV]).
- Each generator must aim for the high efficiency premised in the energy mix in fiscal 2030 (overall thermal power: 44.3% [gross efficiency, HHV]).

Energy Supply Structure Enhancement Act
- Each retailer must aim for a non-fossil power ratio of 44% or higher, the level estimated in the energy mix, in fiscal 2030.

Note: The number of members of the Electric Power Council for a Low Carbon Society and the electricity sales coverage rate given above are from the council's publications.

From the perspective of securing a stable energy supply, given Japan's few mineral resources, nuclear power generation is an important baseload power source. Moreover, as it emits no CO_2 during power generation, nuclear power is an excellent method of power generation in terms of preventing global warming.

The fuel it consumes, uranium, has a high energy density and can be used continuously for a long period after being loaded into the nuclear reactor core. Furthermore, spent fuel can be reprocessed and used as fuel again (via the nuclear fuel cycle), making it a quasi-domestically sourced energy resource.

Nuclear power plants are commonly able to use up to about one-third uranium-plutonium mixed oxide (MOX) fuel. Because the Ohma Nuclear Power Plant will be able to operate using only MOX fuel, it will play an important role in the nuclear fuel cycle.

While constantly striving to further enhance safety, we are steadily advancing the Ohma Nuclear Power Plant Project.

Social Issues

- Stable energy supply
- Raising Japan's energy self-sufficiency rate
- Global warming

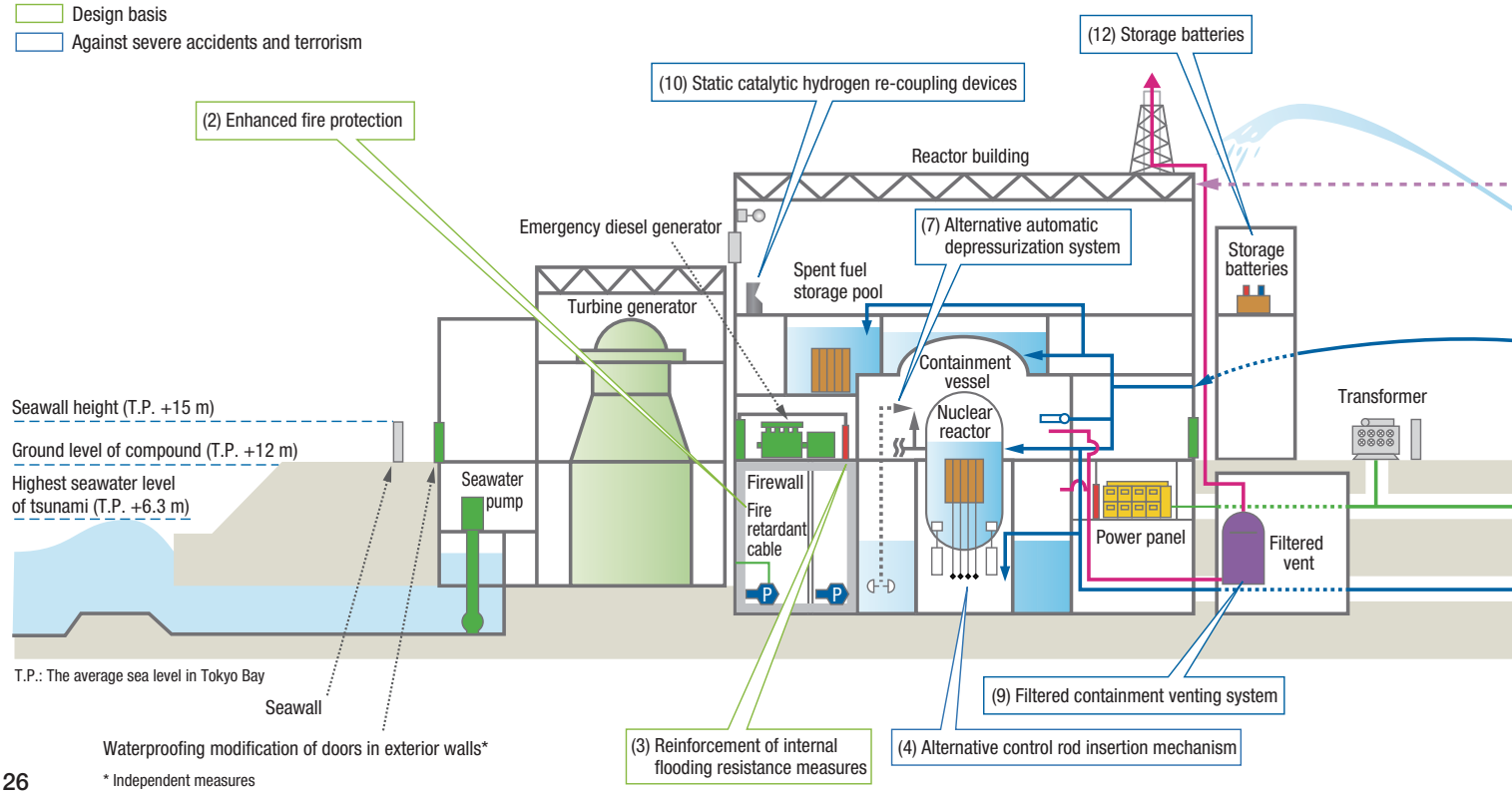
Value That the J-POWER Group Provides

- Contributing to the stable supply of energy with baseload power sources
- Advance the nuclear fuel cycle and contribute to raising Japan's energy self-sufficiency rate by using MOX fuel
- Contributing to reducing CO_2 emissions by using CO_2-free power sources

Overview of the Ohma Nuclear Power Plant Construction Plans

Overview of the Ohma Nuclear Power Plant Plans	
Location	Ohma-machi, Shimokita-gun, Aomori Prefecture
Capacity	1,383 MW
Type of nuclear reactor	Advanced boiling water reactor (ABWR)
Fuel	Enriched uranium and uranium-plutonium mixed oxide (MOX)
Start of construction	May 2008
Start of operations	To be determined

Image of Measures to Reinforce Safety at Ohma Nuclear Power Plant



Measures to Design Basis Accidents

To confirm compliance with the new safety standards, in December 2014 J-POWER submitted an application for permission for alteration of the reactor installment license and an application for construction plan approval to the Nuclear Regulation Authority summarizing the details of measures to reinforce the safety of the Ohma Nuclear Power Plant.

We will implement all measures during construction to ensure that we build a safe power plant.

1. Measures to Design Basis Accidents

Earthquake Proofing

We adopted a new standard seismic motion based on the latest findings and other factors. The adopted standard seismic motion is a maximum acceleration of 650 cm/s^2 (previously 450 cm/s^2). Earthquake-proof designs for buildings and other structures were adopted based on this standard seismic motion.

Tsunami Countermeasures

We also adopted the following design basis tsunami based on the latest findings. We estimated that the maximum height of a tsunami at the site based on the following design basis tsunami is T.P. +6.3 m (previously +4.4 m), but the elevation of the power station site is T.P. +12 m, and consequently, there is no likelihood of a tsunami reaching and following into the site. From the perspective of enhancing confidence even further, we will implement independent measures including construction of seawalls and installation of waterproof exterior doors and so on.

Measures to Prevent Damage from External Impact

(1) We assessed the impact of natural phenomena (volcanic eruptions, tornadoes, external fires, etc.) on the nuclear power station.

Fire Protection

(2) We will enhance fire protection measures including use of fire resistant cables and construction of firewalls.

Internal Flooding Resistance Measures

(3) We will reinforce resistance measures against leaks to protect facility functions in anticipation of damage to pipes within the facility.

2. Against Severe Accidents and Terrorism

To prevent damage to the nuclear reactor and containment vessel from severe accidents, we will implement the following measures.

Measures to Prevent Core Damage and Containment Vessel Failure

(4) Even in the case where nuclear reactor emergency shutdown equipment does not operate, an alternative control rod insertion mechanism that can be operated by separate circuits or manually will be installed to enable shutdown of the nuclear reactor.

(5) Permanent alternative water injection facilities will be installed to cool the nuclear reactor, containment vessel, and spent fuel storage pool.

(6) Mobile alternative water injection pumps will be available to cool the nuclear reactor, containment vessel, and spent fuel storage pool.

(7) An alternative automatic depressurization system will be installed to reduce pressure in the nuclear reactor.

(8) Heat exchanger units will be installed to release generated heat.

(9) A filtered containment venting system[1] will be installed to prevent damage from excess pressure in the containment vessel.

(10) Static catalytic hydrogen re-coupling devices[2] will be installed to prevent damage from hydrogen explosions in the reactor building.

(11) Water spraying facilities will be installed to control the dispersion of radioactive material outside the power station.

Reinforcement of Power and Water supplies

(12) To ensure power supplies, air-cooled emergency generators and gas turbine generators will be installed, the capacity of existing storage batteries will be increased, additional batteries will be installed, and a power supply vehicle will be made available.

(13) Water storage tanks will be installed to secure a water source necessary for resolution of severe accidents.

Ensuring Support Functions of the Control Room

(14) An emergency response office will be created to respond to severe accidents.

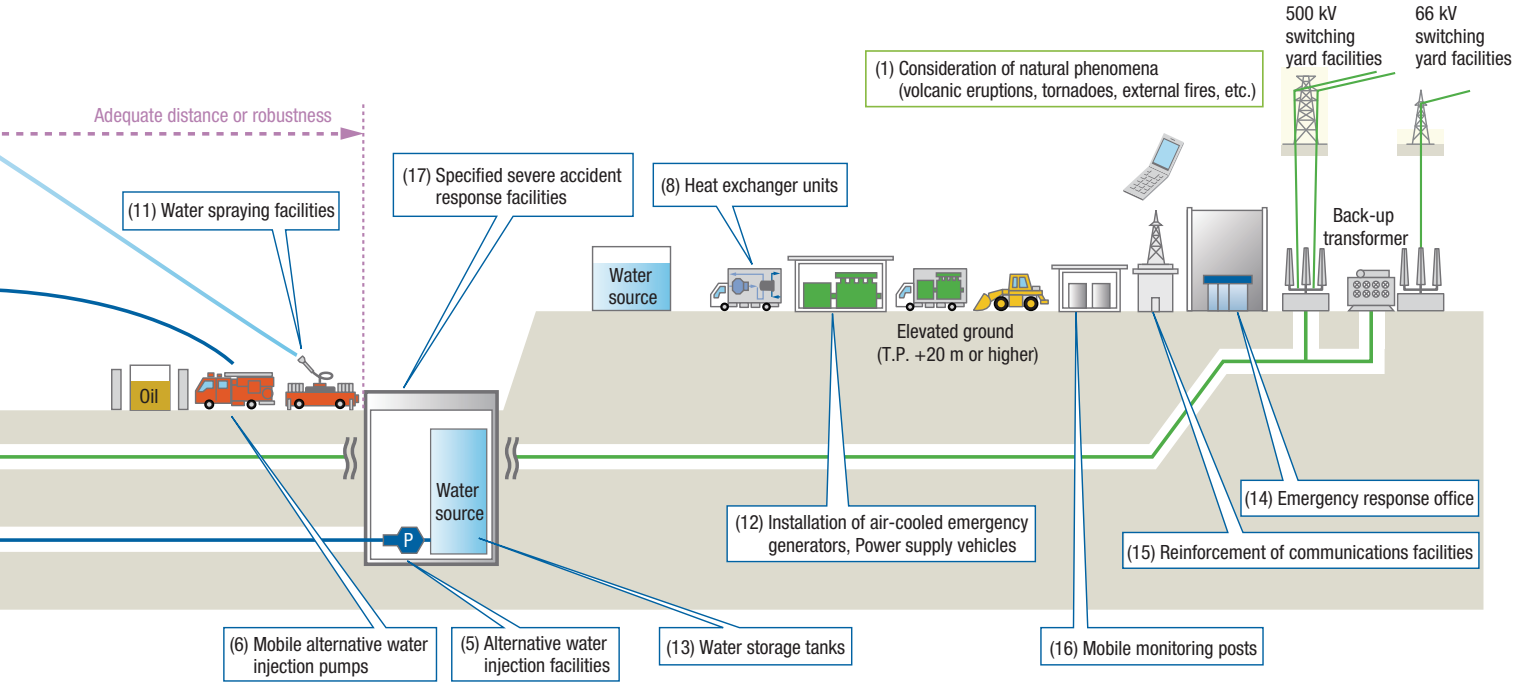
(15) Communications facilities will be reinforced to ensure communications with necessary locations inside and outside the power station.

(16) Mobile monitoring posts will be established to monitor, measure and record the concentration and radio-activity of radioactive material in the vicinity of the power station.

Countermeasures against Intentional Aircraft Crashes

(17) Specified severe accident response facilities will be established to control the abnormal external release of radioactive material in the event of the intentional crash of a large aircraft into the reactor buildings or other terrorist attacks.

1. Filtered containment venting system:
A system that controls the release of radioactive material and releases steam from the containment vessel into the atmosphere in order to prevent damage to the containment vessel in the event of an excessive increase in pressure inside the nuclear reactor containment vessel.
2. Static catalytic hydrogen re-coupling devices:
A system that uses a catalyst to cause a chemical reaction between hydrogen molecules and oxygen molecules to generate water vapor in order to prevent an increase in hydrogen concentration that could result in a hydrogen explosion in the event that damage to the reactor core occurs, causing hydrogen to leak inside the reactor building and the concentration of hydrogen to increase.



Leveraging its extensive experience and technical know-how in the domestic power business, for more than half a century, the J-POWER Group has engaged in the overseas consulting business in areas related to energy development and electric power transmission and substation facilities around the world. Since our first overseas project in 1962, we have implemented a total of 359 projects in 64 countries and regions. In more recent decades, amid the deregulation of electric power industries around the world, the Company commenced an overseas power generation business that participates in projects by investing capital and technologies in overseas markets where strong demand growth is expected. Leveraging the decades-long relationships of trust with local companies and networks built up through the overseas consulting business, we have expanded our participation in overseas projects.

While making maximum use of the strengths in overseas businesses that the Company has built up over the years, we will continue working to secure green-field projects, including renewable energy projects, that support the sustainable growth of the country or region, mainly in Thailand, the United States, and China, where we already have established business platforms, as well as other countries in Asia where energy demand is robust.

Social Issues

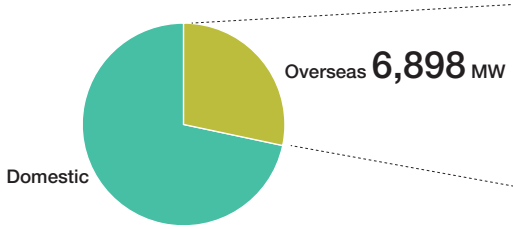
- Electricity shortages in emerging countries
- Environmental problems and global warming

Value That the J-POWER Group Provides

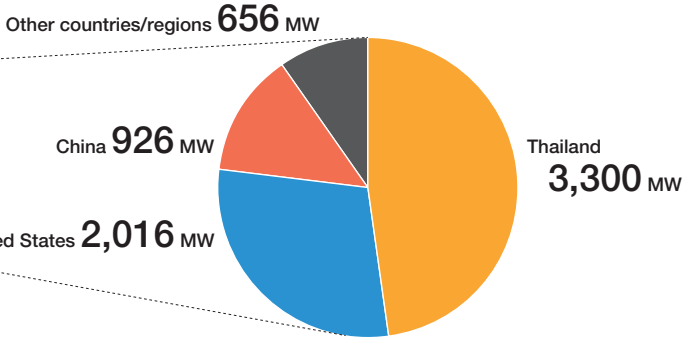
- Contributes to stable power supply overseas though the overseas consulting business and power plant development
- Contributes to addressing environmental problems and reducing CO_2 emissions by participating in the construction of environmentally friendly cutting-edge high-efficiency coal-fired thermal power facilities and offshore wind power farms overseas

J-POWER Group's Consolidated Power Generation Capacity (Owned capacity basis)

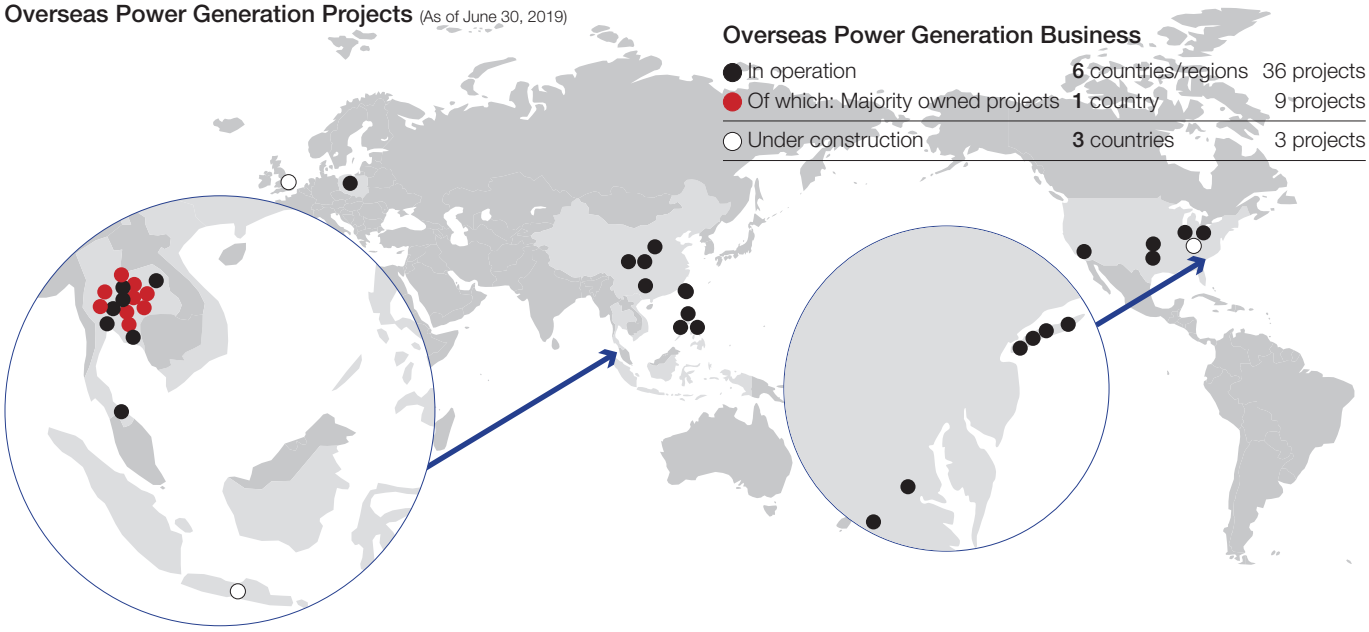
(As of June 30, 2019)



Owned Capacity of Overseas Project in Operation



Overseas Power Generation Projects (As of June 30, 2019)

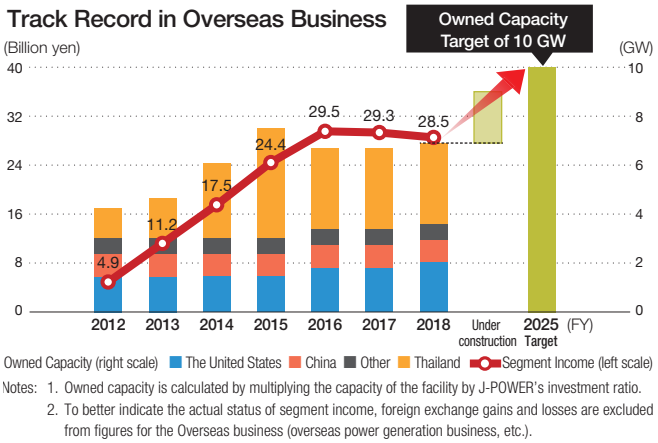


Overseas Power Generation Business

● In operation	6 countries/regions	36 projects
● Of which: Majority owned projects	1 country	9 projects
○ Under construction	3 countries	3 projects

Overseas Business Target under the Medium-Term Management Plan

In order to realize the Medium-Term Management Plan target of 10 GW in owned overseas capacity by fiscal 2025, the J-POWER Group is steadily expanding the assets of its power generation business through such efforts as advancing the construction of projects in development and securing new projects.



Notes: 1. Owned capacity is calculated by multiplying the capacity of the facility by J-POWER's investment ratio.
2. To better indicate the actual status of segment income, foreign exchange gains and losses are excluded from figures for the Overseas business (overseas power generation business, etc.).

Initiatives Aimed at Achieving the Medium-Term Management Plan Target

In the United States, the Tenaska Westmoreland Generating Station, in which the J-POWER Group holds a 25% stake, commenced operation in December 2018.

The Company has three new development projects under way. First, we are advancing construction on the Central Java Project, which will be the first high-efficiency coal-fired thermal power plant in Indonesia, toward a planned start of operations in 2020. In addition, the Company acquired a 25% stake in the Triton Knoll Offshore Wind Farm in the United Kingdom in August 2018. The Company will be involved in this offshore wind power project from the construction phase onward. In June 2019, we began construction of the 1,200 MW gas combined cycle (CCGT) Jackson Power Plant in Illinois, in the United States. This project is located in the Chicago metropolitan area, a major demand center, and within the PJM market, the largest electricity market in the United States. Because it will be located adjacent to the Elwood Power Plant, in which the Company holds a stake, it will benefit from the Company's extensive knowledge of the market environment.

In addition to these, the Company has several projects under consideration and is focusing efforts on carefully selecting and moving forward with high-quality projects toward its target for fiscal 2025 of 10 GW in owned overseas capacity.

Artist's rendering of the Jackson Power Plant (U.S.)

Completed	Type	Capacity	Ownership	Owned Capacity	Remarks
Westmoreland (U.S.)	Natural Gas (CCGT)	925 MW	25%	231 MW	To start operation in December 2018

Projects in Development

Central Java (Indonesia)

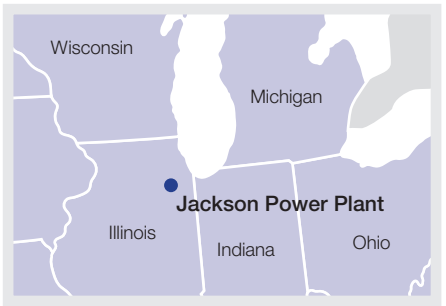
Capacity	2,000 MW (1,000 MW x 2)
Type	Coal (USC*)
Ownership	34%
Status	Under construction
Start of operation	No. 1: Jun. 2020
	No. 2: Dec. 2020

Triton Knoll (UK)

Capacity	860 MW (9.5 MW x 90)
Type	Offshore wind
Ownership	25%
Status	Under construction
Start of operation	2021

Jackson (U.S.)

Capacity	1,200 MW (600 MW x 2)
Type	Natural Gas (CCGT)
Ownership	100%
Status	Under construction
Start of operation	2022



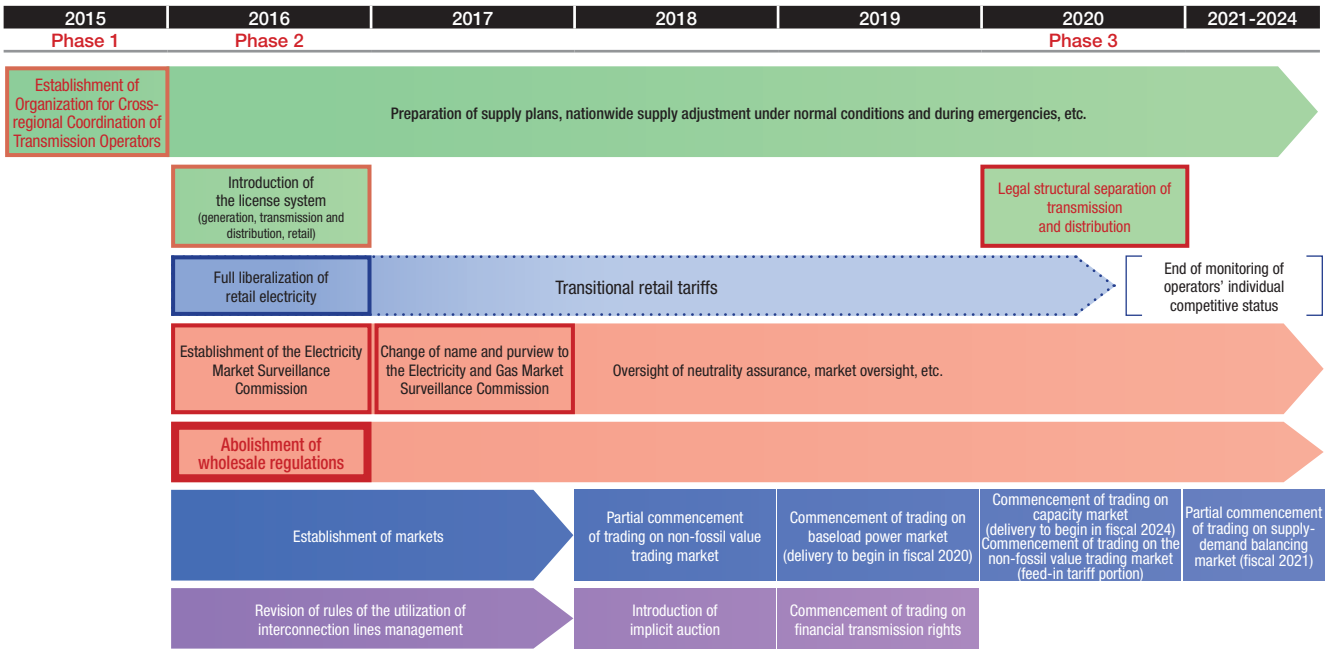
* USC: Ultra-Supercritical

Electricity System Reform

Due in part to the Great East Japan Earthquake and the accident at TEPCO's Fukushima Daiichi Nuclear Power Plant, electricity generation costs have been rising, and the balance of electric power supply and demand in Japan is tightening. In response, the government is advancing electricity system reform as part of efforts to rebuild its energy policy. The three goals of the reform are securing a stable supply of electricity, keeping electricity rates as low as possible, and providing consumers with choices and business operators with opportunities to expand their businesses. To achieve these goals, the Organization for Cross-regional Coordination of Transmission Operators (OCCTO) was established in April 2015, and entry into the retail market was fully liberalized and electricity wholesale regulations abolished in April 2016. In 2020, the transmission/distribution sector will be legally unbundled. After 2020, upon confirmation by the government that conditions are sufficiently competitive, transitional retail tariffs will be removed.

Furthermore, based on the proposals of the February 2017 Interim Report of the Policy Subcommittee for Acceleration of Electricity System Reform, to further stimulate competition, the interconnecting line usage rules were revised. In 2019, trading began on a baseload power market, and a number of other new markets, including a capacity market, non-fossil value trading market, and supply-demand balancing market, are planned going forward. The detailed design of these systems is now being worked out.

Electricity System Reform Schedule



In the midst of intensified competition as a result of deregulation, the J-POWER Group works to maximize its corporate value by enhancing the competitiveness of its generating assets while taking advantage of newly established markets and diversifying sales methods.

Intensifying competition due to deregulation

The J-POWER Group's Initiatives

Strengthening production functions

- With the stable supply of power and ensuring safety as the foremost prerequisites, strengthen cost competitiveness by such means as utilizing digital technologies
- Improve the flexibility of operations and optimize maintenance to meet market needs

Diversifying sales channels

- Adapt to market competition brought about by deregulation and maximize corporate value by diversifying sales channels, for example, investing in Suzuyo-Power Co., Ltd. and ENERES Co., Ltd., and taking advantage of newly established markets, including the baseload power market and capacity market

Enhancing reliability and the nationwide improvement of the power grid

- Enhance the reliability of interconnecting lines, such as the Hokkaido-Honshu HVDC Interconnection Line, and major transmission and transformation facilities that J-POWER owns
- While expanding the Sakuma Frequency Converter Station and related facilities, contribute to the stability and resilience of the electric power supply as well as the nationwide improvement of the power grid

Overview of Existing Businesses

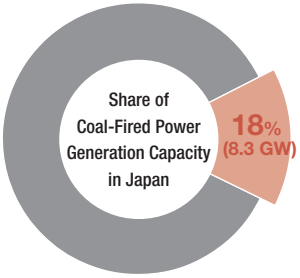
1. Thermal Power Business

Coal-fired thermal power accounts for the majority of the J-POWER Group's thermal power plants in Japan. In 1963, the Company's first coal-fired thermal power plant commenced operations in line with Japan's policy at the time of using domestically produced coal. Following the oil shocks of the 1970s, the Company responded to government plans to diversify the mix of power sources, which had been centered on oil-fired thermal power generation. In 1981, the Company began operations at the Matsushima Thermal Power Plant, the first in Japan fueled with imported coal. The Company went on to develop a series of large-scale coal-fired thermal power plants that run on imported coal, increasing the scale of its business. The Company has continued to improve power generation efficiency by enhancing steam conditions and scaling up plants in its efforts to improve competitiveness and decrease environmental impact. Providing an economical and stable baseload source of electricity, the Company's coal-fired thermal power plants maintain high load factors.

However, as coal-fired thermal power accounts for a large portion of our business, we see reducing CO_2 emissions from coal use as a material issue. Accordingly, we are advancing the mixed combustion of biomass fuels in coal-fired thermal power generation and pursuing research and development aimed at realizing and commercializing zero emissions technologies, including oxygen-blown integrated coal gasification combined cycle (IGCC) and CO_2 capture, use, and storage (CCUS) (please refer to pages 23–24).

Going forward, while taking steps to address global warming and other environmental problems, the Company will continue to build, operate, and maintain coal-fired thermal power facilities to serve as an economical and reliable baseload power source, thereby contributing to the stable supply of electricity in Japan.

The J-POWER Group operates coal-fired thermal power plants with world-leading efficiency and environmental performance



Sources: Compiled from Surveys and Statistics of Electricity (Agency for Natural Resources and Energy) (owned capacity basis, as of March 31, 2019)

Social Issues

- Stable supply of power in light of Japan's low energy self-sufficiency rate
- Environmental problems
- Global warming

Value That the J-POWER Group Provides

- Contributes to the stable supply of power in Japan as an economical and stable baseload power source
- Uses high-efficiency, environmentally friendly coal-fired thermal power to reduce environmental impact
- Advancing biomass fuel mixed combustion initiatives and technological development aimed at achieving zero emissions in coal use in order to reduce CO_2 emissions

Replacement and New Capacity Projects

To contribute to the stable supply of electricity in Japan over the medium-to-long term, the J-POWER Group is promoting new coal-fired thermal power projects to replace aging thermal power plants and develop new power plants. These projects will commence operations after the abolition of wholesale regulations being implemented as part of Japan's electricity system reform. As a result, unlike the coal-fired thermal power plants the Company has developed in the past, the new plants' business contracts will no longer contain restrictive terms limiting who they may sell to and at what rates.

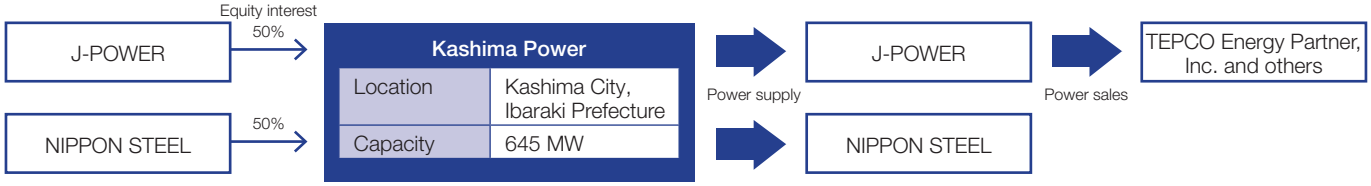
Takehara Thermal Power Plant Unit New No. 1
(post-completion rendering)

New Coal-Fired Power Projects in Japan

Takehara Thermal Power Plant Unit New No. 1 (Replacement)

Location	Takehara City, Hiroshima Prefecture
Status	Under construction for replacement
Start of operations	Scheduled for June 2020
Capacity	600 MW→600 MW (Replacement at the same capacity)
Steam conditions	Sub-critical→Ultra-supercritical

Kashima Power (New Capacity) ✓Status: Under construction (construction started November 2016) ✓Start of operation scheduled for July 2020



Yamaguchi Ube Power (New Capacity) ✓Status: Changes in plan under review

2. Transmission/Transformation

The J-POWER Group is an electricity transmission utility that owns and operates approximately 2,400 km of transmission lines and nine substations and converter stations throughout Japan. In addition to transmitting electric power generated by its own power plants to demand areas, the Company provides sections of the grids of the electric power companies and connects them to one another, fulfilling a major role in the nationwide operation of Japan's overall power grid.

In particular, we operate critical facilities that support wide-area power interchange in Japan, such as interconnection lines (Hokkaido-Honshu HVDC Interconnection Line, Honshu-Shikoku Interconnection Line, Kii Channel HVDC Interconnection Line and Kanmon Interconnection Line) connecting Honshu with Hokkaido, Shikoku, and Kyushu as well as the Sakuma Frequency Converter Station, which connects the different frequencies of eastern Japan (50 Hz) and western Japan (60 Hz). The Company's transmission/transformation facilities helped alleviate the strained regional electricity supply conditions that followed the Great East Japan Earthquake. The Company will maintain the reliability of facilities and focus efforts on ensuring stable operations. The Company also maintains a communications network throughout Japan that is used for facility protection, monitoring, and control as well as operational management to contribute to the operation of the power plants and the power grid.

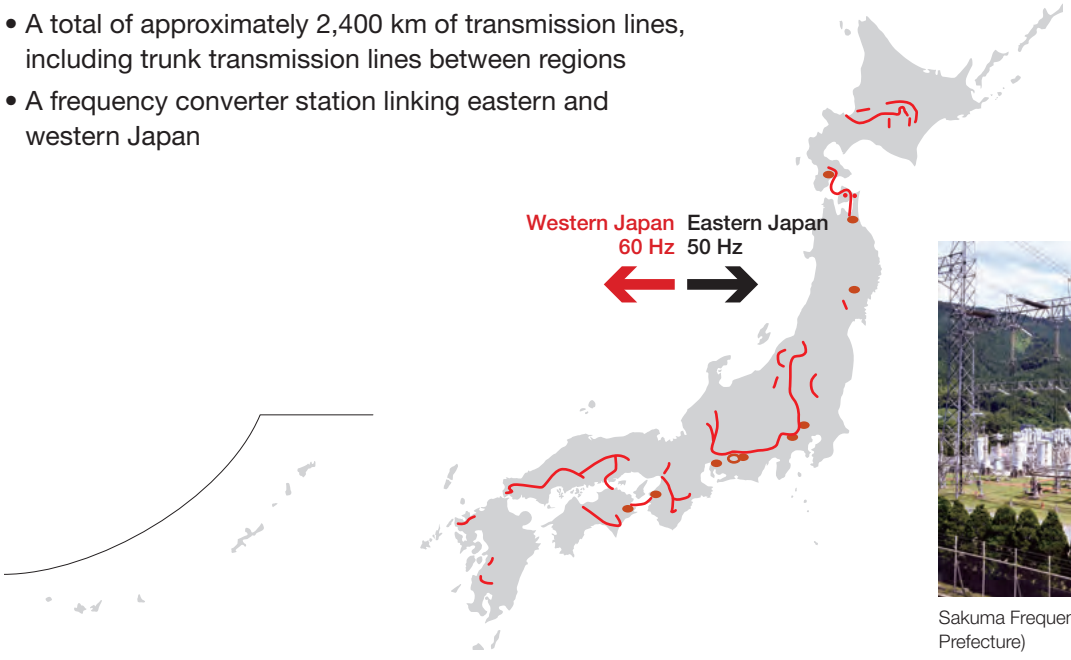
Social Issues

- Securing a stable power supply and demand balance over broad areas of Japan in light of the geographic separation of regions and differing frequencies of the eastern and western parts of the country

Value That the J-POWER Group Provides

- The Group's trunk transmission lines that connect regions, interconnecting line facilities, and frequency converter station that links eastern and western Japan contribute to the operation of Japan's broad-area power network.

- A total of approximately 2,400 km of transmission lines, including trunk transmission lines between regions
- A frequency converter station linking eastern and western Japan



Sakuma Frequency Converter Station (Shizuoka Prefecture)

Cross-Regional Network Development Plan on Tokyo-Chubu Interconnection Facilities

In June 2016, the Organization for Cross-regional Coordination of Transmission Operators published its Cross-regional Network Development Plan, which includes plans for the development of the New Sakuma Frequency Converter Station and for rebuilding the Sakuma East Trunk Line to increase its capacity. The J-POWER Group has been chosen to implement this plan. Accordingly, in line with government policy requirements and the purpose of the plan—to ensure the stable supply of electric power—the Company is advancing detailed examinations in preparation for construction.

Initiative	Capacity	Remarks
Construction of the New Sakuma Frequency Converter Station and replacement and expansion of related transmission lines	New Sakuma Frequency Converter Station: 300 MW Sakuma East Trunk Line: Approx. 125 km Sakuma West Trunk Line: Approx. 14 km	Undergoing detailed review in preparation for construction Expansion scheduled for completion at the end of fiscal 2027

3. Electric Power-Related Business

The J-POWER Group operates electric power-related businesses that support the smooth and efficient implementation of its electric power business. Specifically, these businesses are required for the operation of power generation, transmission, and transformation facilities and include the design, construction, inspection, and maintenance of said facilities as well as the import of coal. J-POWER maintains the power generation facilities of its domestic wholesale electric power business in close partnership with its subsidiaries.

Coal Procurement

The J-POWER Group procures fuel coal primarily from Australia and Indonesia. In Australia, the Company owns interests in three coal mining projects through subsidiaries.

Global supply and demand in the coal market can vary greatly due to demand from developing countries, including China and India, trends related to energy resources other than coal, such as liquefied natural gas (LNG), and other geopolitical factors. In view of this, the Company maintains an upstream presence, namely the ownership of coal mines, and secures diversified procurement sources, thereby ensuring the stable procurement of coal as fuel for thermal power generation over the long term.

Social Issues

- Stable power supply
- Fuel procurement in Japan, an island nation with a low energy self-sufficiency rate

Value That the J-POWER Group Provides

- Contributes to stable power supply through the stable operation of power plants, supported by long-term operation and maintenance technologies
- Conducts stable fuel procurement based on diversified sources, supporting coal-fired thermal power as a baseload power source

Coal Mining Projects (As of June 30, 2019)

Mine Name	Location	Loading Port	2018 Sales Volume	Investment Ratio*	Beginning of Commercial Production
Clermont	Queensland	Dalrymple Bay	11.51 million t	15%	2010
Narrabri	New South Wales	Newcastle	4.74 million t	7.5%	2012
Maules Creek	New South Wales	Newcastle	9.34 million t	10%	2014

* Investment through a subsidiary, J-POWER AUSTRALIA PTY. LTD.

4. Other Business

Aiming to fully utilize the management resources and know-how at its disposal, the J-POWER Group operates multifaceted businesses, including environment-related businesses involving the production of solid fuel from sewage sludge for use as biomass fuel at coal-fired thermal power plants. In addition, the Company is active in innovative power businesses, such as waste power generation and cogeneration systems, and provides technical consulting services in Japan.

Social Issues

- Global warming

Value That the J-POWER Group Provides

- Contributes to reducing CO_2 emissions by utilizing such environmental recycling technologies as biomass fuel production, waste-fueled power generation and cogeneration systems that employ sewage sludge and unused forestry products

Main Projects under Other Business (As of June 30, 2019)

Project Name	Location	Business	Ownership	Year Operation Commenced
Kanamachi Filtration Plant PFI[1] Business	Tokyo metropolitan area	Cogeneration at Kanamachi Filtration Plant of Tokyo metropolitan government's bureau (Gas turbine generator, capacity: 12.28 MW)	20%	2000
Narumi Plant PFI[1] Business	Aichi Prefecture	Maintenance and operation at Narumi Plant in Nagoya (General waste processing capacity: 530 t/day)	11%	2009
Miyazaki Wood Pellet Project	Miyazaki Prefecture	Demonstration business of an integrated system from manufacturing wood pellets from unused forest offcut, including construction of manufacturing facilities, up to the use of pellets for mixed combustion in J-POWER's coal-fired thermal power plants (Pellet production capacity: 25,000 t/year)	98.3%	2011
Hiroshima City Seibu Water Reclamation Center/Sewage Sludge Fuel Project	Hiroshima Prefecture	Integrated DBO-type[2] sewage sludge-based biofuels recycling project, from the construction of biofuel manufacturing facilities to mixed combustion in J-POWER's coal-fired thermal power plants (Sludge processing capacity: 100 t/day)	33.8%	2012
Kumamoto Sewage Sludge Solid Fuel Project	Kumamoto Prefecture	Integrated DBO-type[2] sewage sludge-based biofuels recycling project, from the construction of biofuel manufacturing facilities to mixed combustion in J-POWER's coal-fired thermal power plants and others (Sludge processing capacity: 50 t/day)	44%	2013
Osaka City Hirano Sewage Treatment Plant/ Sludge Solid Fuel Project	Osaka Prefecture	Integrated PFI-type1 sewage sludge-based biofuels recycling project, from the construction of biofuel manufacturing facilities to mixed combustion in J-POWER's coal-fired thermal power plants and others (Sludge processing capacity: 150 t/day)	60%	2014
Omuta Waste-Fueled Power Plant	Fukuoka Prefecture	Recycling power generation using solid fuel (RDF: Refuse derived fuel) made by compressing and forming general waste (Generating capacity: 20.6 MW, RDF processing capacity: 315 t/day)	45.2%	2002
Katsuragawa Right Bank Regional Sewerage/ Rakusai Sewage Treatment Plant/Sewage Sludge Solid Fuel Project	Kyoto Prefecture	Integrated DBO-type[2] sewage sludge-based biofuels recycling project, from the construction of biofuel manufacturing facilities to mixed combustion in J-POWER's coal-fired thermal power plants and others (Sludge processing capacity: 50 t/day)	49%	2017
Mikasagawa-Nakagawa Regional Sewerage/ Mikasagawa Sewage Treatment Plant/Sewage Sludge Solid Fuel Project	Fukuoka Prefecture	Integrated DBO-type[2] sewage sludge-based biofuels recycling project, from the construction of biofuel manufacturing facilities to mixed combustion in J-POWER's coal-fired thermal power plants and others (Sludge processing capacity: 100 t/day)	44%	2019

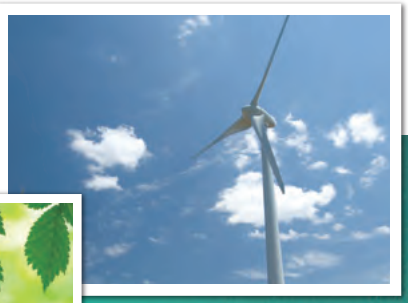
1. PFI (Private Finance Initiative): The method of conducting public-sector projects from construction through the operating stages by drawing on private-sector funding, management know-how, technology, and other resources
2. DBO (Design, Build, Operate): A system whereby the public sector finances projects and then commissions the private sector to undertake their design, building, and operation

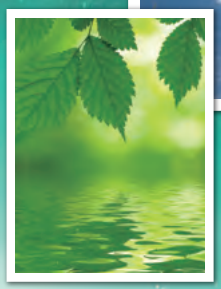
2018 Initiatives

In July 2018, J-POWER and Sumitomo Forestry Co., Ltd. jointly established a wood pellet manufacturing and sales company. The new company will use domestic unused wood and other materials as fuel for power generation and is advancing deliberations with regard to creating the largest wood pellet supply system in Japan, aiming for commercialization in 2021.

Name	Ownership	Business Activities
SJ Wood Pellet Co., Ltd.	Sumitomo Forestry Co., Ltd.: 51% J-POWER: 49%	Manufacture and sale of wood pellets using domestic unused timber from forests, etc.








Environment

Social

Governance

Environment

Social

Governance

Based on our Corporate Philosophy—"We will meet people's needs for energy without fail, and play our part for the sustainable development of Japan and the rest of the world"—the J-POWER Group engages in business conduct aimed at harmonizing energy supply and the environment.

Specifically, under our Corporate Conduct Rules and the J-POWER Group Environmental Management Vision, we regard contribution to the reduction of CO_2 emissions on a global scale and the preservation of local environments as important issues.

The J-POWER Group is implementing a medium-term management plan for the period leading up to 2025. Initiatives going forward under this plan include the expansion of renewable energy and striving toward carbon reduction and decarbonization in coal use as well as the promotion of the Ohma Nuclear Power Plant Project with safety as a major prerequisite.

In line with these policies, the J-POWER Group is promoting specific initiatives that address global environmental issues, including those concerning climate change, as well as initiatives directed at coexistence with the local environment.

J-POWER Group Environmental Management Vision

The J-POWER Group has established the J-POWER Group Environmental Management Vision, comprising the J-POWER Group Environmental Management Vision Basic Policy and Action Programs. The Action Programs are made up of Corporate Targets and Segment Targets as well as the J-POWER Group Environmental Action Guidelines formulated each year.

These are deliberated on at the Sustainability Promotion Board (and deliberated on by the Executive Committee* as required) and decided on by the President.

* Executive Committee: Please refer to page 58.

J-POWER Group Environmental Management Vision

J-POWER Group Environmental Management Vision Basic Policy

Action Programs

Corporate Targets

Targets addressed by the entire Group that lay out medium-term issues to be addressed, targets, and means

Segment Targets

Targets established and addressed by each relevant department and subsidiary

J-POWER Group Environmental Action Guidelines

Issues to be addressed in the fiscal year

Environmental Management Promotion Structures

The Executive Vice President in charge of sustainability serves as the person responsible for environmental management promotion. In addition to establishing the Sustainability Promotion Board, we have established the J-POWER Group Sustainability Promotion Conference to promote environmental management at the group-wide level.

J-POWER Group Environmental Management Vision Basic Policy (Revised on May 15, 2019)

The J-POWER Group adheres to the following Basic Policy.

Basic Stance

As an energy supplier, we will contribute to the sustainable development of Japan and the rest of the world by harmonizing our operations with the environment and ensuring the constant supply of energy essential to human life and economic activity.

Addressing Global Environmental Issues

Directing our most intensive efforts toward ensuring a stable energy supply, we will also steadily advance initiatives toward carbon reduction and decarbonization both domestically and internationally and will contribute to the reduction of CO_2 emissions on a global scale.

To that end, we will work from medium- and long-term perspectives with technologies as our central focus to realize a stable energy supply and reduction in CO_2 emissions domestically and internationally through measures including carbon reduction and decarbonization in coal-fired thermal power generation, research and development of next-generation carbon reduction and decarbonization technologies, and expanding CO_2-free power generation facilities. Our ultimate aim is the achievement of zero emissions through such measures as CO_2 capture and storage.

Addressing Local Environmental Issues

We will seek to operate in harmony with local environments by adopting measures to reduce the environmental impact of our operations while working to save, recycle, and reuse resources in order to limit waste.

Ensuring Transparency and Reliability

We will ensure that our business activities comply with all applicable laws and regulations, disclose a wide range of environmental information, and enhance communication with stakeholders.

Corporate Targets

The Action Programs for the J-POWER Group Environmental Management Vision set Corporate Targets, which are medium-term targets to be addressed by the Group as a whole.

Our Corporate Targets for fiscal 2019 are shown below.

Item		Target
Addressing Global Environmental Issues	Reducing CO_2 emissions from power generation and promoting technological development	Steadily implement the following measures aimed at realizing a low-carbon society as well as contribute to the stable supply of energy and reduction of CO_2 emissions in Japan and around the world by achieving the targets of the Electric Power Council for a Low Carbon Society's Action Plan for Achieving a Low-Carbon Society. (1) **Expansion of renewable energy** • Advance the new installation, upgrading, and equipment replacement of hydroelectric power plants in order to expand the use of hydroelectric power. • Work to significantly expand wind power facilities, including offshore wind power generation. • Work to develop new geothermal power projects in Japan. (2) **Strive toward carbon reduction and decarbonization in coal use** • Advance the development of high-efficiency integrated coal gasification combined cycle (IGCC) technology with the aim of bringing it to practical use. Advance research and development of CO_2 capture, utilization and storage (CCUS) technology. • Work to replace aging coal-fired thermal power plants with the world's leading high-efficiency coal-fired thermal power plants. • Promote the mixed combustion of biomass fuels in coal-fired thermal power plants (effective exploitation of untapped resources). • Contribute to the reduction of global CO_2 emissions and adoption of advanced technologies by expanding the coal-fired thermal power generation business using J-POWER's advanced, high-efficiency power generation technologies, especially in Asia. (3) **Promotion of the Ohma Nuclear Power Plant Project, with safety as a major prerequisite** • Advance construction of the Ohma Nuclear Power Plant, giving highest priority to safety and working to ensure the trust of the local community.
	Maintaining and improving thermal efficiency for thermal power (higher heating value (HHV) basis)	Maintain current level [about 40%]
	Reduction of sulfur hexafluoride (SF_6) emissions; gas recovery rate during inspection and retirement of equipment	Inspection: at least 97% Retirement: at least 99%
Addressing Local Environmental Issues	Reducing sulfur oxide (SOx) emissions per unit of electric power generated by thermal power	Maintain current level [about 0.2 g/kWh]
	Reducing nitrogen oxide (NOx) emissions per unit of electric power generated by thermal power	Maintain current level [about 0.5 g/kWh]
	Maintaining and increasing the recycling rate for industrial waste	Maintain current level [about 97%]
	Preservation of aquatic environments	Consider protection of river and ocean environments in business activities
	Preservation of biodiversity	Consider the protection of biodiversity in business activities
Ensuring Transparency and Reliability	Improvement of environment management level	Continual improvement of EMS

The ★ marks denote data that are the subject of third-party assurance. (Please refer to page 48.)

Actual performance versus the fiscal 2018 Corporate Targets is shown below. In fiscal 2018, all Corporate Targets were achieved.

Item		Target	
Addressing Global Environmental Issues	Reducing CO_2 emissions from power generation and promoting technological development	Steadily implement the following measures aimed at realizing a low-carbon society as well as contribute to the stable supply of energy and reduction of CO_2 emissions in Japan and around the world by achieving the targets of the Electric Power Council for a Low Carbon Society's Action Plan for Achieving a Low-Carbon Society.	
		1. Expansion of renewable energy	
		• Advance the new installation, upgrading, and equipment replacement of hydroelectric power plants in order to expand the use of hydroelectric power.	
		• Work to significantly expand wind power facilities, including offshore wind power generation.	
		• Work to develop new geothermal power projects in Japan.	
		2. Strive toward carbon reduction and decarbonization in coal use	
		• Advance the development of high-efficiency integrated coal gasification combined cycle (IGCC) technology with the aim of bringing it to practical use. Advance research and development of CO_2 capture, utilization and storage (CCUS) technology.	
		• Work to replace aging coal-fired thermal power plants with the world's leading high-efficiency coal-fired thermal power plants.	
		• Promote the mixed combustion of biomass fuels in coal-fired thermal power plants (effective exploitation of untapped resources).	
		• Contribute to the reduction of global CO_2 emissions and the adoption of advanced technologies by expanding the coal-fired thermal power generation business using J-POWER's advanced, high-efficiency power generation technologies, especially in Asia.	
		3. Promotion of the Ohma Nuclear Power Plant Project, with safety as a major prerequisite	
		• Advance construction of the Ohma Nuclear Power Plant, giving highest priority to safety and working to ensure the trust of the local community.	

Item		Target	Fiscal 2017 Performance	
Addressing Global Environmental Issues	Maintaining and improving thermal efficiency for thermal power (higher heating value (HHV) basis)	Maintain current level [about 40%]	40.4% (Reference: LHV* = 41.5%)	
	Reduction of sulfur hexafluoride (SF_6) emissions; gas recovery rate during inspection and retirement of equipment	Inspection: at least 97% Retirement: at least 99%	Inspection: 99.4% Retirement: 99.2%	
Addressing Local Environmental Issues	Reducing sulfur oxide (SOx) emissions per unit of electric power generated by thermal power	Maintain current level [about 0.2 g/kWh]	0.19 g/kWh	
	Reducing nitrogen oxide (NOx) emissions per unit of electric power generated by thermal power	Maintain current level [about 0.5 g/kWh]	0.49 g/kWh	
	Maintaining and increasing the recycling rate for industrial waste	Maintain current level [about 97%]	98.9%	
	Preservation of aquatic environments	Consider the protection of river and ocean environments in business activities	Practiced consideration for the protection of river and ocean environments	
	Preservation of biodiversity	Consider the protection of biodiversity in business activities	Practiced consideration for biodiversity	
Ensuring Transparency and Reliability	Improvement of environment management level	Continual improvement of EMS	Consistently implemented the PDCA cycle	

* LHV (lower heating value) is estimated from actual HHV (higher heating value) using conversion coefficients supplied in the Agency of Natural Resources and Energy's *Comprehensive Energy Statistics* (Fiscal 2004 edition)

	Main Fiscal 2018 Initiatives
	With regard to the expansion of the use of hydroelectric power, we started operations of the Unit No. 1 at the Akiba No. 1 Hydroelectric Power Plant after a comprehensive renewal of its major facilities that increased its capacity. We began construction on the Shinkatsurazawa Hydroelectric Power Plant Project and the Ashoro Hydroelectric Power Plant Repowering Project.
	In onshore wind power, we advanced construction of the Setana-Ohsato Wind Farm, Kuzumaki No. 2 Wind Farm, and Nikaho No. 2 Wind Farm, as well as preparation for construction of the Kaminokuni No. 2 Wind Farm. In offshore wind power, we are advancing business studies related to the Kitakyushu Hibikinada Offshore Wind Farm (tentative name). In the overseas wind power business, in August 2018, we acquired a stake in the Triton Knoll Offshore Wind Power Project in U.K.
	Looking at the development of new geothermal power projects in Japan, construction work on the Wasabizawa Geothermal Power Plant progressed as planned toward its May 2019 start of operation. We also advanced the commercialization of the Appi Geothermal Power Plant. Furthermore, having shut down the existing facilities of the Onikobe Geothermal Power Plant in April 2017, we advanced preparations to begin the construction of new facilities in April 2019.
	At the Osaki CoolGen Project, we completed demonstration tests of oxygen-blown IGCC (Phase 1) in February 2019, achieving all our test targets, including those for efficiency and load change rate. We are implementing ongoing efforts toward oxygen-blown IGCC with CO_2 separation and capture (Phase 2).
	We made progress with construction work at the Takehara Thermal Power Plant Replacement Project, as planned.
	At the Matsuura Thermal Power Plant, Takehara Thermal Power Plant, and Takasago Thermal Power Plant, we implemented mixed combustion using domestically-sourced biomass fuels (such as wood pellets and dried sewage sludge). To make effective use of unused wood and other materials from wooded areas in Japan, we jointly established SJ Wood Pellet Co., Ltd., which will manufacture and sell wood pellets, with another company.
	In Indonesia, we advanced construction work on the Central Java Project, as planned.
	For the Ohma Nuclear Power Plant Project, we carried out studies for safety enhancement measures and responded to the review of compliance with the new safety standards. We also implemented initiatives to gain the understanding and trust of local residents.

	Fiscal 2018 Performance	Fiscal 2018 Performance Evaluation
	40.6% ★ (Reference: LHV* = 41.6%)	The J-POWER Group met its target for total thermal efficiency for thermal power thanks to efforts at existing thermal power plants to maintain high-efficiency operations and to adopt high-efficiency technologies when renovating facilities.
	Inspection: 99.1% ★ Retirement: 99.3%	The target was met, with a recovery rate of 99.1% during inspections and 99.3% at retirement, thanks to efforts to curb emissions during equipment inspection through sound recovery and reuse.
	0.21 g/kWh ★	As a result of efforts including fuel management and the appropriate operation of flue gas desulfurization systems, we curbed our SOx emissions and achieved our target for emissions per unit of electric power generated.
	0.51 g/kWh ★	As a result of efforts including fuel management, combustion management and the appropriate operation of flue gas denitrification systems, we curbed our NOx emissions and achieved our target for emissions per unit of electric power generated.
	98.8% ★	We achieved our targets through efforts to promote the recycling of coal ash and to reduce industrial waste generated by the maintenance and operation of power plants.
	Practiced consideration for the protection of river and ocean environments	At operating power generation facilities that are involved with rivers, we implemented measures for the protection of the river environment appropriate to the conditions at each location. These included the implementation of sedimentation disposal measures and measures to mitigate the long-term persistence of turbidity. At operating power generation facilities that adjoin the ocean, we implemented precise control over effluent in compliance with environmental protection agreements and other such arrangements.
	Practiced consideration for biodiversity	We showed consideration for the protection of ecosystems and the diversity of species in conducting our business activities and worked to protect rare animal and plant species and their habitats.
	Consistently implemented the PDCA cycle	We implemented the PDCA cycle consistently and worked to raise the level of environmental management.

Fiscal 2019 J-POWER Group Environmental Action Guidelines

1 Addressing Global Environmental Issues

Expansion of Renewable Energy

- Maintain stable operations at existing hydroelectric, geothermal, wind, and biomass power stations
  - Maintain stable operations at existing hydroelectric, geothermal, wind, and biomass power stations
  - Improve efficiency through the replacement of existing hydroelectric power facilities
- Advance the development of new hydroelectric, geothermal, and wind power projects
  - Advance the development of new hydroelectric, geothermal, and wind power projects; particularly in the case of wind power, in addition to proceeding with development aimed at significantly expanding power generation capacity, advance efforts to realize offshore wind power projects
  - Advance the development of renewable energy and support thereof in developing countries

Strive toward Carbon Reduction and Decarbonization in Coal Use

- Proceed with large-scale demonstration tests of oxygen-blown integrated coal gasification combined cycle (IGCC) generation
  - Proceed with the Osaki CoolGen Project to develop high-efficiency IGCC generation technologies
- Proceed with development of CO_2 capture, utilization and storage (CCUS) technologies
  - Steadily proceed with Phase 2 of the Osaki CoolGen Project, making use of the results of pre-combustion CO_2 capture technology developed in the EAGLE Project
  - Advance basic research aimed at evaluating the technical risks and economic efficiency of CO_2 transportation and storage
  - Advance brown coal hydrogen pilot testing project in Australia
- Maintain high-efficiency operations at existing thermal power stations
- Promote biomass fuel mixed combustion at existing thermal power stations
- Move forward with a replacement project for an existing thermal power station
  - Replace the Takehara Thermal Power Station Units No. 1 and 2 with the latest USC plants to greatly improve efficiency
- Transfer high-efficiency coal-fired thermal power generation technologies overseas and promote their diffusion
  - Contribute to the reduction of global CO_2 emissions and adoption of advanced technologies by expanding the high-efficiency coal-fired thermal power generation business using J-POWER's advanced, high-efficiency power generation technologies, especially in Asia

Promotion of the Ohma Nuclear Power Plant Project, with Safety as a Major Prerequisite

- Respond appropriately to the review of compliance with new safety standards conducted by the Nuclear Regulation Authority
- Based on serious consideration of the accident at Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Station, implement voluntary initiatives to further enhance safety and advance the construction of a nuclear power plant that will be trusted by the local community

Other

- Promote energy saving
  - Promote the reduction of the internal consumption rate at power stations
  - Take the initiative in energy conservation in offices throughout the Group
    - – Promote energy conservation measures in offices, giving consideration to the criteria for judgment stipulated for businesses by the Energy Conservation Act
    - – Work to conserve energy at our Headquarters to ensure compliance with the Tokyo Metropolitan Ordinance on Environmental Protection
  - Reduce the environmental burden by promoting such initiatives as the improvement of efficiency when transporting raw materials, etc.
  - Reduce the environmental burden through measures including the use of public transportation, improvement of company vehicles' operational efficiency, and promotion of eco driving
  - Promote energy and resource-conserving measures in employees' households, such as the use of the Household Eco-Account Book
  - Support measures to promote the spread of energy conservation
- Utilization and promotion of the offset credit mechanism
- Reduce emissions of GHGs other than CO_2
  - Curtail emissions of greenhouse gases other than CO_2, such as SF_6 (sulfur hexafluoride), CFCs (chlorofluorocarbons), HCFCs (hydrochlorofluorocarbons), HFCs (hydrofluorocarbons), and N_2O (nitrous oxide)

2 Addressing Local Environmental Issues

Reduction of Emissions of Environmentally Harmful Substances

- Continue to reduce emissions
  - Properly manage combustion conditions and environmental equipment in order to reduce emissions of SOx, NOx, soot, dust, etc.
  - Properly manage wastewater treatment facilities to reduce the discharge of water pollutants
  - Properly manage facilities to reduce noise, vibration, and odors
  - Properly manage facilities to prevent the pollution of soil and groundwater
- Strengthen measures to prevent oil spills from equipment, etc., and be prepared so that emergencies can be dealt with in an appropriate and timely manner
- Design and introduce highly efficient environmental equipment when newly installing or renovating facilities

Promotion of the 3Rs (Reduce, Reuse, and Recycle waste) and Proper Disposal of Waste

- Make efforts toward the reuse and recycling of recyclable resources and achievement of zero waste emissions
  - Promote the reduction of waste as well as the reuse and recycling of materials and equipment during the new installation, upgrading, and demolition of facilities
  - Work to reduce consumption of water, chemicals, lubricating oil, etc.
  - Work to curb volume of office waste (copy paper, etc.) and promote reuse
  - Rigorously collect and separate paper, bottles, cans, plastic, and other waste, and promote reuse and recycling
- Maintain and continue green purchasing efforts in line with the J-POWER Group Green Purchasing Guidelines
  - Maintain and continue the green purchasing of office goods
  - Maintain and continue the use of low-pollution vehicles, etc.
- Properly implement maintenance, management, and closing procedures for final disposal sites
- Properly dispose of waste
  - Dispose of waste properly and completely in accordance with the Waste Disposal and Public Cleansing Act

Management of Chemical Substances

- Fully comply with the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (commonly known as the Pollutant Release and Transfer Register, or PRTR, Act)
  - Survey and manage the amounts of chemical substances subject to the PRTR Act that are emitted and transferred, notify the appropriate authorities, and publicly disclose this information
- Take appropriate measures to deal with dioxins
  - Appropriately manage waste incinerators, and survey and report on exhaust gases and ash in accordance with the Act on Special Measures against Dioxins
  - Observe the stipulations of the Waste Disposal and Public Cleansing Act and the Act on Special Measures against Dioxins when waste incinerators are scrapped
- Manage and treat PCB waste and products containing PCBs
  - Appropriately store and manage PCB waste and products containing PCBs based on the stipulations of the Waste Disposal and Public Cleansing Act, the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes, the Electricity Business Act, and the Fire Service Act
  - Steadily treat PCB waste and products containing PCBs in accordance with the J-POWER Group's Basic Policy for the Treatment of PCBs
- Strive to reduce volumes of toxic chemicals handled
- Respond appropriately to asbestos-related issues
  - Adopt appropriate measures to manage asbestos, including the prevention of dispersion, while systematically removing asbestos and replacing it with alternative substances based on the J-POWER Group's Basic Policy concerning Asbestos

Measures to Protect the Natural Environment

- Take the natural environment into account at the various stages of business
  - Recognizing that the blessings of the natural environment support rich and secure living, conduct surveys, estimates, and assessments as necessary of the impact of business activities on the natural environment, and work to protect the natural environment at each stage of the business process, including the planning, design, construction, and operation of facilities
- Consideration for aquatic environments
  - In operating power generation facilities that are involved with rivers, steadily promote measures for the protection of the river environment appropriate to conditions at each location, including the implementation of sedimentation control measures and measures to mitigate the long-term persistence of turbidity
  - In operating power generation facilities that adjoin the ocean, implement precise control over effluent in compliance with environmental protection agreements and other such arrangements
- Consideration for biodiversity
  - Show consideration for the protection of ecosystems and the diversity of species in conducting our business activities and strive to protect rare animal and plant species and their habitats
- Implement forest protection initiatives
  - Institute appropriate protections for company-owned forests based on the J-POWER Group Forest Protection Guidelines
  - Promote the use of unexploited offcuts in forests

Environmental Conservation Initiatives in Overseas Projects

- Promote the overseas transfer of environmental protection technologies
  - Promote the transfer of environmental protection technologies for thermal and hydroelectric power generation
- Incorporate environment-conscious initiatives when formulating development plans and considering investment in projects, and ensure that such initiatives are carried out

Implementation of Accurate Environmental Impact Assessments

- Accurately conduct surveys, estimates, and assessments of the environmental impact of business activities in accordance with the applicable laws and regulations, reflect the results in the details of business activities, and give due consideration to environmental protection

3 Ensuring Transparency and Reliability

1. Continual Improvement of Environmental Management (Greater Reliability)

Improvement of Environmental Management Level

- Continue to improve the operation of the environmental management system (EMS) at each J-POWER Group company
  - Assess the actual status of environmental burden and set targets and formulate plans for the protection of the environment
  - Systematically conduct internal environmental audits and periodically evaluate and improve details of environmental activities in order to meet targets
  - Take measures to enhance check functions with the aim of maintaining and improving internal environmental audits
  - Make improvements through activities concerning ISO 14001 at certified business sites
- Raise employee awareness of environmental issues
  - Systematically conduct education and training programs regarding environmental laws and regulations applicable to business activities
  - Promote environmental education using e-learning, etc.
- Request that business partners, including contractors, cooperate in environmentally friendly business operations
- Strengthen risk management
  - Work to prevent environmentally harmful incidents and ensure essential communication and appropriate responses in an emergency

Full Compliance with Laws, Regulations, Agreements, and Other Rules

- Identify applicable laws, regulations, agreements, and other rules, and ensure that they are recognized and complied with in business operations
  - Accurately identify laws and regulations, agreements, etc., applicable to business activities, and work to ensure appropriate responses, their widespread recognition, and application, while verifying compliance
- Fully comply with environment-related laws, regulations, agreements, and other rules
  - Make precise improvements to equipment and operations in order to prevent pollution of the surrounding environment
  - Conduct risk diagnoses in relation to waste and education programs for employees engaged in waste disposal in order to ensure the appropriate disposal of waste. In addition, promote the application of the J-POWER Group Guidelines for Deciding Industrial Waste Disposal Contractors and the expansion of use of electronic manifests

2. Communication with Society (Greater Transparency)

Disclosure of Environmental Information

- Formulate environmental reports
  - In disclosing environmental information via the environmental report, we refer to such guidelines as the Environmental Reporting Guidelines of the Ministry of the Environment and carry out reporting in consideration of social demands
  - With regard to the content of the environmental report, work to increase reliability and transparency by such means as reviews by third parties

Increased Engagement in Environmental Communication

- Carry out environmental communication
  - Conduct publicity programs via websites, internal Group publications, etc.
  - Conduct publicity programs targeting visitors to offices, PR centers, etc.
  - Communicate with experts and other third parties
  - Receive external assessments, such as environmental ratings
  - Conduct environment-related social contribution activities, such as providing support for environmental education
- Carry out regional environmental protection activities
  - Independently implement regional environmental protection activities
  - Participate in cleanup events, beautification activities, tree planting events, and similar activities organized by cities, towns, villages, neighborhoods, etc.

The ★ marks denote data that are the subject of third-party assurance. (Please refer to page 48.)

The J-POWER Group Environmental Action Guidelines call for the reduction of emissions of environmentally harmful substances, such as SOx, NOx, soot, and dust; the conservation of resources; the reduction of waste; and the appropriate management of chemical substances. (For details, please refer to page 40.)

Furthermore, in the interests of conservation, we take the natural environment into account at various stages of our businesses, give consideration to aquatic environments and biodiversity, and implement forest protection initiatives. (For details, please refer to page 41.)

Environmentally Harmful Substances

The J-POWER Group undertakes environmental preservation initiatives using the latest technologies and knowledge to reduce the environmental burden caused by its domestic and overseas electric power businesses.

Environmental Preservation Measures at Coal-Fired Thermal Power Plants

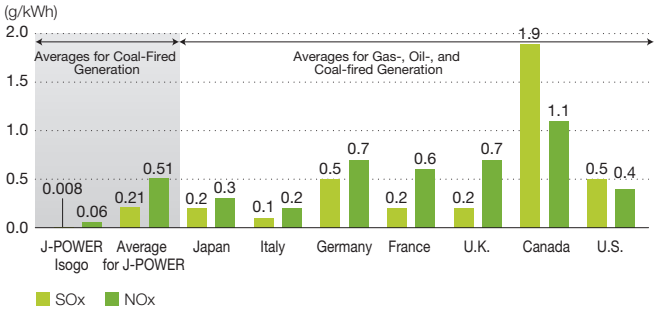
Measures to Prevent Air Pollution	The combustion of coal and other fuels can generate sulfur oxides (SOx), nitrogen oxides (NOx), and soot and dust. To reduce these emissions, we have improved our combustion methods and installed such flue gas treatment equipment as desulfurization and denitrification systems and electrostatic precipitators. Although the performance of equipment varies with its date of installation, at each facility, the newest technology available at the time of installation was used to ensure the high-efficiency removal of pollutants. This equipment operates automatically with the aid of measurement devices that continuously monitor the content of flue gas. In addition, human operators monitor the equipment 24 hours a day and are able to mount a swift response in the event of any abnormality, ensuring that our emissions do not exceed the benchmark figures specified by the Air Pollution Control Act and environmental protection agreements. Our fiscal 2018 performance regarding SOx, NOx, and soot and dust emissions is shown in the below table. The figures obtained are quite low by international standards.
Measures to Control Coal Dust, etc.	We implement various measures to prevent the dispersal of dust during the handling of coal and coal ash, including the use of closed conveyor belts and silos, as well as windshielding and spraying with water as dictated by topographical and weather conditions. At our coal ash landfill disposal sites, soil is spread over the surface, and leachate is treated with appropriate treatment systems.
Measures to Prevent Oil Leaks	We implement various measures to prevent the leakage and dispersion of fuel oil, lubricating oil, and other such substances within power station grounds, including keeping adsorbent materials constantly ready.
Measures to Prevent Soil Pollution	From fiscal 2004 through 2006, we conducted studies at all J-POWER Group domestic sites and determined that they were free of soil and groundwater contamination. We will continue working diligently to ensure that no soil pollution occurs.

Fiscal 2018 SOx, NOx, and Soot and Dust Emissions Performance ★

Substance	Emissions	Emissions Intensity[1]
SOx	12.4 thousand tons	0.21 g/kWh
NOx	29.4 thousand tons	0.51 g/kWh
Soot and dust[2]	0.9 thousand tons	0.02 g/kWh

1. Emissions intensity: Emissions per unit of electricity generated at thermal power stations.
2. Emissions of soot and dust are calculated on the basis of monthly measurements.

International Comparison of SOx and NOx Emissions Intensity for Thermal Generation



Notes: 1. Emissions: OECD StatExtracts
Power generated: IEA Energy Balances of OECD Countries, 2018 Edition
2. J-POWER and Isogo figures are fiscal 2018 results.

Waste

Reduction and Effective Utilization of Waste

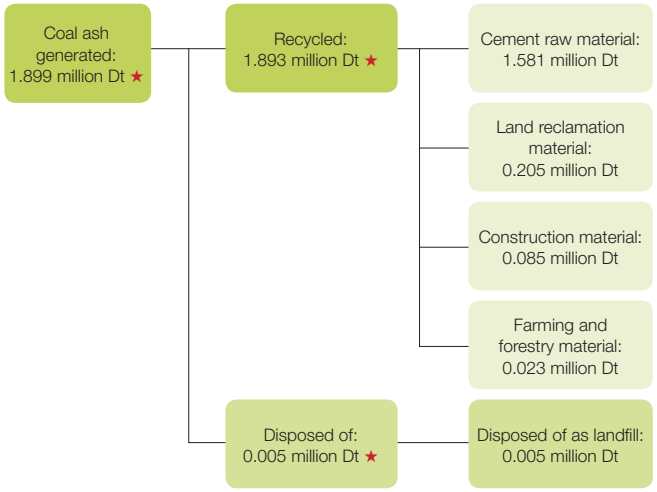
The J-POWER Group's target industrial waste recycling rate is 97%. The total amount of industrial waste we generated in fiscal 2018 was 2.30 million tons, and we achieved a recycling rate of 98.8%.

Making Effective Use of Coal Ash and Gypsum

The J-POWER Group's industrial waste consists of 96% coal ash and gypsum from thermal power stations.

We recycle 99.7% of coal ash produced in coal-fired thermal power generation, mainly as material for making cement and for land reclamation, as well as 100% of the gypsum and sulfuric acid produced as byproducts of emissions desulfurization.

Breakdown of Coal Ash Recycling (displacement tons)



Note: Sums of figures may not equal totals due to rounding.

Information on Maintenance and Management of Industrial Waste Final Disposal Sites

The J-POWER Group discloses on its website maintenance and management information for its industrial waste final disposal sites, including the maintenance and management plan, the results of groundwater and discharge water quality analyses, inspection results, and the volume of landfill waste.

▶ **http://www.jpower.co.jp/bs/karyoku/maintenance.html**
(Japanese Only)

Chemical Substances

Management of Chemical Substances

The J-POWER Group complies with applicable laws and regulations and properly uses, stores, manages, and treats chemical substances regulated by the PRTR Act, dioxins, PCB waste material (including equipment that contains trace amounts of PCB), materials that contain asbestos, and other substances that are used in power plants or are included in equipment or machinery.

PRTR Substance Release and Transfer Volumes (Fiscal 2018)

Substance	Use	Volume handled	Volume released	Volume transferred as waste
33: Asbestos	Insulation for equipment	15.1 t/y	—	15,090 kg/y
71: Ferric chloride	Wastewater treatment agents	5.9 t/y	—	5,920 kg/y
80: Xylene	Coating for machinery	5.8 t/y	2,204 kg/y	—
240: Styrene	Coating for machinery	3.0 t/y	3,007 kg/y	—
296: 1,2,4-Trimethylbenzene	House boiler fuel	4.2 t/y	85 kg/y	—
300: Toluene	Fuel for power generation (coal)	18.0 t/y	17,982 kg/y	—
405: Boron compounds	Manure additives	14.0 t/y	0.4 kg/y	—
406: PCB	Transformer insulation oil	5.4 t/y	—	5,392 kg/y

Note: Figures represent the total release and transfer volumes for all business sites handling 1 ton or more per year of a Class 1 designated chemical substance or 0.5 ton or more per year of a Specific Class 1 designated chemical substance.

Environmental Impact Assessment

Before building or expanding power plants, we conduct environmental impact assessments in accordance with applicable laws and regulations and implement adequate environmental preservation measures, taking the opinions of local residents into consideration. After a power plant becomes operational, we carry out ongoing monitoring in accordance with environmental protection agreements entered into with related local governments to ensure that our environmental preservation measures are effective. Currently, 11 projects are in the process of environmental impact assessment (as of July 31, 2019).

Preservation of Aquatic Environments

From fiscal 2013 onward, the preservation of aquatic environments has been designated as one of the Corporate Targets under the J-POWER Group Environmental Management Vision with the aim of reinforcing our environmental preservation initiatives regarding rivers and the seas.

We undertake environmental preservation measures based on the specific regional environment and characteristics of each business site. For example, near hydroelectric power stations, we take measures regarding water quality and the accumulation of silt in dam lakes and downstream area, while near thermal power stations we manage effluent emitted into nearby oceans in accordance with applicable laws and regulations.

Aquatic Environment Preservation Measures for Coal-Fired Thermal Power Plants

Measures to Prevent Water Pollution	Wastewater from such facilities as desulfurization units and offices is appropriately treated in integrated wastewater treatment systems using such processes as coagulation, precipitation, and filtration. Treated water is always monitored by automatic measuring equipment and analyzed periodically to ensure that it meets the standards set under the Water Pollution Prevention Act and environmental protection agreements.
Measures to Control Thermal Water Discharge	Seawater taken in to cool the steam used in power generation is released as thermal water discharge.* We control intake and discharge properly to minimize their impact on marine life in the vicinity and monitor the temperature of thermal water discharge on a 24-hour basis to ensure that it remains at or below the reference values established under environmental protection agreements
Cutting Back on Industrial Water Use	Industrial water is used in such equipment as boilers, cooling systems, and wet-type desulfurization systems. Part of this water is released into the atmosphere as steam. We work to recover and reuse as much of the wastewater not released into the atmosphere as possible in order to reduce our consumption of industrial water.

* Thermal water discharge: In thermal power generation, the steam that drives the turbine is sent through a condenser for cooling, returning to its liquid state for reuse in the boiler. In almost all power stations in Japan, seawater is used for cooling in the condensers. As the seawater cools the steam passing through the condenser, its temperature rises. It is then returned to the ocean through the discharge outlet, at which point it is referred to as thermal water discharge.

Preservation of Forests

J-POWER owns forests in areas near its hydroelectric power facilities throughout Japan. We appropriately maintain these valuable forests in accordance with the Forest Protection Guidelines (formulated in 2007).

The J-POWER Group is contributing to forest preservation as well as the reduction of CO_2 emissions through efforts to combust biomass fuel pellets made from forestry offcuts and other materials along with coal at coal-fired thermal power stations.

Preservation of Biodiversity

To reinforce our measures in light of the Basic Act on Biodiversity, from fiscal 2011 onward, the preservation of biodiversity has been one of the Corporate Targets under the J-POWER Group Environmental Management Vision.

During the planning and design stages of power generation facilities, we incorporate environmental preservation measures to mitigate the impact on habitats, breeding environments and ecological systems as determined through environmental impact assessments that look at the wildlife and ecological systems of the surrounding land and marine areas. We strive to preserve wildlife living in the vicinity of operating power plants, particularly rare species, and their habitats.

These measures are tailored to local environments and characteristics. For example, every effort is made to avoid outdoor work during the nesting season of the Japanese golden eagle and other endangered birds that live in the vicinity of the Okutadami Dam and Otori Dam. Another example is the restoration, maintenance, and management of marshes that became landfill areas when the Okutadami Dam was expanded.

The J-POWER Group conducts environmental preservation activities in accordance with its corporate philosophy. To this end, the introduction of environmental management systems (EMSs) at all J-POWER business sites was completed in 2002. The introduction of EMSs at J-POWER's consolidated subsidiaries and at subsequently established business sites is also proceeding, and we are continuing our efforts to enhance environmental preservation measures.

Improvement of Environmental Management

On the basis of the J-POWER Group Environmental Action Guidelines, reviewed annually by management, each executive unit draws up its own Environmental Action Plan. Each executive unit periodically reviews and evaluates its initiatives and revises the measures to be taken, following the PDCA cycle.

Raising Employee Awareness of Environmental Issues

The J-POWER Group puts efforts into environmental training for employees in order to deepen their awareness of environmental issues and instill a sense of personal responsibility.

Fiscal 2018 In-House Environmental Training

Media	Type	Training category	Results	Main content of efforts to ensure strict compliance with environmental laws and regulations
General training	General environmental management	Environmental management briefing	Approximately 800 participants	Information regarding group environmental management initiatives and amendments to environmental laws and regulations
		Lecture presentations on the environment	Approximately 100 participants	A talk titled "Biomimetics Saves the World" given by an invited guest lecturer
	E-learning	Basic knowledge regarding environmental issues	5,735 participants	Basic knowledge regarding environmental issues
Advanced and specialized training	EMS implementation	Internal environmental auditor training	60 participants	Knowledge necessary to conduct internal audits under EMSs
		Follow-up training for internal environmental auditors	34 participants	Knowledge necessary to oversee audit teams conducting internal audits under EMSs
	Environmental laws and regulations	Skill enhancement training for waste-processing operations	65 participants	Explanation of the key points of the Waste Disposal Act
		Waste-processing risk assessment	Four locations assessed	Checking provisions of agreements and manifests specified by law
		Training on environmental laws and regulations	297 participants	Explanation of environmental laws and regulations
	E-learning	EMS course	Continuously conducted	Basic knowledge of EMSs

Full Compliance with Laws, Regulations, Agreements, and Other Rules

In order to reduce the impact of business activities on the surrounding environment, we take appropriate steps to implement the laws, regulations, agreements, and other such rules applicable to our business activities and make them widely known. We are also engaged in ongoing efforts to improve our facilities and operations.

In order to dispose of waste properly, we take measures to maintain and improve the disposal capabilities of waste disposal operators, employing waste disposal consulting firms to directly confirm the status of waste disposal by local organizations.

Responding to Environmental Incidents

We make every effort to prevent environmental incidents before they occur. When problems arise that require emergency handling, however, we promptly take whatever measures are required to contain the damage and notify the local agencies concerned as well as the J-POWER Headquarters Emergency Response Team and related departments.

The J-POWER Headquarters Emergency Response Team promptly notifies top management and, in the interests of information disclosure, provides information for publication on the emergency to the media and other relevant parties. We also devise measures to prevent recurrences. Of the incidents impacting the environment that occurred in fiscal 2018, one incident was reported through the mass media.

Status of Environmental Incidents

Location	Situation and Countermeasures
Water Quality Standard Exceeded in Private Water Supply at Okutadami-Hassaki	On the afternoon of September 11, 2018, a test of the private water supply installed by J-POWER at Okutadami-Hassaki found one of the monitored levels to be in excess of the water quality standards established by Japan's Water Supply Act. The standard exceeded was that for arsenic and its compounds. Minute amounts of naturally occurring arsenic had previously been detected in this water supply. This time however, a level of 0.011 mg/l, 0.001 mg/l in excess of the standard of 0.01 mg/l, was detected. Although the amount of arsenic detected was extremely low, we suspended the supply of drinking water to the affected facilities and provided an alternative potable water supply. After purging the water remaining in the water supply facilities and confirming that the water quality had improved, we restored normal water supply on October 2, 2018. We sincerely apologize for the worry and difficulty caused to all affected and are advancing efforts to determine the cause of the elevated arsenic level and formulate countermeasures to prevent recurrences.

The ★ marks denote data that are the subject of third-party assurance. (Please refer to page 48.)

Business Activities and the Environment

The charts below detail the resource consumption and environmental load of the fiscal 2018 J-POWER Group operations within Japan.

Note: The scope of applicability includes J-POWER and its 22 consolidated domestic subsidiaries, which are engaged in the electric power business, electric power related business, and other business. The amounts attributed to consolidated subsidiaries are based on percentages corresponding to J-POWER's equity share. Note that equity method affiliates (one company in Japan) are included in the calculation of CO_2 emissions from thermal power stations.

INPUT

Thermal Power Generation

- **Fuel** ★

Coal (wet) ..... 20.83 million tons
Heavy oil ..... 29 thousand kl
Light oil ..... 22 thousand kl
Natural gas ..... 130.1 million Nm^3
Biomass ..... 24 thousand tons

- **Industrial-use water** ★ ..... 10.05 million m^3
- **Major chemicals (undiluted equivalents)**

Limestone ($CaCO_3$) ..... 239 thousand tons
Ammonia (NH_3) ..... 14 thousand tons

Hydroelectric Power Generation

- **Power for pumped storage** ..... 1.3 TWh

Internal Use at Business Sites and Offices

- **Electricity (purchased)** ★

Business sites ..... 87.48 GWh
Offices ..... 15.55 GWh

- **Fuel (gasoline equivalent)**

Business sites ..... 9,020 kl
Offices ..... 1,341 kl

- **Clean water**

Business sites ..... 75 thousand m^3
Offices ..... 177 thousand m^3

- **Copy paper (A4 equivalent)** ..... 54 million sheets

Notes: 1. Other than that discharged as wastewater, almost all industrial-use water used in thermal power stations is released into the atmosphere as steam.
2. River water used in hydroelectric power stations is not included in the input figures, as all such water is returned to the river after power generation.

Business Activities

Electric Power Generated ★ 69.6 TWh

Thermal

Hydroelectric

Wind

Auxiliary power for operation and transmission loss

Electric Power Sales ★ 64.7 TWh

Major Resources Recycled

Coal ash ★ ..... 1,893 thousand tons [99.7%]
Sludge (excluding gypsum) ..... 17 thousand tons [81.3%]
Gypsum (desulfurization byproduct) ..... 318 thousand tons [100.0%]
Sulfuric acid (desulfurization byproduct) ..... 23 thousand tons [100.0%]
Other industrial waste ..... 41 thousand tons [70.2%]
Wastepaper ..... 329 tons [92.3%]
Driftwood caught in dam reservoirs ..... 23 thousand m^3 [70.5%]

Note: Percentages indicate recycling rate.

Effective Utilization (at cement plants, etc.)

OUTPUT

Thermal Power Stations ★

- **Emissions into the atmosphere**

CO_2 ..... 46.73 million t-CO_2
SOx ..... 12 thousand tons
NOx ..... 29 thousand tons
Soot and dust ..... 1 thousand tons

- **Emissions into bodies of water**

Wastewater ..... 3.79 million m^3
Wastewater COD ..... 13 tons

CO_2 Emissions from Business-Site and Office Activities ★

- **Business sites** ..... 65 thousand t-CO_2
- **Offices** ..... 11 thousand t-CO_2

Waste ★

- **Industrial waste** ..... 27 thousand tons

(Of which, coal ash ..... 5 thousand tons)

- **Specially controlled industrial waste** ..... 0.6 thousand tons
- **Non-industrial waste**

Wastepaper ..... 27 tons
Driftwood caught in dam reservoirs ..... 2.0 thousand m^3

The ★ marks denote data that are the subject of third-party assurance. (Please refer to page 48.)

Environment-Related Data

The following data represent year-end values for each fiscal year. Unless specifically noted, includes data for Group companies.[1]

1. The scope of applicability includes J-POWER and its 22 consolidated domestic subsidiaries, which are engaged in the electric power business, electric power related business, and other business. The amounts attributed to consolidated subsidiaries are based on percentages corresponding to J-POWER's equity share. For information on the companies included, please refer to the list of Major Group Companies on page 102. (However, the figures under Usage of Specified CFCs and for SF_6 emissions and handled amount under Greenhouse Gas Emissions are calculated based on the total amounts from consolidated subsidiaries.)

Note: The sums of individual figures may not equal the corresponding totals due to rounding.

Fuel Consumption

	Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018★
Coal (dry coal 28 MJ/kg equivalent)	million t	18.61	18.10	18.83	17.73	18.87	18.09
Use intensity (coal-fired thermal power)	t/GWh	340	341	342	340	340	338
Natural gas	million m^3N	172	173	116	160	164	130
Heavy oil	million kl	0.06	0.04	0.05	0.04	0.04	0.03
Diesel	million kl	0.02	0.02	0.02	0.02	0.02	0.02
Biomass	million t	0.03	0.02	0.03	0.02	0.03	0.02

Note: Denominators for use intensity represent electric power sold by coal-fired thermal power stations

Greenhouse Gas Emissions[2]

		Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018★
CO_2 emissions (domestic and overseas power generation)[3]		million t-CO_2	56.33	55.77	59.11	55.24	57.02	53.53
CO_2 emission intensity		kg-CO_2/kWh	0.68	0.67	0.64	0.65	0.66	0.66
CO_2 emissions (domestic power generation)		million t-CO_2	47.84	46.49	48.20	45.52	48.42	46.73
CO_2 emission intensity		kg-CO_2/kWh	0.74	0.73	0.72	0.73	0.73	0.72
SF_6[4]	Emissions	t	0.0	0.0	0.1	0.1	0.0	0.0
	Handled	t	7.7	7.5	11.0	10.2	6.7	2.3
	Recovery rate	%	99	99	99	99	99	99
HFC emissions[5]		t	0.2	0.1	0.1	0.1	0.1	0.2
N_2O emissions		t	1,553	1,576	1,715	1,107	1,780	1,618

2. CO_2 emissions comprise emissions from fuel combustion for power generation. Emissions of other greenhouse gases (PFC, CH_4, and NF_3) are effectively zero. The calculation of CO_2 emissions from both operations in Japan and those overseas is performed in accordance with the Act on Promotion of Global Warming Countermeasures.
3. This covers J-POWER as well as consolidated subsidiaries and equity method affiliates, which are engaged in the electric power business and overseas business (6 domestic and 33 overseas companies). The amounts attributed to consolidated subsidiaries and equity method affiliates are based on the percentages of J-POWER's equity share. For information on the companies included, please refer to the list of Major Group Companies on page 102.
4. Annual values
5. Calculated using the same tabulation method as that employed for Usage of Specified CFCs.

Note: Denominators for emission intensity represent electric power sold.

J-POWER Group Total Thermal Efficiency for Thermal Power Generation (Gross Efficiency)

	Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018★
Total thermal efficiency (gross efficiency, HHV)	%	40.3	40.2	40.4	40.3	40.4	40.6

Usage of Specified CFCs

		Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Specified CFCs	Inventory	t	1.0	1.0	1.0	1.0	1.0	1.0
	Emissions	t	0.0	0.0	0.0	0.0	0.0	0.0
Halons	Inventory	t	4.6	4.6	4.7	4.7	4.5	4.8
	Emissions	t	0.0	0.0	0.0	0.0	0.0	0.0
Other CFCs	Inventory	t	10.8	10.4	6.2	5.8	5.0	4.7
	Emissions	t	0.1	0.1	0.1	0.0	0.0	0.0
HFCs (CFC alternatives)	Inventory	t	13.3	14.4	15.2	20.0	20.8	21.1
	Emissions	t	0.2	0.1	0.1	0.1	0.1	0.2★

SOx, NOx, and Soot and Dust Emissions

		Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018★
SOx	Emissions	thousand t	10.7	9.8	10.7	10.2	11.4	12.4
	Intensity (thermal)	g/kWh	0.18	0.17	0.18	0.18	0.19	0.21
NOx	Emissions	thousand t	31.1	29.1	29.8	27.8	29.6	29.4
	Intensity (thermal)	g/kWh	0.52	0.51	0.50	0.49	0.49	0.51
Soot and dust	Emissions	thousand t	0.8	0.8	0.8	1.0	0.9	0.9
	Intensity (thermal)	g/kWh	0.01	0.01	0.01	0.02	0.02	0.02

Notes: 1. Soot and dust emissions are calculated from monthly measurements.
2. Denominators for intensity represent the electricity generated in thermal power stations (excluding geothermal power stations).

Industrial Waste Recycling

	Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018★
Volume generated	million t	2.32	2.14	2.25	2.10	2.32	2.30
Volume recycled	million t	2.27	2.11	2.22	2.07	2.29	2.27
Recycle rate	%	98	99	99	99	99	99

Coal Ash and Gypsum Recycling

		Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018★
Coal ash	Volume generated	thousand t	1,928	1,773	1,852	1,719	1,939	1,899
	Volume recycled	thousand t	1,906	1,760	1,839	1,708	1,929	1,893
	Recycle rate	%	98.9	99.2	99.3	99.4	99.5	99.7
Gypsum	Volume generated	thousand t	322	304	318	310	329	318
	Recycle rate	%	100	100	100	100	100	100

Office Power Consumption

		Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Power consumed by offices (company total)		GWh	19.04	19.51	19.61	20.83	19.37	18.80
Head office[6]	Power consumption	GWh	6.94	6.39	6.41	6.37	6.25	6.15
	Lighting/power sockets	GWh	1.29	1.26	1.25	1.22	1.18	1.24

6. J-POWER head office building

Fuel Consumption in Offices (Gasoline Equivalent)

	Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Consumption	kl	1,293	1,252	1,198	1,230	1,324	1,341

Rate of Procurement of Recycled Copy Paper

		Unit	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Copy paper[7]	Purchased	million sheets	61.79	58.53	55.30	54.81	55.14	53.70
Recycled copy paper[7]	Purchased	million sheets	61.45	57.85	54.76	54.58	54.63	52.96
	Purchase rate	%	99	99	99	100	99	99

7. A4 paper-size equivalent

Third-Party Assurance Regarding Environment-Related Information

The environmental information and performance data (hereinafter "sustainability information") contained in the J-POWER Group Integrated Report 2019 have been reviewed by Ernst & Young ShinNihon LLC, from the point of view of accuracy and comprehensiveness for important sustainability information as determined by the Japanese Association of Assurance Organizations for Sustainability Information (J-SUS). As a result of this review, said sustainability information has received an Independent Assurance Report. The data that were calculated in accordance with the specified calculation standards* and are covered by this assurance are indicated by stars (★).

* The calculation standards are available on the J-POWER website.
http://www.jpower.co.jp/english/ir/ir51000.html

Translation

The following is an English translation of an independent assurance report prepared in Japanese and is for information and reference purposes only. In the event of a discrepancy between the Japanese and English versions, the Japanese version will prevail.

August 8, 2019

Building a better working world

Independent Assurance Report

TO:
Mr. Toshifumi Watanabe
President
Electric Power Development Co., Ltd.

Kenji Sawami
Engagement Partner
Ernst & Young ShinNihon LLC Tokyo

We, Ernst & Young ShinNihon LLC, have been commissioned by Electric Power Development Co., Ltd. (hereafter the "Company") and have carried out a limited assurance engagement on the Key Environmental Performance Indicators (hereafter the "Indicators") of the Company and its major subsidiaries for the year ended March 31, 2019 as included in J-POWER Group Integrated Report 2019 (hereafter the "Report"). The scope of our assurance procedures was limited to the Indicators marked with the symbol "★" in the Report.

1. **The Company's Responsibilities**
The Company is responsible for preparing the Indicators in accordance with the Company's own criteria, which it determined with consideration of Japanese environmental regulations as presented in the Investor Relations, IR Library, Integrated Reports, Calculation Standards of Environmental Information of the Company's website. Greenhouse gas (GHG) emissions are estimated using emissions factors, which are subject to scientific and estimation uncertainties, given instruments for measuring GHG emissions may vary in characteristics, in terms of functions and assumed parameters.

2. **Our Independence and Quality Control**
We have met the independence requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants in July 2018, which is based on the fundamental principles of integrity, objectiveness, professional competence and due care, confidentiality, and professional behavior.
In addition, we maintain a comprehensive quality control system, including documented policies and procedures for compliance with ethical rules, professional standards, and applicable laws and regulations in accordance with the International Standard on Quality Control 1 issued by the International Auditing and Assurance Standards Board in April 2009.

3. **Our responsibilities**
Our responsibility is to express a limited assurance conclusion on the Indicators included in the Report based on the procedures we have performed and the evidence we have obtained.
We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements: Assurance Engagements Other than Audits or Reviews of Historical Financial Information - ("ISAE 3000") (Revised), issued by the International Auditing and Assurance Standards Board in December 2013, Practical Guidelines for the Assurance of Sustainability Information, revised in December 2014 by the Japanese Association of Assurance Organizations for Sustainability Information and, with respect of GHG emissions, the International Standard on Assurance Engagements: Assurance Engagements on Greenhouse Gas Statements ("ISAE 3410"), issued by the International Auditing and Assurance Standards Board in December 2013. The procedures, which we have performed according to our professional judgment, include inquiries, document inspection, analytical procedures, reconciliation between source documents and Indicators in the Report and the following:
- Making inquiries regarding the Company's own criteria that it determined with consideration of Japanese environmental regulations, and evaluating the appropriateness thereof;
- Inspecting relevant documents with regard to the design of the Company's internal controls related to the Indicators, and inquiring of personnel responsible thereof at the headquarters and one power station visited;
- Performing analytical procedures concerning the Indicators at the headquarters and one power station visited; and
- Testing, on a sample basis, underlying source information and conducting relevant re-calculations at the headquarters and one power station visited.

The procedures performed in a limited assurance engagement are more limited in nature, timing and extent than a reasonable assurance engagement. As a result, the level of assurance obtained in a limited assurance engagement is lower than would have been obtained if we had performed a reasonable assurance engagement.

4. **Conclusion**
Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Indicators included in the Report have not been measured and reported in accordance with the Company's own criteria that it determined with consideration of Japanese environmental regulations.

Independent third-party assurance regarding the J-POWER Group Integrated Report 2019

The J-POWER Group considers each employee to be a valuable human resource that enables its sustainable corporate growth. We strive to provide safe and comfortable working environments. At the same time, we endeavor to create a corporate culture that respects the character and individuality of our employees and makes them feel it worthwhile to constantly take on new challenges.

The J-POWER Group positions recruitment and making effective use of and developing human resources as crucial measures for its sustainable growth. We are reinforcing the foundations for career development with a focus on the Career Development Program (CDP) and establishing workplace environments and systems that make advantageous use of diversity in order to improve individual skills and workforce productivity.

Recruiting and Making Effective Use of Human Resources

The J-POWER Group's Approach to Human Resource Recruitment

The J-POWER Group approach is realizing stable recruiting in the interest of sustainable growth, seeking human resources in a wide range of fields and age-groups, and providing employees with opportunities to take an active part. When recruiting and making use of human resources, we make sure that we comply with the labor regulations of Japan and other countries in which we conduct business. In addition, we are also conducting awareness raising through human rights training in accordance with J-POWER's Compliance Action Guidelines, which stipulate respect for individuality and human rights and prohibit discrimination. (Please refer to page 69.) We are engaged in creating systems and working environments that enable our diverse personnel to fully demonstrate their capabilities, without regard for gender, age, or other such distinctions.

Number of New Graduates Hired (J-POWER)

	FY 2017	FY 2018	FY 2019
Male	72	79	**79**
Female	9	12	**17**
Total	81	91	**96**

Status of Human Resource Retention (J-POWER)

Average length of continuous service	19.6 years (As of March 31, 2019)
Turnover rate for the three years after joining	9.7% (April 2018)

Note: Does not include temporary employees

Measures to Promote Diversity

As a measure to further make use of the skills of older workers, we have an employment extension system that allows those who have passed mandatory retirement age (60) to extend their employment and continue working until the end of the fiscal year in which they reach age of 65 should they so desire. Using this system in combination with the personnel registration system (available up to the end of the fiscal year in which they reach age of 70), which introduces job opportunities in the Group, we will harness the experience, skills, and motivation to work possessed by the Group's most senior personnel for the sustained growth of our business. As of the end of March 2019, 146 employees (of J-POWER) are working using the employment extension system.

Our employment rate of persons with disabilities was 2.14% as of June 1, 2019. We are enhancing working environments and promoting understanding among other employees through such initiatives as establishing a consultation desk where employees with disabilities can discuss employment assistance and working environments as well as making office buildings barrier-free. We will continue making efforts to raise our employment rate of persons with disabilities.

We will also take steps to improve our management training with a view to building a workplace where diverse human resources can take active part.

Protection of Employees' Rights

In accordance with the laws and regulations of each country in which we operate, the J-POWER Group protects the basic rights of its employees, including the prevention of child labor and forced labor, protection of the right to freedom of association, protection of the right of collective bargaining, and compliance with minimum wages. The Group also thoroughly prohibits discrimination in all its forms, including on the grounds of birth, nationality, race, creed, religion, gender, physical condition, and social status.

In addition, in order to protect the rights of employees and to maintain and improve their living standards, we obligate employees who are not in management positions to join labor unions and form collective agreements between our companies and their respective labor unions. In addition to consulting with the labor unions on important changes in working conditions, including salaries and bonuses, we hold consultations on management policy with labor unions once a year in order to reflect the opinions of employees in management policy.

Internships

J-POWER, JPHYTEC Co., Ltd., and JPec Co., Ltd. offer short-term summer internships to science students in graduate school, university, or technical college. The internships provide experience in certain operations at power stations and other facilities with the aim of helping the interns' studies and supporting them in making future career choices. In fiscal 2018, there were 91 interns from various areas of Japan who took up the challenge of practical training in the maintenance and operation of electric power facilities.

In addition, J-POWER conducts short-term summer and winter internships multiple times a year for students interested in employment in non-technical positions.

Human Resource Development

Human Resource Development Programs

Our aim in the J-POWER Group is to develop all our employees into independent, talented, professional human resources who contribute to the organization with knowledge in multiple specialized areas and a broad perspective. We have adopted the Career Development Program (CDP) as a measure to achieve that aim.

Overview of the CDP

The CDP comprises departmental visions and personnel requirements, job rotation, and career building support systems. By implementing human resource development measures from a number of angles, we aim to increase value for both the Company and employees.

Departmental Visions and Personnel Requirements

Each department establishes a departmental vision that reflects changes in its business environment and corporate strategy and lays out the kinds of human resources needed for the Company, based on the departmental vision, as personnel requirements. These personnel requirements are shared between the Company and employees. The Company uses the requirements as targets for its human resource development efforts and reflects them in its concrete personnel development mechanisms, while employees use them as guideposts for their career building and skill development efforts.

Job Rotation

J-POWER divides its employees' careers into three broad stages: the basic knowledge and skill acquisition stage, the expert stage, and the professional stage. Job rotation helps employees gain the abilities necessary for each stage.

Career Building Support Systems

To support employee's independent career building efforts, the Company systematically operates a range of support systems.

Self-Declaration System	Every year, employees make a self-declaration to the Company about their future career outlook, based in part on an examination of their execution of work duties and abilities. The Company's managers discuss the declarations with employees, offer advice as appropriate from a medium- to long-term human resource development perspective, and plan and implement employee rotations as needed.
Training System	The Company implements training systems in step with each employee's career stage, required skills, career path, and personal motivation. These include level-specific training[1] and department-specific training[2] as well as objective-specific training, self-improvement through correspondence or campus-based education, sending employees to study or work at universities or other institutions, including NGOs, in and outside Japan, and selective leadership training.

Human resource development through such training programs is aimed not only at ensuring our human resources acquire the basic knowledge and skills necessary for our business, but also at fostering next-generation leaders, promoting diversity, and empowering our veteran employees.

1. Expert training, human resource management practical training, etc.
2. The technical departments (civil engineering and architectural engineering; hydroelectric power, transmission and transformation, and telecommunications; thermal power; and nuclear power) each have their own training facilities in order to systematically develop engineers.

CDP Overview

Evaluation and Management System

We established an evaluation system in 2004 that is based on a goal management system. The system encourages employees to perform work autonomously, heighten their drive to achieve, and improve their faculties while working toward achieving their goals. We also set divisional goals to realize divisional strategies. Employees are encouraged to work together to achieve the divisional goals.

Developing Environments to Create Dynamic Workplaces

Toward the Realization of Work-Life Balance

The J-POWER Group is actively developing working environments and cultures that enable every employee to autonomously enhance their work and personal life and focus on highly creative work. We are taking measures to help employees improve their work-life balance, including enhancing and encouraging the use of childcare and nursing care support programs, and normalizing working hours.

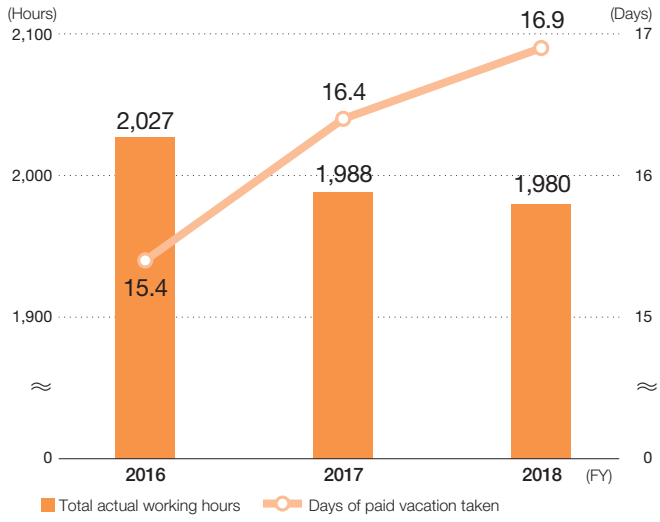
Improving Labor Productivity

As part of the full-scale implementation of work reforms at J-POWER, we have established an action program known as J-POWER Challenge 30, setting and working toward goals that include reducing the number of overtime hours by 30% and increasing paid vacation days taken by 30%, compared with fiscal 2016 levels, by the end of fiscal 2020. Measures to achieve these goals include the introduction of a system for using paid leave in hourly increments, the sequential introduction of RPA* in offices, and a policy of complete lights-out and a PC shutdown at Headquarters at 10 p.m. In addition, we are investing in equipment, such as replacing all PCs with lightweight, portable models and installing new groupware. Using these tools, we are further advancing work efficiency, including shifting to paperless operations for management meetings. Furthermore, we are preparing to introduce flextime and remote working systems in fiscal 2019. Aiming to become a company in which diversified human resources gather and can prove their merits according to their capabilities, we are advancing wide-ranging initiatives to improve labor productivity.

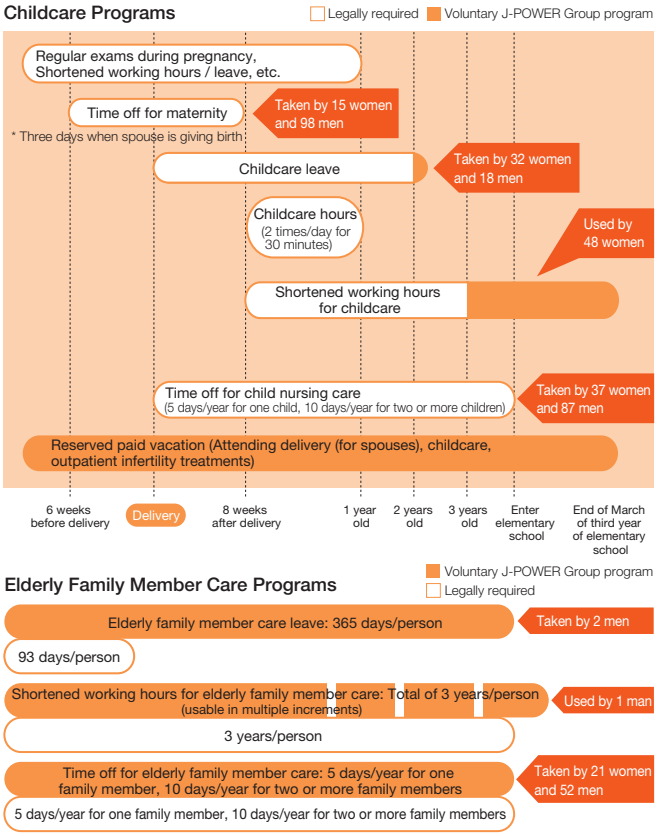
* Robotic process automation (RPA): Work process automation using software robots

	FY 2016 Result	FY 2018 Result	End of FY 2020 Target
Overtime hours	24.6 hrs/month	21.7 hrs/month	17 hrs/month
Days of paid vacation taken	15.4 days/year	16.9 days/year	20 days/year

Changes in Total Actual Working Hours and Paid Vacation Taken (J-POWER)



Overview of the Childcare and Nursing Care Support Programs and Results in Fiscal 2018 (J-POWER Group)



"Platinum Kurumin" Special Certification Mark

Certified by the Minister for Health, Labour and Welfare as a supportive company for childcare, J-POWER received a "Kurumin" certification. We also received the special "Platinum Kurumin" mark certification, which is awarded only to companies with measures that have met an even higher standard. We will continue making improvements for an even better work environment so that all employees will be able to harmonize their work and their personal life and exercise their abilities fully.

Consultation Desk

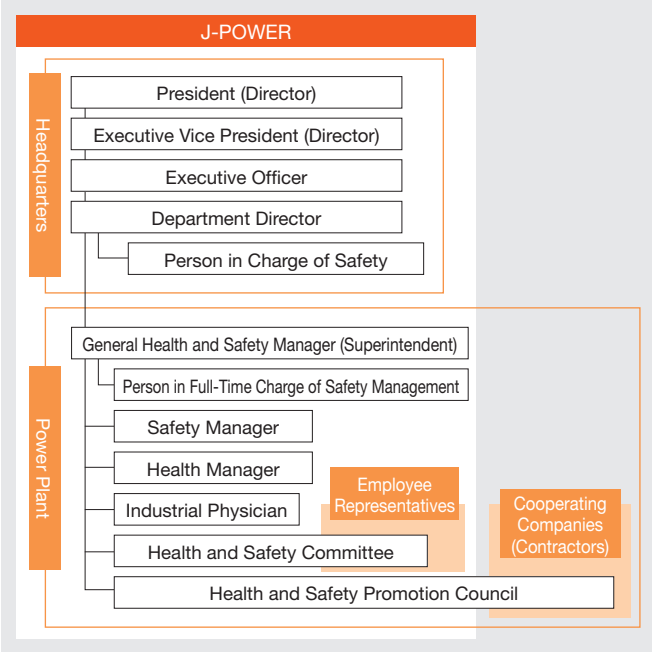
Aiming to create employee-friendly workplaces, we have established a consultation desk where employees can discuss working hours, the workplace environment, and harassment. The privacy of employees using this desk is assured. In order to prevent harassment, we have also developed Company regulations, manuals, and other such resources, and we are implementing education for increased awareness via level-specific training courses, posters, and other such means. We are also training managers in each section in how to respond should a harassment-related incident occur as part of efforts to maintain a framework to respond to incidents appropriately.

The J-POWER Group intends to create safe, healthy, and rewarding workplaces as the foundation of its business activities. J-POWER and other Group companies each have roles and responsibilities and collaborate on implementing health and safety management to prevent occupational accidents, including those of cooperating companies (contractors), and maintain and improve the health of employees.

Health and Safety Management System

Based on laws and regulations, the J-POWER Group has established health and safety management systems, which include employee representatives and cooperating companies, at Headquarters and local operating units, such as power plants.

Health and Safety Management System



Note: Since health and safety management systems differ depending on the work content and the number of employees, etc., of each operating unit, this diagram shows a typical system at a thermal power plant.

Measures Pursuant to the Group Operational Health and Safety Plan

The J-POWER Group has established a groupwide Group Operational Health and Safety Plan. Based on the plan, individual Group companies formulate their own operational health and safety plans and take measures to promote occupational health and safety in cooperation with the Group.

The roles, operations, and workplace environments of Group companies vary significantly. Accordingly, to efficiently and effectively advance initiatives across the Group, the Group Operational Health and Safety Plan designates only major targets for the entire Group; specific safety initiatives to achieve said targets are designated in each Group company's operational health and safety plan in line with their respective conditions and needs. At the Group level, we check, evaluate, and take steps to improve each company's plan and its implementation, aiming to ensure the steady implementation of said plans.

The results from the implementation of operational health and safety plans are compiled at the end of the fiscal year and reported to the Executive Committee* and the Board of Directors. The operational health and safety plans for the next fiscal year are drawn up on the basis of those results.

* Executive Committee: Please refer to page 58.

Fiscal 2019 Group Operational Health and Safety Plan		
Major Targets	Operational Safety	No serious disasters (all related staff at Group workplaces and cooperating companies)
	Operational Health	Preventing and raising awareness of lifestyle-related diseases and enhancing mental health care

Occupational Accident Prevention Initiatives

In recent years, many occupational accidents have occurred when contractors are engaged in construction and other work. It is therefore important to promote unified safety activities that include contractors to prevent such accidents. To this end, we have designated the priorities of increasing safety awareness and communication, reinforcing safety management, and implementing recurrence prevention and safety measures. Based on these, we continually work to prevent occupational accidents.

Furthermore, in light of occurrence of serious accidents and the plateau in the overall number of accidents in recent years, we hold the J-POWER Group Health and Safety Convention as part of efforts to cultivate and spread awareness of the utmost importance of safety and safe behavior.

When we place a work order for construction with a contractor, we take into consideration such factors as work methods and scheduling in order to ensure a healthy and safe work environment.

The number of occurrences and nature of occupational accidents as well as analyses of the circumstances are reported to the Executive Committee and Board of Directors on a quarterly basis.

Safety pledge at the Health and Safety Convention

Number of Occupational Accidents[1]

	FY 2016			FY 2017			FY 2018		
	J-POWER Group	Contractors	Total	J-POWER Group	Contractors	Total	J-POWER Group	Contractors	Total
Fatal Accident	0	0	**0**	0	0	**0**	0	1	**1**
Serious Injury	1	7	**8**	1	10	**11**	0	10	**10**
Minor Injury	4*	8	**12**	3	9	**12**	7	8	**15**

* Includes one accident involving members of the public

Accident Frequency[2] and Severity[3]

		FY 2016	FY 2017	FY 2018
Frequency	**J-POWER**	**0.97**	**1.14**	**1.30**
	All industries	1.63	1.66	1.83
Severity	**J-POWER**	**0.06**	**0.03**	**0.42**
	All industries	0.10	0.09	0.09

1. Number of Occupational Accidents: Accidents causing death or lost work days involving J-POWER employees or contractors (principal contractors and subcontractors) engaging in construction and other work ordered by J-POWER
2. Frequency: Number of casualties in occupational accidents per one million working hours. Covers accidents causing loss of one day or more of work. Does not include accidents of employees on loan.
3. Severity: Number of days of work lost per 1,000 working hours. Does not include accidents of employees on loan.

Health and Safety Training Programs

J-POWER Headquarters implements health and safety training for Group companies at J-POWER Headquarters and local operating units for the purpose of improving the health and safety of the entire J-POWER Group. In addition, local operating units implement legally mandated training for new hires and employees newly transferred in, special training for work involving electricity, and safety training suitable for their business operations such as training about relevant laws and regulations. These units also implement mental health-related training on line-of-command care and self-care. Management-level employees, such as superintendents, and dedicated safety staff are required to participate in seminars and courses held by external organizations in order to improve their health and safety knowledge and management skills and to raise safety awareness. In fiscal 2018, 1,211 people participated in such training programs held at J-POWER Headquarters.

Health and Safety Management with Regard to Radiation

J-POWER is currently proceeding with construction of the Ohma Nuclear Power Plant. Currently, construction work is still under way, and there is no danger of employees and workers being affected by radiation. We will have established our health and safety management system related to radiation by the time that it becomes necessary.

Maintaining the Physical and Mental Health of Employees and Their Families

To maintain and improve the health of employees and their families, we encourage employees to undergo health checks and health maintenance guidance, and take infectious disease prevention measures. In addition, we place priority on the prevention of lifestyle-related disease and mental health disorders. Accordingly, we provide special health checks and specific health guidance as well as health maintenance and improvement activities* and stress check programs. By taking these measures, we support the sound physical and mental health of employees and their families.

* Health maintenance and improvement activities: Comprehensive activities that integrate activities aimed at total health, both physical and mental, based on Ministry of Health, Labour and Welfare guidelines on Total Health Promotion Plans (THP), and activities aimed at fostering a vibrant environment through the Company's unique communication revitalization initiative.

Selected as a Health & Productivity Management Outstanding Organization

J-POWER was selected as a 2019 Health & Productivity Management Outstanding Organization in the large enterprise category (the "White 500") by the Ministry of Economy, Trade and Industry and Nippon Kenko Kaigi, mainly in recognition of its initiatives to solve issues related to maintaining and improving the health of its employees. Going forward, the Group will continue initiatives in this area.

2019
健康経営優良法人
Health and productivity
ホワイト500

Basic Policy on Occupational Health and Safety

The Company aims to create safe, healthy, and rewarding workplaces for the J-POWER Group.

The Company and general directors of operating units fully play their parts in establishing and operating a robust occupational health and safety management system with the cooperation of employees and all concerned while remaining in compliance with laws, regulations, and self-defined rules. We also work to promote overall safety management and improve the health and safety standards of the J-POWER Group. Through these measures, we prevent occupational accidents and maintain and promote health.

Creating Rewarding Workplaces

The Company works to create rewarding workplaces that enable each and every J-POWER Group employee to realize health and self-fulfillment by ensuring, maintaining, and improving workplaces that are safe and comfortable to work in.

Compliance with Rules, Including Laws and Regulations

The Company complies with external and internal rules, including the relevant laws, regulations, and Company regulations, and endeavors to prevent occupational accidents as well as maintain and promote health in the J-POWER Group.

Improvement of Health and Safety Management

The Company and general directors of operating units establish and operate a systematic, efficient occupational health and safety management system by supervising safety managers, health managers, and those in charge of safety at the operating units and by gaining the cooperation of employees and all others concerned, thus working to improve the level of health and safety in the J-POWER Group.

Responsibilities of Management

The Company and general directors of operating units recognize their responsibility to realize this basic policy and take the initiative and set an example for those that follow while keeping the relevant parties thoroughly informed of this basic policy.

When a situation arises that runs contrary to this aim, the Company and the general directors of operating units will take the initiative to solve the problem while working to investigate the cause, prevent recurrences, clarify the root causes, and take appropriate measures.

Based on the J-POWER Group Approach to Social Contribution Activities, as a good corporate citizen, the J-POWER Group proactively engages in social contribution activities, including supporting culture and the arts, cooperating with local communities, supporting participation in volunteer activities, and contributing to international society. Through such efforts, the Group seeks to contribute to social development.

J-POWER Group Approach to Social Contribution Activities (established April 1, 2009)

The J-POWER Group's corporate philosophy states that "We pursue harmony with the environment, and thrive in the trust of communities where we live and work," and that "We regard profits as the source of our growth, and share the fruits with the society." In line with this philosophy and as a member of society, the Group engages in long-term social contribution activities aimed at the sound, sustainable development of society.

Based on the following two main themes of our activities, we value communication, knowledge sharing, and learning with local community members and people who are working to harmonize the energy supply with the environment. In this way, we steadily engage in social contribution activities and support the volunteer activities of our employees.

Community Involvement

Our corporate activities are supported by the communities in which our power plants and other facilities are located. Just as every employee strives to be a good citizen in each community, we aim for every Group location to contribute to the community and society as a good corporate citizen. Through activities that earn the trust and familiarity of local residents, we aim to be involved in communities and to grow in step with society.

Harmonizing the Energy Supply with the Environment

Rich, fulfilling lifestyles require both the energy that supports everyday living and a healthy natural environment. Leveraging the environmental insight developed through our businesses, we are working with a wide range of people to harmonize the energy supply with the environment and implementing activities to develop mindsets and technologies that prioritize both energy and the environment. By doing so, we are contributing to the sustainable development of Japan and the world.

Social Contribution Activities

For our social contribution activities in fiscal 2018, we implemented a variety of initiatives that included the following programs.

Program	Overview	Target	Partners	Number of participants, etc.
Ecology and Energy Experience Tour 	To promote the coexistence of energy and the environment, J-POWER holds the Ecology and Energy Experience Tour, in which participants learn about the links between energy and the environment through hands-on experience. Tours focusing on hydroelectric power were conducted for children and their parents, for students, and for elementary school teachers at Miboro Power Plant and Okutadami Power Plant. Tours focused on thermal power were conducted for students at Isogo Thermal Power Plant. The Okutadami tour made use of the Midori no Gakuen youth educational and lodging facilities and Lake Okutadami Tour Boat operated by Group company Okutadami Kanko Co., Ltd., providing an opportunity for experiential learning in which, surrounded by the grand natural environment of beech forests at Lake Okutadami, participants could see, feel, think, and enjoy themselves.	**Parent-child tour** Children in grades 4-6 and their parents **Student tour** Technical college, university, and graduate school students **Teacher tour** Elementary school teachers	KEEP, Inc., TOYOTA Shirakawa-Go Eco-Institute, Takakura Environmental Institute, JPec Co., Ltd., Okutadami Kanko Co., Ltd., Reborn Corporation	**Parent-child tour** 16 parent-child pairs, 4 times (128 total) **Student tour** 30 students **Teacher tour** 30 teachers
Sameura Bamboo Shoot Hunting with Local Elementary School Students (Kochi Prefecture) 	The J-POWER Group conducts a variety of social and cooperative activities with local communities at its power plants and transmission line engineering offices, etc. throughout Japan. At Sameura Power Plant in Kochi Prefecture (hydroelectric, 42 MW), we have planted bamboo on company-owned land and invite local elementary school students to experience digging up bamboo shoots there every spring.	Students in grades 1–6 at a local elementary school	Elementary school teachers	32 students, 12 teachers

Support for Volunteer Activities

To support employees' volunteer activities, we are taking measures to maintain an environment that is conducive to volunteer activities, including offering a volunteer leave of absence system.

Respect for Human Rights

Believing that it is important to respect human rights in our business activities, we incorporate human rights training in employee training programs and provide human rights training in accordance with the needs of local business units.

Community Development Activities at the Central Java Project

The J-POWER Group is currently constructing the Central Java Project (2,000 MW, coal) in Indonesia. This project is known as a model project for its high efficiency and environmental friendliness. The J-POWER Group, through the project company Bhimasena Power Indonesia (BPI), provides various supporting activities for the sustainable growth of the local community in the area near the project site. In order to reflect local needs, the activities were reviewed by local citizens and the municipal governments, and thus BPI supported the implementation. For these supporting initiatives, BPI has received a number of awards both within and outside of Indonesia.

CEO Yasuhiro Koide (dispatched employee of J-POWER) taking part in tree-planting activities

Specific Initiatives

Economic activity support	Supporting small businesses (laundries, tailors, etc.) run by local resident groups as well as local microfinance (providing materials, training, etc.) Support provided for 173 groups and 2,536 individuals as of 2018
Medical support	Providing supplemental food for infants and the elderly at village clinics, providing medical kits, training medical volunteers
Educational support	Supporting an environmental education program of the Indonesian government, providing a scholarship program for elementary and junior high school students in collaboration with the national electrical power company, supporting the creation of a village library in coordination with the regional government and the Coca Cola Foundation
Infrastructure improvement support	Setting up public toilets, renovating mosques, setting up a medical clinic, repairing roads, etc. 279 projects completed as of 2018
Social, cultural, and environmental support	Recycling activities, tree planting, mangrove maintenance, town cleanup, etc.

Main Awards Received

- Special Award as The Best Environmental Concerned Company on Indonesia Best Electricity Award (IBEA) 2016
- TOP CSR Improvement 2017
- TOP Leader on CSR Commitment 2017 for Takashi Irie*
- AREA (Asia Responsible Entrepreneurship) Awards for category Social Empowerment (2017)
- Indonesia CSR Leadership Award 2017
- Certificate of appreciation for BPI contribution to national program on community based disaster risk reduction program in affected villages around power plant project
- AREA (Asia Responsible Entrepreneurship) Awards for category Health Promotion (2018)

* Then the CEO of BPI, dispatched from J-POWER.

In accordance with its Corporate Philosophy, the Company endeavors to enhance corporate governance on an ongoing basis in order to realize sustainable growth and enhance corporate value over the medium-to-long term.

The Company has established the Basic Policy on Corporate Governance. For more information, please refer to J-POWER website.

▶ **http://www.jpower.co.jp/english/ir/ir23200.html**

Respect for Shareholder Rights

The J-POWER Group believes that sustainable growth and the enhancement of corporate value over the medium-to-long term can only be achieved in cooperation with a wide range of stakeholders. One important group of stakeholders is shareholders. The Company respects shareholder rights in order to allow for proper collaboration with shareholders.

Ensuring the Rights and Equality of Shareholders

The Company's policy regarding shareholder rights, such as voting rights at the general meeting of shareholders, is to respect such rights and ensure the substantial equality of shareholders. In addition, the Company gives consideration to ensuring that the special rights that are granted to minority shareholders are upheld with regard to confronting listed companies and their officers (including the right to seek an injunction against illegal activities and the right to file a shareholder lawsuit).

General Meetings of Shareholders

The Company provides shareholders with information that it believes to be useful for appropriate decision making at general meetings of shareholders. To this end, it is constantly striving to improve the content of convocation notices, reference materials, and business reports. It also provides information via financial results, timely disclosure materials, and disclosure via its website, as needed.

The Company sends a convocation notice for each ordinary general meeting of shareholders around three weeks prior to the meeting date to ensure that shareholders have sufficient time to consider the proposals to be put before the meetings and enable them to appropriately exercise their voting rights. The Company also endeavors to disclose information included in the convocation notice online in both Japanese and English prior to sending the notice. Moreover, the Company strives to avoid scheduling the general meeting of shareholders for the date most crowded with other companies' shareholder meetings.

General Meeting of Shareholders for Fiscal 2018

Date	June 26, 2019 (to avoid the day most crowded with other companies' shareholder meetings)
Convocation notice	Posted online Japanese: May 21, 2019 English: June 5, 2019 Mailed May 31, 2019 (11 days earlier than legally required)

Strategic Shareholdings

J-POWER does not maintain strategic shareholdings unless such shareholdings are deemed to serve a purpose.

Shareholdings are deemed to serve a purpose if they are judged to contribute to the Company's sustainable growth and the medium- to long-term enhancement of its corporate value based on the comprehensive consideration of their profitability, verified through properly ascertaining expected returns and other effects, as well as their objectives, such as the development of joint business and the need to maintain, strengthen, or build business relationships.

Every year, the Board of Directors evaluates the rationality and necessity of each strategic shareholding from such perspectives as consistency with the objectives of said holdings and the balance of the shareholding's profitability against the Company's cost of capital. Holdings found not to serve a purpose are disposed of, with due consideration given to the market impact of such disposal.

J-POWER exercises the voting rights of its strategically held shares based on careful consideration of the medium- to long-term enhancement of the corporate value of the Company and the companies whose shares it holds as well as its objectives for holding such shares.

Shareholder and Investor Engagement

J-POWER engages with shareholders and investors not only at General Meetings of Shareholders, but through such means as facility tours for shareholders, corporate presentations for individual investors, and individual meetings with institutional investors. Such efforts enable shareholder and investors to better understand our businesses, and the opinions they express are shared with management so that they can be put to use in our operations.

Facility tour for shareholders

Corporate Governance System

J-POWER has adopted a Company with an Audit & Supervisory Board structure, and has put in place a system for mutual oversight among Directors through the meetings of the Board of Directors attended by Outside Directors who participate in the Company's management decision making from an independent position.

Also, in fiscal 2019 the Company established Nomination and Compensation Committee, more than half the members of which are Independent Officers, to enhance the independence, objectivity and accountability of the Board of Directors with regard to the nomination and compensation of Directors and top management.

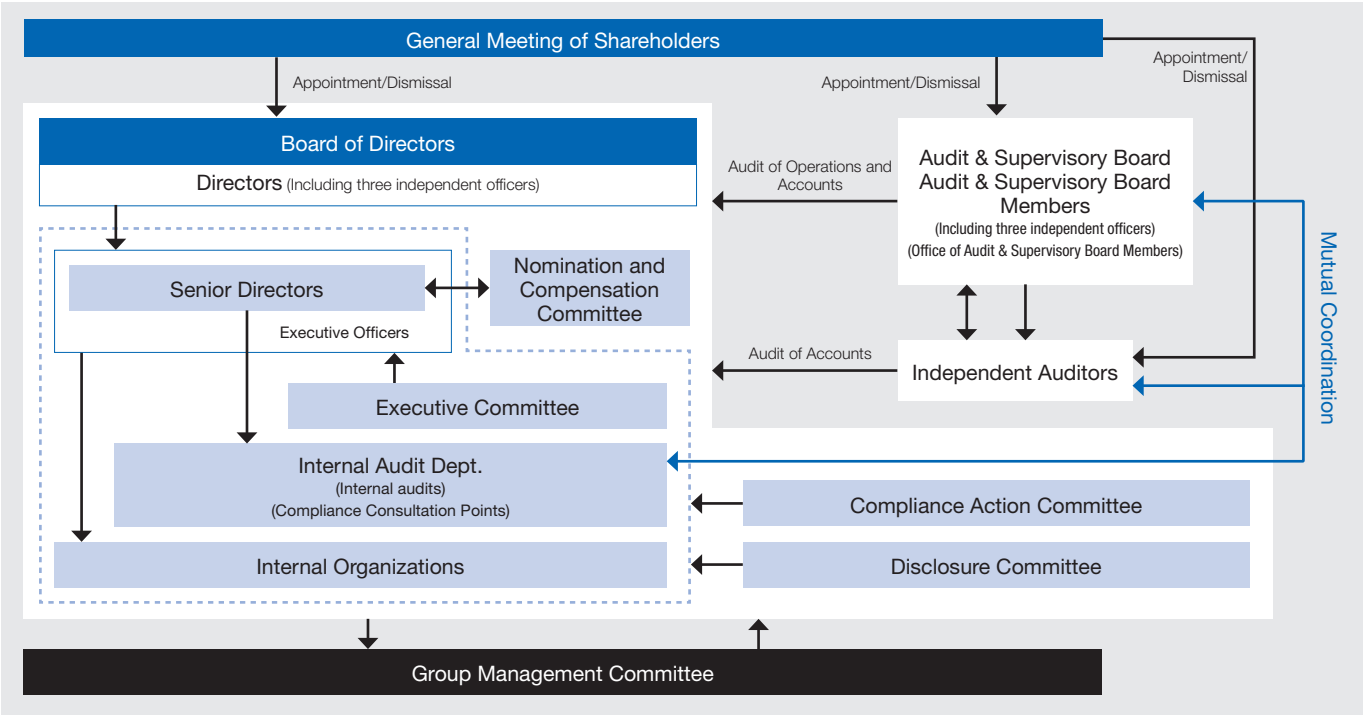
Further, the execution of duties by Directors is constantly monitored through the attendance at the meetings of the Board of Directors and other management meetings of the Audit & Supervisory Board Members, including Outside Audit & Supervisory Board Members with abundant experience in such areas as the management of leading Japanese listed companies and execution of government policies. The Company believes this system allows for sufficient corporate governance functionality.

In addition to the above, the Company also maintains the Executive Committee.

Nomination and Compensation Committee Members (As of June 26, 2019)

	Independent Officers: 3	Internal Officers: 2
Chairman	Go Kajitani, Outside Director Mutsutake Otsuka, Outside Audit & Supervisory Board Member Kiyoshi Nakanishi, Outside Audit & Supervisory Board Member	Masayoshi Kitamura, Representative Director, Chairman of the Board of Directors Toshifumi Watanabe, Representative Director, President

Corporate Governance Structure (As of June 26, 2019)



Composition of the Board of Directors and the Audit & Supervisory Board

Composition of the Board of Directors

The Board of Directors is composed of Directors with abundant experience, distinguished knowledge, and advanced specialization, ensuring that an overall balance and diversity of knowledge, experience, and abilities is maintained. The number of Directors is capped at 14.

In addition, to ensure the effectiveness of independent and objective management supervision by the Board of Directors, the Company endeavors to appoint at least two Independent Outside Directors, giving consideration to their experience, knowledge, specialization, and other attributes.

Currently, the total number of Directors is 14, including three Independent Outside Directors.

Composition of the Audit & Supervisory Board

The Audit & Supervisory Board comprises a maximum of five Audit & Supervisory Board Members, at least half of whom are required to be Outside Audit & Supervisory Board Members. In addition, at least one person with appropriate knowledge of finance and accounting is appointed as an Audit & Supervisory Board Member.*

Currently, the total number of the Audit & Supervisory Board Members is five, including three Independent Outside Audit & Supervisory Board Members.

* Senior Audit & Supervisory Board Member Hiroshi Fujioka (Independent Outside Audit & Supervisory Board Member) has a high level of knowledge in the area of finance and accounting as he has had many years of experience in fiscal and financial administration.

System for the Execution of Directors' Duties

Ensuring Effectiveness in Business Execution

The Board of Directors meets monthly in principle* and on an as-needed basis, with attendance by all Directors and Audit & Supervisory Board Members, including Outside Directors and Outside Audit & Supervisory Board Members. The Executive Committee meets weekly in principle, with attendance by all Senior Directors, Senior Executive Officers, and full-time Audit & Supervisory Board Members. This committee discusses matters subject to deliberation by the Board of Directors, significant company-wide matters related to business execution by the President and Executive Vice Presidents based on policies decided by the Board of Directors, and important matters related to individual business execution.

In addition to allocating functions for the Board of Directors and Executive Committee, the Company has established a system in which Senior Directors and Executive Officers share responsibility for business execution. This system clarifies responsibilities and authority, enables appropriate and prompt decision making, and provides for efficient corporate management.

* The Board of Directors met 12 times during fiscal 2018.

Ensuring Appropriateness in Business Execution

The Company has established the Internal Audit Department to ensure proper business execution. The department conducts internal audits from a perspective that is independent of other operating units. In addition, each operating unit regularly conducts self-audits of its own business execution.

Preventing Conflicts of Interest

The Directors of the Company, in accordance with its Corporate Philosophy, Corporate Conduct Rules, and Compliance Action Guidelines,[1] exemplify honest and fair conduct based on a spirit of compliance and business ethics. In addition, the Company works to prevent conflicts of interest in the event that the Company engages in a transaction with a Director or a major shareholder[2] by obtaining the approval of the Board of Directors before executing the transaction and reporting the results of the transaction to the Board of Directors.

1. Please refer to pages 67 to 69 for further information on the Corporate Conduct Rules and Compliance Action Guidelines.
2. Shareholders with shares representing 10% or more of the voting rights in the Company

Audits by Audit & Supervisory Board Members

In accordance with the Companies Act, J-POWER appoints Audit & Supervisory Board Members, who audit the legality and appropriateness of Directors' business execution. At J-POWER's Headquarters, Audit & Supervisory Board Members conduct audits by attending the meetings of the Board of Directors and other important meetings and observing the status of the execution of Directors' and Executive Officers' duties. In addition, the Audit & Supervisory Board Members perform site visits to local operating units and subsidiaries in Japan and overseas.

In the course of accounting audits, Audit & Supervisory Board Members liaise with the Independent Auditors to regularly receive reports and exchange opinions regarding auditing schedules and results as a means of ensuring the appropriateness of the Independent Auditors' auditing methods and results.

When performing audits, Audit & Supervisory Board Members liaise with the Internal Audit Department.

With regard to staff under the Audit & Supervisory Board Members, the Company has established the Office of Audit & Supervisory Board Members as an independent unit outside of the Directors' chain of command. The office's full-time specialist staff assist the Audit & Supervisory Board Members in the course of their audits.

Group Governance

With regard to the administration of subsidiaries and affiliates, the J-POWER Group's basic policy calls for Group-wide business development in accordance with the Group's management plan. The administration of subsidiaries and affiliates is undertaken in accordance with the Company's internal regulations, and the Group Management Committee works to improve the appropriateness of operations for the entire corporate Group. In addition, the Audit & Supervisory Board Members and the Internal Audit Department implement audits of subsidiaries and affiliates with the objective of ensuring proper operations at all Group companies.

Evaluation of Effectiveness of the Board of Directors

The Company analyzes and evaluates the effectiveness of the Board of Directors on an annual basis.

To improve the effectiveness of the Board of Directors, the Company strives to enhance the quality of discussion at monthly meetings of the Board of Directors and to this end has implemented a number of initiatives, including the following.

- Promoting discussion between internal and outside officers in settings other than meetings of the Board of Directors
- Enhancing the provision of information, including the content of Executive Committee discussions, to outside officers
- Inspections of power plants and other facilities by outside officers
- Training for internal officers

Regarding the evaluation in 2019, the Board of Directors discussed the status of measures implemented on the basis of the previous year's analysis and evaluation as well as the results of interviews and surveys of all officers, including outside officers. As a result of the discussion, the effectiveness of the Board of Directors was deemed sufficient. Going forward, the Company will further expand the scope of deliberation based on changes in the business environment, and make continual efforts to enhance the effectiveness of the Board of Directors.

Outside Officers (Outside Directors and Outside Audit & Supervisory Board Members)

The Company's Outside Directors and Outside Audit & Supervisory Board Members are independent officers that meet both the requirements for independent officers prescribed by the Tokyo Stock Exchange, and the Criteria to Determine the Independence of Outside Officers prescribed by the Company.

Criteria to Determine the Independence of Outside Officers

Outside Officers must not fall into any of the following categories:

1. Persons whose major business partner[1] is the Company or any of the Company's subsidiaries, or persons executing business for such persons.
2. Persons who are major business partners[1] of the Company or any of the Company's subsidiaries, or persons executing business for such persons.
3. Consultants, accounting professionals, and legal professionals who have received large amounts of money[2] and/or other items of value other than officers' remuneration from the Company or any of the Company's subsidiaries. (If the persons that have received such items are corporations, general partnerships, or other organizations, this means persons that belong to such organizations.)
4. Persons who fall into any of (1) to (3), below, during the past 10 years:
   (1) Persons listed in paragraphs 1 to 3, above;
   (2) Persons who execute business, or Directors who do not execute business of the Company or any of the Company's subsidiaries; or
   (3) Audit & Supervisory Board Members of the Company or any of the Company's subsidiaries.
5. Persons who are close relatives of any of the persons listed in (1) to (4), below (excluding immaterial cases):
   (1) Persons listed in paragraphs 1 to 4, above;
   (2) Persons who execute business or Directors who do not execute business of the Company or any of the Company's subsidiaries;
   (3) Audit & Supervisory Board Members of the Company or any of the Company's subsidiaries; or
   (4) Persons who fall under (2) or (3), above, during the past 10 years.

1. "Major business partners" refers to business partners whose annual amount of transactions with the Company during the past three fiscal years accounted for over 2% of the total consolidated sales of the Company or that of the other party.
2. "Large amounts of money" refers to amounts of ¥10 million or more a year, on average, during the past three fiscal years.

Appointment and Dismissal of Officers

The Board of Directors appoints as members of top management and nominates as candidates for Director and Audit & Supervisory Board Member individuals who have the abundant experience, distinguished knowledge, and advanced specialization necessary for those positions, based on discussion by the Board following the President's presentation of recommendations. The President's recommendations for members of top management and Director candidates are themselves based on the deliberations of the Nomination and Compensation Committee.

When a member of top management or a Director is found to have acted inappropriately or unreasonably, or there is some other marked impediment to the continued execution of the individual's duties, the Board of Directors may decide, based on discussion within the Board after deliberation by the Nomination and Compensation Committee, to dismiss or otherwise take action to deal with the member of top management or a Director in question.

Officers' Compensation

The compensation of top management and Directors is determined by means of discussion at meetings of the Board of Directors, after comprehensively taking into account corporate performance, position held, and other factors, in light of the characteristics of the Company's business, namely, aiming to recover investment through the long-term operation of power plants, etc., based on proposals made by the President following deliberation by the Nomination and Compensation Committee.

By resolution at the 54th Ordinary General Meeting of Shareholders held on June 28, 2006, total compensation for Directors is capped at ¥625 million annually (a fixed monthly salary calculated according to position and a performance-linked bonus paid once a year. Employee salaries for Directors who serve in dual capacity as employees are excluded). Each Director's compensation is determined within this cap.

Total compensation for the Audit & Supervisory Board Members was capped at ¥120 million annually (a fixed monthly salary calculated according to position) at the same general meeting of shareholders. Each Audit & Supervisory Board Members' compensation is determined, within the cap prescribed above, by means of consultation among Audit & Supervisory Board Members.

Compensation Paid during Fiscal 2018

Category		Number of Persons	Total Amount
Directors	Directors (excluding Outside Directors)	11	¥395 million
	Outside Directors	3	¥28 million
	Subtotal	14	¥424 million
Audit & Supervisory Board Members	Audit & Supervisory Board Members (excluding Outside Audit & Supervisory Board Members)	2	¥67 million
	Outside Audit & Supervisory Board Members	3	¥51 million
	Subtotal	5	¥118 million
Total		19	¥543 million

Notes: 1. The Directors' compensation includes a performance-linked bonus of ¥47 million for fiscal 2018.
2. The number of Directors includes one Director, who retired from office at the end of the 66th Ordinary General Meeting of Shareholders held on June 27, 2018.

Compensation of Independent Auditors

Total compensation paid during fiscal 2018 by the Company and its consolidated subsidiaries to the Independent Auditors who conducted accounting audits of the J-POWER Group comprised ¥152 million for auditing procedures and ¥25 million for non-auditing functions.

Directors, Audit & Supervisory Board Members, and Executive Officers (As of June 26, 2019)

Representative Director
Chairman
Masayoshi Kitamura
Company-wide compliance

Representative Director
President and Chief Executive Officer
Toshifumi Watanabe

Representative Director
Executive Vice President
Hitoshi Murayama
General operations
Production/technology oversight
Digital Innovation Dept.
Procurement Dept.

Representative Director
Executive Vice President
Masato Uchiyama
General operations
Department Director of Energy Business (delegation of administrative works)
Corporate Planning & Administration Dept.
Accounting & Finance Dept.
General Affairs Dept.

Representative Director
Executive Vice President
Akihito Urashima
General operations
Department Director of Nuclear Power Business (delegation of administrative works)

Director
Executive Vice President
Yoshiki Onoi
General operations
Department Director of International Business (delegation of administrative works)

Director
Executive Vice President
Hiromi Minaminosono
General operations
Department Deputy Director of Nuclear Power Business (delegation of administrative works)
Secretarial Affairs & Public Relation Dept.
Personnel & Employee Relations Dept.
Siting & Environment Dept.

Director
Executive Managing Officer
Hiroyasu Sugiyama
Department Director of Renewable Energy (delegation of administrative works)
Department Deputy Director of Nuclear Power Business (delegation of administrative works)
Civil & Architectural Engineering Dept.
Renewable Energy Business Strategy Dept.
Thermal power engineering business and international business (matters under special assignment)

Director
Executive Managing Officer
Hideki Tsukuda
Thermal Power Dept.
Thermal Power Engineering Dept.
International business (matters under special assignment)

Director
Executive Managing Officer
Makoto Honda
Department Deputy Director of International Business (delegation of administrative works)
Accounting & Finance Dept.
Procurement Dept.
International Business Management Dept.
International Business Development Dept.
Corporate planning & administration (matters under special assignment)

Director
Executive Managing Officer
Hitoshi Kanno
Corporate Planning & Administration Dept.
General Affairs Dept.
Siting & Environment Dept.
Power business planning & development (matters under special assignment)

Director
Go Kajitani [1, 3]

Director
Tomonori Ito [1, 3]

Director
John Buchanan [1, 3]

Senior Audit & Supervisory Board Members
Naori Fukuda
Hiroshi Fujioka [2, 3]
Shinichi Kawatani

Audit & Supervisory Board Members
Mutsutake Otsuka [2, 3]
Kiyoshi Nakanishi [2, 3]

Executive Managing Officers
Shosaku Kusunose
Yoshikazu Shimada
Ryou Suzuki
Hisanori Shizuma
Hiroshi Sasatsu

Executive Officers
Katsunori Hoshi
Isshu Kurata
Masaaki Ikeda
Takaya Nomura
Osamu Hagiwara
Ryouji Sekine
Takashi Jahana
Toshiya Sato
Hideo Kimura
Kenji Morita
Shinichi Demachi

1. Outside Director
2. Outside Audit & Supervisory Board Member
3. Independent Officer

Independent Outside Directors (As of June 26, 2019)

Go Kajitani (b. November 22, 1936)

Career summary

April 1967	Registered as an attorney at law (Dai-ichi Tokyo Bar Association) Joined KAJITANI LAW OFFICES
April 1998	President of Dai-ichi Tokyo Bar Association, Vice President of Japan Federation of Bar Associations
April 1999	Senior Partner of KAJITANI LAW OFFICES
June 2003	Outside Audit & Supervisory Board Member of NICHIAS Corporation
April 2004	President of Japan Federation of Bar Associations
June 2007	Chairman of the Central Third-Party Committee to Check Pension Records, the Ministry of Internal Affairs and Communications
June 2009	Director (Outside Director) of the Company (current position)
April 2011	President of Japan Legal Support Center
June 2011	Outside Audit & Supervisory Board Member of The Yokohama Rubber Co., Ltd.

Reason for selection

Go Kajitani has distinguished knowledge as an attorney at law and abundant experience in the legal profession.

Main activities during fiscal 2018

He attended 12 of the 12 meetings of the Board of Directors and made comments primarily based on his distinguished knowledge and a wide range of experience as an attorney at law.

Tomonori Ito (b. January 9, 1957)

Career summary

April 1979	Joined The Bank of Tokyo, Ltd.
March 1990	Vice President of Investment Banking Group, Bank of Tokyo Trust Company, New York Branch
April 1994	Vice President of Emerging Market Group, The Bank of Tokyo, Ltd., New York Branch
March 1995	Manager of Business Development Daini, Union Bank of Switzerland, Tokyo Branch
August 1997	General Manager of Tokyo Branch and Head of Investment Banking, Union Bank of Switzerland
June 1998	Head of Investment Banking and Managing Director, UBS Securities Japan Co., Ltd.
April 2011	Visiting Professor of Graduate School of International Corporate Strategy, Hitotsubashi University
May 2012	External Director of PARCO CO., LTD.
October 2012	Professor of Graduate School of International Corporate Strategy, Hitotsubashi University (currently Department of International Corporate Strategy, Graduate School of Business Administration, Hitotsubashi University) (current position)
June 2014	Outside Director of Aozora Bank, Ltd. (current position)
June 2016	Director (Outside Director) of the Company (current position)

Reason for selection

Tomonori Ito has abundant experience in investment banking business both inside and outside Japan and distinguished knowledge acquired through research in financial theory as a Professor of the Department of International Corporate Strategy, Graduate School of Business Administration, Hitotsubashi University.

Main activities during fiscal 2018

He attended 11 of 12 meetings of the Board of Directors and made comments primarily based on his abundant experience in investment banking business both inside and outside Japan and distinguished knowledge and abundant experience acquired through research in financial theory.

John Buchanan (b. October 31, 1951)

Career summary

October 1974	Joined Lloyds Bank Group (Bank of London and South America, Lloyds Bank International, Lloyds Merchant Bank)
January 1981	Representative, subsequently Branch Manager, Lloyds Bank International, Osaka
August 1983	Branch Manager, Bank of London and South America, Barcelona
October 1987	Joined S.G. Warburg & Co. Ltd.
October 1992	Director of S.G. Warburg & Co. Ltd.
October 1995	Joined The Sumitomo Bank, Limited, London Branch
May 2000	Joined Daiwa Securities SB Capital Markets Europe Limited
August 2006	Research Associate of Centre for Business Research, University of Cambridge (current position)
June 2016	Director (Outside Director) of the Company (current position)

Reason for selection

John Buchanan has abundant experience in investment advisory business both inside and outside Japan as well as distinguished knowledge acquired through research concerning corporate governance at the University of Cambridge.

Main activities during fiscal 2018

He attended 12 of 12 meetings of the Board of Directors and made comments primarily based on his abundant experience in investment advisory business both inside and outside Japan and distinguished knowledge and abundant experience acquired through research concerning corporate governance.

Independent Outside Audit & Supervisory Board Members (As of June 26, 2019)

Hiroshi Fujioka (b. June 2, 1954)

Career summary

April 1977	Joined the Ministry of Finance
July 2008	Director-General of Customs and Tariff Bureau, the Ministry of Finance
July 2009	Director-General for Policy Planning, the Ministry of Land, Infrastructure, Transport and Tourism
January 2012	Senior Executive Vice President of Japan Housing Finance Agency (Incorporated Administrative Agency)
January 2014	Councilor of the Minister's Secretariat, the Ministry of Finance
June 2014	Audit & Supervisory Board Member (Outside Audit & Supervisory Board Member) of the Company
June 2015	Senior Audit & Supervisory Board Member (Outside Audit & Supervisory Board Member) of the Company (current position)
June 2016	Outside Corporate Auditor of The Nishi-Nippon City Bank, Ltd.
October 2016	Audit and Supervisory Committee Member (Outside Director) of The Nishi-Nippon City Bank, Ltd. (current position)

Reason for selection

Hiroshi Fujioka has distinguished knowledge and abundant experience acquired through many years of work in the government.

Main activities during fiscal 2018

He attended 12 of the 12 meetings of the Board of Directors and 12 of the 12 meetings of the Audit & Supervisory Board, and made comments primarily based on his distinguished knowledge and abundant experience in fiscal and financial administration, etc.

Mutsutake Otsuka (b. January 5, 1943)

Career summary

April 1965	Joined Japanese National Railways
April 1987	Joined East Japan Railway Company, General Manager of Finance Department
June 1990	Director and General Manager of Personnel Department of East Japan Railway Company
June 1992	Executive Director and General Manager of Personnel Department of East Japan Railway Company
June 1997	Executive Vice President and Representative Director and Director General of Corporate Planning Headquarters of East Japan Railway Company
June 2000	President and Representative Director of East Japan Railway Company
April 2006	Chairman and Director of East Japan Railway Company
April 2007	Temporary Audit & Supervisory Board Member (Outside Audit & Supervisory Board Member) of the Company
June 2007	Audit & Supervisory Board Member (Outside Audit & Supervisory Board Member) of the Company (current position)
May 2011	Vice Chairman of Nippon Keidanren
April 2012	Advisor of East Japan Railway Company (current position)
June 2013	Outside Director of JX Holdings, Inc.(currently JXTG Holdings, Inc.) (current position)
June 2014	Outside Director of NIPPON STEEL & SUMITOMO METAL CORPORATION (currently NIPPON STEEL CORPORATION) (current position)

Reason for selection

Mutsutake Otsuka has distinguished knowledge and abundant experience as a director of a listed company.

Main activities during fiscal 2018

He attended 12 of the 12 meetings of the Board of Directors and 12 of the 12 meetings of the Audit & Supervisory Board and made comments primarily based on his distinguished knowledge and abundant experience in the management of a listed company.

Kiyoshi Nakanishi (b. April 2, 1945)

Career summary

April 1970	Joined Toyota Motor Co., Ltd.
January 1997	General Manager of No. 3 Engine Technical Department of No. 4 Development Center of TOYOTA MOTOR CORPORATION
June 2000	Director of TOYOTA MOTOR CORPORATION
June 2003	Managing Officer of TOYOTA MOTOR CORPORATION
June 2004	Adviser of TOYOTA MOTOR CORPORATION
June 2004	Representative Director of GENESIS RESEARCH INSTITUTE, INC.
June 2010	Adviser of GENESIS RESEARCH INSTITUTE, INC.
June 2010	Adviser of Toyota Central R&D Labs, Inc.
June 2010	Audit & Supervisory Board Member of TOYOTA TECHNOCRAFT Co., LTD. (currently TOYOTA CUSTOMIZING & DEVELOPMENT Co., Ltd.)
June 2011	Audit & Supervisory Board Member (Outside Audit & Supervisory Board Member) of the Company (current position)

Reason for selection

Kiyoshi Nakanishi has distinguished knowledge and abundant experience as a director of a listed company.

Main activities during fiscal 2018

He attended 11 of the 12 meetings of the Board of Directors and 11 of the 12 meetings of the Audit & Supervisory Board and made comments primarily based on his distinguished knowledge and abundant experience in the management of a listed company.

Representative Director, Chairman Masayoshi Kitamura and Outside Director John Buchanan discuss the corporate governance of the J-POWER Group.

Evaluating the Corporate Governance of the J-POWER Group

Kitamura Now that it's been three years since you joined the J-POWER Group as an Outside Director, what is your overall impression of the corporate governance here?

Buchanan There are many different ideas about what corporate governance is, but my definition is that it is a way to establish the fundamental nature of a company. Looking at it from that perspective, I think the J-POWER Group's corporate governance is sound. My foremost reason for saying that is the strong sense I get that it's not just the directors who are working to achieve the Company's mission, it's every single employee. Employees throughout the Group have the courage to speak up if they think it's in the Company's interest. That's extremely important, because if that were not the case, you'd simply end up with a top-down approach to corporate governance.

On the other hand, the corporate governance of the J-POWER Group is obviously not an exact duplicate of so-called best practice in the UK and the USA. Being a Japanese company, J-POWER has a lot of different traditions. And that's not necessarily a bad thing. For example, while there are frank exchanges of opinion at Board meetings, not every subject is covered at those meetings. Separate from the Board of Directors meetings, are Director Opinion Exchange Meetings [detailed later on], which were set up to debate business strategies. This is clearly a contributing factor to the currently sound corporate governance of the J-POWER Group.

Kitamura As you noted, senior management and employees very clearly possess a shared understanding regarding the Company's mission and its role in society. This has been true since long ago, whether at our power plants or Headquarters. I'm really glad that you feel the same. We can contribute to the community by sustainably raising our corporate value through the sound growth of the entire Company. I also believe that we can contribute to the many stakeholders supporting the Company. A large number of those stakeholders are shareholders, but not all of them. Our customers, employees, suppliers, and communities are also stakeholders. For a long time, you have researched the corporate governance of Japanese companies at the University of Cambridge. Personally, I'm

worried that despite the diversity of stakeholders, corporate governance in Japan may be too focused on a narrow set of them. What do you think?

Buchanan When I think about the balance of stakeholders, I always picture a gauge with a large needle. So, for example, it would be dangerous to lean too far toward one side or the other, like an extremist shareholder-centric position or an extremist employee-centric position. Striking a healthy balance is what's important. At present, I think Japan as a whole, including J-POWER, is gradually leaning towards a shareholder-centric position, but the needle of the gauge has yet to find its ideal balance, so I think it's not currently in danger of being too tilted toward shareholders.

Kitamura The Company's history as a publicly traded company is still short. It was not until 2004 that the Company was fully privatized and made 100% of its shares available to the public. At that time, corporate governance was a hot topic, and many European and American investors liked to grumble about how little regard Japanese companies had for shareholders. So we tried to be very sensitive to shareholder perspectives when we were creating our new corporate system. On that point, however, I think J-POWER is a little different from older, more typical Japanese companies. But you have been studying corporate governance in Japan for a long time, so how do you see this?

Buchanan Because J-POWER didn't have multiple shareholders before it was listed on the stock market as a publicly traded company, I think it probably had zero shareholder awareness up till that point. So, I think it was more self-conscious about its stance toward shareholders than many other companies. I don't feel that the Company ignores or disdains its shareholders in the slightest. It seems that J-POWER has achieved a good balance in its approach to its many stakeholders, including customers, employees, and all other members of the community.

The Roles Expected of Independent Outside Directors

Kitamura As an independent Outside Director contributing to the management of the Company, what do you think is expected of you?

Buchanan I think one of the roles of an Outside Director is to serve as a representative for shareholders and other stakeholders. Looking at it from that point of view, two main underlying principles stand out. One is taking on the role of an emergency brake on executive actions, that is, basically functioning as a check mechanism. I draw on my own experience to assess whether an action is appropriate or not. And, on balance, I'd say this role is a passive one. The other role an Outside Director plays is strategic. Being inside a company can sometimes narrow one's vision, while someone from the outside may be better positioned to take a broader view. The knowledge I've gained from my own experience does come in handy in both roles.

There is one other important matter. I wasn't especially aware of the essential nature of this when I first took on the position of Outside Director, but what I've come to realize over the last three years is that, ultimately, an outside director is not there to usurp the authority of the management. Of course, if everything I said was being ignored, I might be inclined to resign. Conversely, it would be unreasonable to expect the Company to accept and act on my every whim. Essentially, no matter how objective their stance, a person who is outside the Company lacks the knowledge and experience of those inside it. And, it is for that very reason that we need to respect the experience of the people inside the Company. Thinking that outside opinions are always right is unhelpful and dangerous. I think the important role we Outside Directors play is improving outcomes by bringing together external and internal viewpoints.

Kitamura Because those of us inside the Company are always here, we are very familiar with the Company's management style, the employee mindset, and the electric power business itself. We also understand that as the business environment changes, we need to respond to those changes using methods that differ from the ones used up to now. I've come to realize that when assessing the effectiveness of our response to capital markets, we are fortunate to be the recipients of the opinions of individuals who speak from perspectives not coloured by our particular corporate ways of thinking, experience or knowledge.

Buchanan By expressing our opinions as Outside Directors, we can better convey how the J-POWER Group is viewed from the outside. Some things that are considered obvious within the Company may be viewed entirely differently by people outside the Company. Pointing out things like this is surely another role that the Outside Directors play.

Ensuring the Effectiveness of the Board of Directors

Kitamura J-POWER has taken various measures to ensure the effectiveness of its Board of Directors, but what do you think it really means for the Board of Directors to be effective?

Buchanan That is a very difficult question. Strictly speaking, I think the ideal is for the Board of Directors to engage in vigorous discussions. For example, in Europe and the USA, it has recently come to be considered fundamental that everything of consequence will be debated at Board of Directors meetings. Basically, no discussions of any importance can be held outside of such meetings. However, Japanese companies, including the J-POWER Group, don't have a tradition of discussing everything at their Board of Directors meetings.

For example, in Japan if the Executive Committee has already discussed a particular topic

Outside Director: John Buchanan

June 1974	Graduated from the University of Cambridge with a degree in Oriental Studies
July 2006	Received a PhD in Management Studies from the University of Cambridge (researched corporate governance)
October 1974	Joined Lloyds Bank Group (Bank of London and South America, Lloyds Bank International, Lloyds Merchant Bank)
October 1987	Joined S.G. Warburg & Co. Ltd.
October 1992	Director of S.G. Warburg & Co. Ltd.
October 1995	Joined The Sumitomo Bank, Limited, London Branch
May 2000	Joined Daiwa Securities SB Capital Markets Europe Limited
August 2006	Research Associate of Centre for Business Research, University of Cambridge (current position)
June 2016	Director (Outside Director) of Electric Power Development Co., Ltd. (current position)

and exchanged a wide range of frank opinions, the directors on the Executive Committee will not repeat that discussion at the Board of Directors meeting. Holding discussions at the Executive Committee meetings is of itself a very healthy thing to do. If we were to rehash every point already discussed elsewhere at the Board of Directors meetings, it would only confuse things as people wouldn't know what to say at which meeting.

Because these traditions run deep, they aren't easy to change. Still, it can be a problem if directors on the Executive Committee remain silent at the Board of Directors meetings, waiting for the Outside Directors unilaterally to deliver their opinions and then agreeing to everything without discussion. However, that kind of problem has not occurred with the J-POWER Group. At first, the internal directors often limited themselves to responding to questions from the Outside Directors; now, however, they are gradually beginning to voice their own opinions. Although there remains a tendency for the Outside Directors and Outside Audit & Supervisory Board Members to dominate discussions, I think things have begun to change and are heading in a much healthier direction.

Kitamura If we are to improve the decision making of the Board of Directors, I think hearing various opinions, including on matters overlooked at the Executive Committee meetings, is a very good thing. When assessing effectiveness, what's important is to be sure that genuinely useful meetings are being held. As part of this discussion about ensuring the effectiveness of the Board of Directors, we received a request from the Outside Directors and Outside Audit & Supervisory Board Members. They would like more time to be devoted to the discussion of business strategies rather than just dealing with proposals because the future direction of the Company and its business strategies are precisely what the Board of Directors should be discussing. In response to this request, we have restricted the matters brought before the Board of Directors to those related to relatively large investments. And, to give more time to discussions of important business matters that could affect the future of the Company, we established a new Director Opinion Exchange Meeting. What do you think of these developments?

Buchanan I think some people would find it odd to discuss such matters outside of Board of Directors meetings, but I don't see it that way. I think these meetings improve the effectiveness of the Board of Directors and support its goals. A traditional Board of Directors in Japan will maintain some rigidity no matter how much it progresses. The establishment of a separate meeting has made it possible for the internal directors to speak up more and have franker discussions. Those discussions are reflected in the Board of Directors meetings, increasing opportunities for more strategic discussions and thereby raising the effectiveness of the Board of Directors itself. The opinion exchange meetings may end up being incorporated into the Board of Directors meetings, but, for now, I think it is a very sound way of doing things.

Establishing the Nomination and Compensation Committee

Kitamura As part of its corporate governance reform efforts, J-POWER established a Nomination and Compensation Committee in April 2019. The committee comprises mainly Outside Directors and Outside Audit & Supervisory Board Members and deliberates in advance before providing its recommendations to the Board of Directors. The aim is to ensure transparency when determining board member compensation and officer appointment and dismissal. What do you think of the establishment of this committee?

Buchanan The Nomination and Compensation Committee is very important in demonstrating to external parties that there is a clear system in place for these processes. And people can trust the committee because its members speak their mind freely. This will undoubtedly be a fundamental shift for the Company.

Kitamura Decisions about appointment, dismissal, and compensation of officers are extremely important to both the Company and shareholders, so, as a mechanism for ensuring objectivity and transparency in such decisions, I think the establishment of the committee is very significant. I think the role of the outside officers on the committee will surely be key.

Buchanan I agree. Because this committee serves as a kind

of assurance, I think it is there to operate when unforeseen situations arise. Its very existence shows external parties that the Company has these kinds of functions, and that the committee can also play an important role internally when needed. It's important to have these kinds of safety measures in place.

Potential Corporate Governance Issues for the J-POWER Group Going Forward

Kitamura Finally, I'd like to ask about potential issues going forward. I think that it's not enough for our corporate governance system simply to be in accordance with the Corporate Governance Code; it needs to be able to change as time goes on. I don't just mean that if it falls behind the times we can amend it or that if the Corporate Governance Code is revised we can bring it up to date, I mean that we should be able deliberately to change it ourselves. In addition, while it is very important to write down our policies clearly, the main issue is the actual practice of governance. I think it's important always to be mindful of how governance is being conducted, and that applies to all of the various interactions among top management, between management and employees, and between management and shareholders or other investors. What is your opinion?

Buchanan The J-POWER Group's corporate governance is currently sound. But no company is perfect; there are always some issues. First, because some aspects of the Group's approach up to now have been very good, the Group needs to be able to introduce new elements without losing those good aspects. It is not the case that old practices are all necessarily bad so it's very important to hold onto what has been working to date while bringing other practices into line with the Corporate Governance Code. Next, and this is an issue not just for the J-POWER Group but for all Japanese companies, the Board of Directors has a habit of expecting unanimity in all its resolutions, with no objections. From a third-party standpoint, it feels overly mechanical and unnatural. It is important to debate until a consensus is reached, but it is also okay to admit that there are individuals who harbour some doubts. I'd like to see the Board gradually become able to decide on matters and move ahead in the face of dissenting minority opinions.

Another issue is diversity, which has recently become a big topic. A wide range of backgrounds,experiences, and ideas among the participants is very helpful to discussion. But it is a big mistake to treat diversity merely as window dressing. If the Company as a whole is lacking diversity, there isn't any meaning in ensuring it on the board. I think the Group should think about how it can foster diversity and how it can find and make the best use of appropriate human resources. More than anything, this should lead to more active participation by women. For example, another long-term issue will be hiring more women in technical roles and promoting them according to their capabilities.

Kitamura What always comes to mind when I think of the expression "corporate governance" is the importance of the mission we have defined for ourselves and the pride we have in our work. Our corporate philosophy isn't something that we should make changes to willy-nilly because such things are less highly regarded or because the situation has changed over time. Our current corporate philosophy was created after discussion among all the employees when we decided to privatize. Therefore, I think we need constantly to assess whether our corporate governance aligns with our corporate philosophy.

Buchanan The Corporate Governance Code is not all there is to corporate governance; it's just a guide for what you should not do or what you should do at a bare minimum. Corporate governance is a much broader concept intimately entwined with corporate philosophy, so I think you have the right idea.

J-POWER, in accordance with its Corporate Philosophy, has established the Corporate Conduct Rules (please refer to page 67) as the core of its compliance activities, outlining basic rules for behavior in line with the spirit of compliance and business ethics to be observed in the course of business operations. In addition, the Company has established its Compliance Action Guidelines (please refer to page 68) as criteria for determining specific actions by individual employees, including members of management, when conducting business activities. The Company distributes these documents to all employees and works to encourage compliance awareness by having employees sign and keep with them a copy of the Compliance Pledge.

Directors adhere to the Corporate Philosophy, Corporate Conduct Rules, and Compliance Action Guidelines, set an example for honest and fair conduct based on a steadfast spirit of compliance and business ethics, and instill these values in employees.

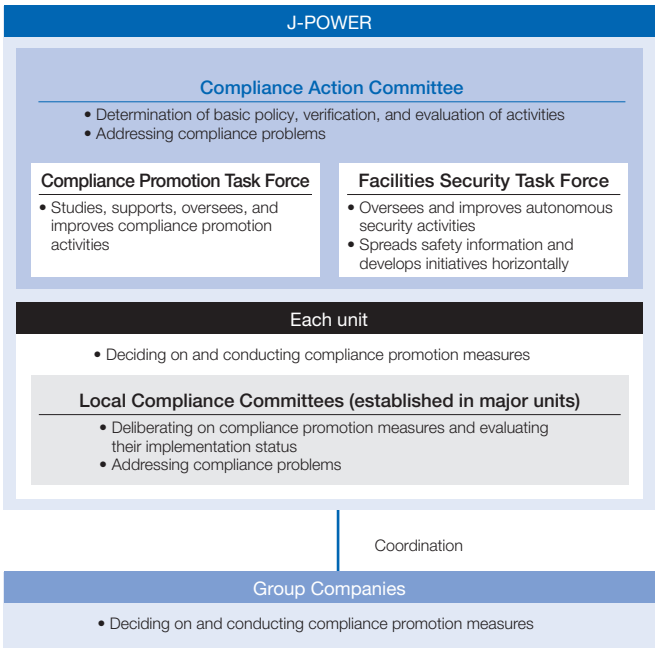
In addition, the Board of Directors regularly receives reports on the status of business execution in order to quickly understand risks, including ESG-related risks. The Company incorporates mutual checks and balances in the internal decision-making process, undertakes reviews in various meetings and committees, and always maintains risk management frameworks in accordance with Company regulations. This structure ensures measures are implemented to recognize and avoid risks in the conduct of business activities and minimizes losses when risks actualize.

Compliance Promotion Structure

The Company's compliance is overseen by the Chairman. An Executive Vice President or an Executive Officer in charge of compliance implements compliance promotion programs and assists the Chairman and President. The Compliance Action Committee, chaired by the Chairman, has been established to discuss company-wide compliance promotion measures, evaluate their implementation status, and address issues related to compliance violations. With the participation of group companies, the committee is implementing measures for the entire J-POWER Group. Two task forces, led by two Executive Vice Presidents, have also been established to quickly and accurately promote operations pertaining to compliance promotion, one for company-wide compliance promotion and the other for autonomous safety activities based on the Company's safety regulations.

At major business units, such as regional headquarters, regional transmission system centers, and thermal power plants, local compliance committees have been established to implement compliance activities suited to the characteristics of their respective business units.

The J-POWER Group's Compliance Promotion System



Compliance Promotion Activities

The Compliance Action Committee utilizes a PDCA (plan-do-check-act) method for compliance promotion, formulating a plan for each fiscal year, evaluating the results at the end of the fiscal year, and formulating the next year's plan based on the results. The compliance promotion plan and results are reported to the Board of Directors.

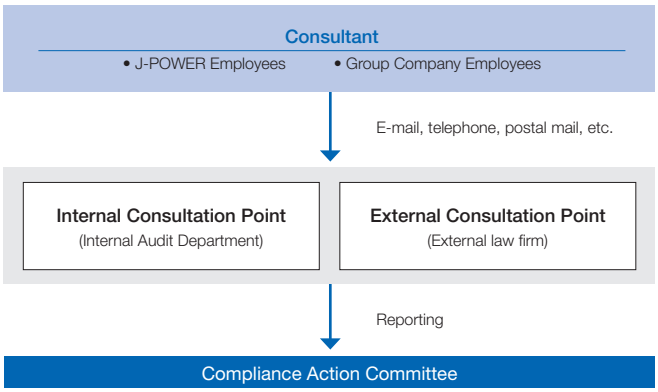
To raise compliance awareness among employees, the Company issues notifications of changes in laws and regulations, presents compliance-related case studies, and conducts training sessions on laws and regulations related to our business and on compliance issues.

When alleged compliance violations occur, the Compliance Action Committee investigates the facts and causes surrounding the issues and takes appropriate action as necessary, including issuing directives for improvement or measures to prevent their recurrence.

Compliance Consultation Points (Whistle-Blowing System)

The J-POWER Group has established Compliance Consultation Points at the Internal Audit Department and at an external law firm to serve as a consulting hotline in the event that employees face compliance issues. The Group makes employees aware of these channels. Employees who use these resources are rigorously protected.

The J-POWER Group's Compliance Consultation Points



Barring Relations with Anti-Social Forces

The J-POWER Group's policy is to not maintain relations of any sort with the anti-social forces that threaten the order and safety of civil society. The Company has designated an internal department to act as a point of contact in the event that demands or other contacts are received from anti-social forces and has established a system that ensures the quick collection of information and appropriate response in cooperation with specialist external agencies.

Preventing Bribery and Corruption

The J-POWER Group prohibits bribes, illicit payments, and illegal political donations, as well as entertaining or giving gifts to public officials that conflict with the National Public Service Ethics Act or rules prescribed by government agencies. Also, the Company does not offer financial or other rewards to foreign government officials in return for illicit benefits or accommodations. We are careful to avoid actions that might be construed as collusion with politicians or administrative agencies and strive to establish sound and transparent relationships.

Disclosure

The Company has established the Disclosure Committee, chaired by the President, to enhance transparency and accountability in corporate activities. This committee ensures the fair and transparent disclosure of company information in a timely and proactive manner.

Compliance with the Internal Control Reporting System

In response to the internal control reporting system for financial reporting required by Japan's Financial Instruments and Exchange Act, the J-POWER Group established, maintains, and evaluates its internal control system, mainly through the Accounting & Finance Department and Internal Audit Department.

In fiscal 2018, continuing from the previous year, the Company's management evaluated the status of the development and operation of internal controls with respect to company-wide internal controls, operational process-related internal controls, and information technology-based internal controls in accordance with the implementation standards of Japan's Financial Services Agency. The Company determined that its internal control system for financial reporting is effective. This evaluation result was submitted as an Internal Control Report to the Director-General of the Kanto Finance Bureau in June 2019 following an audit carried out by the Company's Independent Auditor.

Going forward, the J-POWER Group will continue to verify the efficacy of its internal control system and ensure the reliability of its financial reporting.

Corporate Conduct Rules (Revised on April 1, 2004)

Reliable supply of energy
We will put forth every effort to reliably supply energy both in Japan and abroad, utilizing our experienced personnel and cutting-edge technology.

Safety assurance
In conducting operations, we will constantly work to raise safety awareness and give the highest priority to public and worker safety.

Environmental conservation
Based on the awareness that our business operations are deeply linked with the environment, we will actively engage in environmental conservation activities.

Communication with society
To establish communication with society, we will conduct information disclosure and public relations activities in a fair and transparent manner.

Contribution to society
Aiming to be a good corporate citizen, we will undertake activities to contribute to society and assist in the development of local communities both in Japan and abroad.

Creation of a rewarding corporate culture
In addition to providing safe and comfortable work environments, we will respect the individuality of our employees and endeavor to establish a rewarding corporate culture that encourages them to take on new challenges.

Compliance with laws, regulations, and corporate ethics
We will conduct business in good faith and in a fair manner with a strong commitment to compliance and ethics. We will stand firm against anti-social forces that threaten the order and safety of civil society.

Role of top management
Recognizing its responsibility in putting into practice the spirit of these Corporate Conduct Rules, our top management must set an example for others and work to spread awareness of these rules.

Should an event occur that violates the spirit of these rules, top management must take the initiative in dealing with the problem to determine the causes and prevent its recurrence. Top management must also identify and take disciplinary action against those responsible, including its own members.

Compliance Action Guidelines (Revised on October 1, 2014)

[1] Basic Matters (omitted)

[2] Compliance Rules

1. Relationship with Society

(1) Contribution to Society

a. We shall contribute to the sustainable development of Japan and the world by faithfully fulfilling the mission of the J-POWER Group to provide a stable supply of electricity.
b. We shall act sensibly and responsibly as members of society and conduct our duties with awareness and pride as members of the J-POWER Group.
c. We shall actively participate in social contribution activities as a good corporate citizen and contribute to the development of society. We shall continually conduct social contribution activities, including supporting culture and the arts, cooperating with local communities, supporting participation in volunteer activities, and contributing to international society, in order to fulfill our role as a good corporate citizen.

(2) Appropriate Disclosure

a. We shall not act in a way that leads to a loss of trust from society, such as disclosing false information or data, or willfully concealing information that should be made public.
b. We shall respect diverse views and not act in a way that hinders the formation of sound public opinion.
c. In written statements and other information released as part of public relations activities, we will never use any slanderous expressions or socially discriminatory language.

(3) Restrictions on Donations and Political Contributions

a. In making political contributions or donations to any type of organization, etc., we will comply with the Public Officers Election Act, Political Funds Control Act, and other related laws and regulations, acting in accordance with regular methods.
b. In accordance with Company regulations, we shall receive prior approval for contributions or donations.
c. We will not offer bribes, illicit payments, or illegal political donations, and be extremely careful not to act in a way that may be construed as colluding with politicians or government agencies. We will strive to build sound and transparent relationships.

(4) Barring Relations with Anti-Social Forces

a. To avoid illegal or anti-social behavior, we will maintain a basic legal knowledge, an awareness of social norms and sense of justice, and strive to constantly exercise good sense.
b. We will be resolute in dealing with the anti-social forces that threaten the order and safety of civil society and never engage with them in relations of any sort. If an improper demand is received from anti-social forces or other parties, we will maintain a firm stance and never seek a resolution with money or other rewards.
c. We will never use anti-social forces for corporate or personal gain.
d. We will never conduct business with anti-social forces or businesses affiliated with anti-social forces.

(5) Environmental Protection

We maintain a continuous awareness of the importance of environmental protection in all our business activities. We will comply with all environment-related laws and regulations and proactively address global and local environmental issues based on our Environmental Management Vision.

(6) Appropriate Use of Information Systems

a. We recognize that information security is a social responsibility for a company with vital infrastructure.
b. We use the Company's information systems only for work purposes, and not for personal matters.
c. We strictly manage Company information and encrypt data removed from Company premises to prevent the leak or theft of confidential information.
d. When using computers or external storage media, we will run a virus scan to prevent damage from viruses and other malicious programs.
e. We will properly manage our ID and password information and never illicitly access systems.
f. When using the Internet, we always take care to ensure appropriate use and refrain from acts that could undermine the Company's social credibility in our private lives, as well.
g. We use software appropriately and shall not install software with a high risk of information leakage, such as free software or file sharing software.

(7) Protection of Intellectual Property Rights

The Company's intellectual property rights acquired through research and development or other business operations (inventions, utility models, designs, copyrights, trademarks, know-how, technical information, etc.) are important Company assets. We will use them properly and strive to protect those rights.

a. We will promptly submit applications and register work that belongs to the Company and strive to protect the Company's intellectual property rights.
b. We will never infringe upon the intellectual property rights of others, such as by engaging in the unauthorized copying of computer software.
c. The intellectual property rights of business partners must be used only under appropriate license and never illicitly.

(8) Compliance with Import-Export Laws and Regulations

a. For the export and import of products, we will follow proper import/export and customs procedures in accordance with relevant laws and regulations.
b. We will never import or export prohibited goods.

2. Relationships with Customers, Business Partners, and Competitors

(1) Safety and Reliability of Energy Supplies and Product Sales

a. In supplying electric power and other forms of energy to society, with constant priority on ensuring safety, we will maintain full understanding of and compliance with relevant laws, regulations, and standards. We will also take extreme care with regard to maintenance and operations and strive to provide a stable energy supply with quality and safety.
b. Similarly, with regard to product sales, we will maintain full understanding of and compliance with safety-related laws and safety standards, from development and manufacturing to sales, repair, and maintenance, aiming for higher reliability.
c. When we receive information about impediments to safety or reliability, we will promptly confirm the facts, and if we determine that there is a problem, contact the relevant departments and take appropriate action.

(2) Compliance with Antitrust Laws

Under no circumstances will we act in a manner that violates antitrust laws, for example, by participating in cartels or collusion, fixing resale prices, or abusing a dominant bargaining position. We will engage in fair and free competition.

a. We will not make any agreements with other business operators that affect sales prices or terms of sale and will not engage in collusive bidding or other unreasonable restraint of trade.
b. We will not sell products at inappropriately low prices, restrict the selling prices of customers, or engage in other unfair business practices.

(3) Appropriate Business with Suppliers
In our business relations with suppliers, we will act with good sense and sincerity and treat suppliers with impartiality and fairness.
a. When choosing a supplier from among several companies, we will determine the optimal partner by fairly comparing and evaluating such factors as quality, price, delivery period, technical development capabilities, stable supply, and financial standing.
b. We will not exert influence that provides certain suppliers with improper favorable treatment.
c. When commissioning business partners for manufacturing, repairs, the preparation of information deliverables, or the rendering of services, we will conclude contracts and conduct business with a full understanding of the Subcontract Act, taking care to avoid delayed payment or other improper action.

(4) Prevention of Unfair Competition
a. We will not acquire or use the trade secrets of other companies through theft or other improper means.
b. We will not acquire or use the trade secrets of other companies that we know or suspect to have been obtained through improper means.

(5) Entertaining/Gifts
a. Entertaining and the giving of gifts to business partners will be within the scope of social courtesy.
b. When we have no choice but to be entertained by or accept gifts from customers or business partners, it must be within the scope of social courtesy.

3. Relationships with Company Assets, Accounting, Shareholders, and Investors

(1) Appropriate Use of Company Assets
Company assets need to be in a condition for efficient and ready use, and we should handle both tangible and intangible assets appropriately to prevent damage or theft. Company assets or expenditures may not be used for personal purposes.

(2) Appropriate Accounting Management and Tax Treatment
Entries on accounting ledgers or accounting slips will be made in accordance with relevant laws, regulations, and Company regulations. We will not disguise or conceal facts, create fictional records, or accumulate off-book assets.

(3) Disclosure of Management Information
We will provide shareholders and investors with timely and appropriate disclosure of management information, including the Company's financial condition and status of business activities. We will clearly convey the Company's management philosophy and policies and take seriously any opinions or criticism regarding them.

(4) Prohibition on Insider Trading
We will not buy or sell Company stocks or bonds using internal information obtained during the course of business.

We will not buy or sell the stocks or bonds of business partners with which we have a business relationship, competitors, or customers using internal information obtained during the course of business prior to the disclosure of such information to ordinary investors.

We will handle internal information appropriately to prevent stock transactions using internal information and not disclose such information to others not associated with the business.

4. Relationships with Government Agencies and Public Officials

(1) Appropriate Approval and Notification Procedures
a. We ensure that necessary procedures, such as obtaining approvals and submitting notifications, are taken.
b. We will not neglect to submit necessary notifications, alter data, or take any action that leads to a loss of the Company's credibility.

(2) Entertaining and Gifts to Public Officials
We will not entertain or give gifts to public officials or equivalent persons in a manner that conflicts with the National Public Service Ethics Act or other rules prescribed by government agencies.

In addition, we will not give, promise, or offer financial or other rewards to foreign government officials to improperly gain a business advantage or in return for a business accommodation.

5. Relationships with Employees

(1) Respect for Human Rights
We will strive to constantly maintain a wholesome work environment, will respect human rights, and will never act in a way that leads to discrimination or the denial employees' personalities.
a. We will not discriminate in any way, including on the grounds of birth, nationality, race, creed, religion, gender, physical condition, or social status.
b. We will not engage in abuse of authority, sexual harassment, or similar types of behavior.

(2) Protection of Privacy
We will strictly manage the personal information of employees and external persons obtained during the course of business and use this information only for business purposes, while preventing the leakage of this information.

(3) Workplace Health and Safety
We will strive to provide a work environment with priority on health and safety, and will understand and comply with laws and regulations regarding workplace health and safety. Should a work-related accident occur, we will minimize the effects of the accident and faithfully and promptly follow prescribed procedure, such as reporting, to prevent recurrences.

(4) Compliance with Labor Laws
We will comply with labor-related laws and strive to maintain a wholesome work environment with a pleasant atmosphere for a wide range of human resources.
a. We will comply with the Labor Standards Act and not impose duties that force employees to engage in excessive labor or overtime.
b. We will comply with the overtime work agreement and not require or condone unpaid overtime.
c. We will conduct discussions with labor unions in good faith and establish healthy labor-management relations.
d. Each of us will constantly strive to maintain our own mental and physical health and pay attention to the physical and mental health of subordinates.

(5) Compliance with Rules of Employment
a. We will maintain discipline on the job and comply with the Rules of Employment.
b. We will respect the rights of employees as prescribed by the Rules of Employment.

Emergency Management Measures

The J-POWER Group has a responsibility as an electric utility company to ensure a stable supply of electricity, which plays an essential role in people's everyday lives. We need to prevent damage to the equipment that produces and transmits electric power and to restore service quickly should a disruption occur. Accordingly, the J-POWER Group implements the following measures.

(1) Installation of appropriate facilities and development of disaster recovery systems in preparation for natural disasters, including earthquakes, typhoons, lightning strikes, and tsunami
(2) Enhancement of security to prevent malicious and violent conduct
(3) Enhancement of regular facility inspections to prevent major impediments to electric power supply and appropriate repairs and upgrades in response to aging, the decline of function, and breakdowns
(4) Preparation of action plans for responding to pandemics and other events that could have a major impact on business operations

The J-POWER Group has established the following systems to accurately forecast and prevent accidents, facility incidents, and other emergency events, and to promptly and appropriately respond to and manage such events should they occur.

Emergency Management Systems

(1) Emergency Response Team

A permanent organization at the J-POWER Headquarters. The team forecasts emergencies, immediately takes first-response action in the case of an occurrence, and oversees emergency management operations.

(2) Emergency Managers and Emergency Duty Personnel

Emergency Managers and Personnel are appointed at the Headquarters and local units to take first-response action and report information.

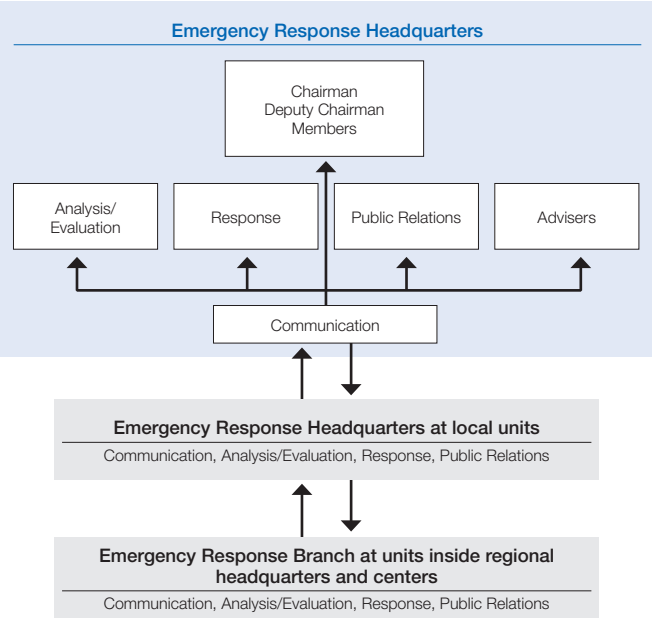
(3) Emergency Response Headquarters and Branches

When an emergency is predicted to occur or occurs and the seriousness warrants emergency countermeasures, the Emergency Response Headquarters (and Branches) are established.

Emergency Response Headquarters Structure (Head Office)

Structure	Composition
Chairman	President
Deputy Chairman	Executive Vice President
Members	Executive Officers in charge of General Affairs Dept. and related Executive Officers Department Directors of General Affairs Dept., Secretarial Affairs & Public Relation Dept., and other related departments
Emergency Management Task Force	Emergency Response Team and related departments
(Composition of Task Force)	(Division of Duties)
1. Communication	Communication, collection, and management of information
2. Analysis/Evaluation	Analysis, evaluation, response planning
3. Response	Restoration, liaison, response to victims, response to consumers, IR-related information
4. Public Relations	Relations with media
5. Advisers	Provide advice regarding analysis, evaluation, response planning, etc.

Emergency Response Headquarters Communication System



Disaster Prevention and Business Continuity

J-POWER, as an electric utility company responsible for vital lifelines, is a designated public institution under the Basic Act on Disaster Control Measures.

Accordingly, the Company has established physical measures assuming a large-scale natural disaster as well as non-physical measures, such as various rules for when disasters occur, and a systematic disaster preparedness structure from the head office to local units. By actively implementing these measures, the Company further strengthens its disaster preparedness structure to ensure the continuation of business even in the event of a natural disaster exceeding assumptions.

Information Security

With advancements in the utilization of IT by corporations, information security has become increasingly important in light of the increase in instances of cyber attacks targeting specific companies and other threats. As an important infrastructure company that is responsible for ensuring a stable power supply in Japan and overseas and the construction of a nuclear power plant, it is imperative that the J-POWER Group ensure an especially high level of information security.

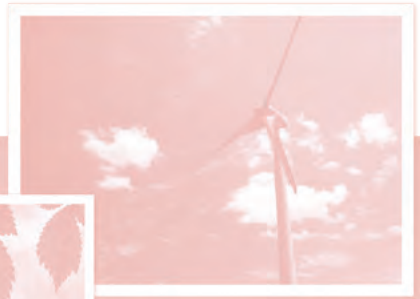
Furthermore, ensuring the security of important systems, such as electric power control systems, is growing ever more important to ensuring a stable power supply.

The J-POWER Group has established a Basic Policy on Information Security and formulates and implements an annual plan with specific measures based on activities in the previous fiscal year.

Of note, the Company is strengthening its collaboration with relevant government agencies and the electric power industry overall, contributing to the stable supply of electric power from an IT perspective. The Company is implementing robust information security measures in constructing the Ohma Nuclear Power Plant, with the IT department working in close coordination with the nuclear power department.

Note: Please refer to the J-POWER website for more information on the Basic Policy on Information Security and information security measures.
http://www.jpower.co.jp/english/privacy/








FINANCIAL SECTION/ FACT DATA

Consolidated Balance Sheet

(Millions of yen)

	2018/3	2019/3
Assets		
Noncurrent Assets	2,325,256	**2,401,671**
Electric Utility Plant and Equipment	951,149	**944,323**
Hydroelectric Power Production Facilities	346,719	**351,141**
Thermal Power Production Facilities	305,191	**302,274**
Internal Combustion Engine Power Production Facilities	3,029	**2,967**
Renewable Power Production Facilities	50,784	**44,169**
Transmission Facilities	153,180	**150,699**
Transformation Facilities	29,718	**29,833**
Communication Facilities	8,375	**8,552**
General Facilities	54,148	**54,684**
Overseas Business Facilities	341,418	**312,128**
Other Noncurrent Assets	93,404	**94,836**
Construction in Progress	525,740	**582,083**
Construction and Retirement in Progress	525,740	**582,083**
Nuclear Fuel	73,800	**74,514**
Nuclear Fuel in Processing	73,800	**74,514**
Investments and Other Assets	339,743	**393,785**
Long-Term Investments	256,715	**313,339**
Deferred Tax Assets	47,744	**53,321**
Other	35,283	**27,123**
Current Assets	321,798	**364,508**
Cash and Deposits	129,675	**121,187**
Notes and Accounts Receivable–Trade	91,432	**84,686**
Short-Term Investments	9,045	**66,000**
Inventories	52,368	**53,483**
Other	39,322	**39,149**
Allowance for Doubtful Accounts	(46)	**—**
Total Assets	2,647,054	**2,766,179**

(Millions of yen)

	2018/3	2019/3
Liabilities		
Noncurrent Liabilities	1,561,828	**1,622,378**
Bonds Payable	554,991	**614,992**
Long-Term Loans Payable	875,043	**852,269**
Lease Obligations	368	**1,106**
Other Provision	152	**30**
Net Defined Benefit Liability	55,176	**57,790**
Asset Retirement Obligations	28,484	**29,023**
Deferred Tax Liabilities	22,343	**19,455**
Other	25,266	**47,709**
Current Liabilities	249,100	**298,219**
Current Portion of Noncurrent Liabilities	114,307	**159,335**
Short-Term Loans Payable	16,803	**15,278**
Notes and Accounts Payable–Trade	25,539	**25,457**
Accrued Taxes	26,303	**17,155**
Other Provision	292	**678**
Asset Retirement Obligations	341	**368**
Other	65,512	**79,946**
Total Liabilities	1,810,929	**1,920,597**
Net Assets		
Shareholders' Equity	745,176	**777,699**
Capital Stock	180,502	**180,502**
Capital Surplus	119,927	**119,927**
Retained Earnings	444,753	**477,276**
Treasury Stock	(6)	**(7)**
Accumulated Other Comprehensive Income	42,114	**19,760**
Valuation Difference on Available-for-Sale Securities	16,822	**12,482**
Deferred Gains or Losses on Hedges	(6,580)	**(7,293)**
Foreign Currency Translation Adjustment	30,960	**17,551**
Remeasurements of Defined Benefit Plans	912	**(2,979)**
Non-Controlling Interests	48,833	**48,123**
Total Net Assets	836,124	**845,582**
Total Liabilities and Net Assets	2,647,054	**2,766,179**

Consolidated Statement of Income

(Millions of yen)

	2018/3	2019/3
Operating Revenue	856,252	**897,366**
Electric Utility Operating Revenue	631,923	**693,790**
Overseas Business Operating Revenue	163,084	**141,024**
Other Business Operating Revenue	61,244	**62,551**
Operating Expenses	751,916	**818,521**
Electric Utility Operating Expenses	566,143	**652,781**
Overseas Business Operating Expenses	131,251	**112,003**
Other Business Operating Expenses	54,521	**53,737**
Operating Income	104,336	**78,844**
Non-Operating Income	29,113	**18,894**
Dividend Income	1,577	**1,592**
Interest Income	1,287	**1,357**
Share of Profit of Entities Accounted for Using Equity Method	9,721	**9,657**
Gain on Sales of Securities	229	**1,999**
Other	16,298	**4,287**
Non-Operating Expenses	30,974	**29,200**
Interest Expenses	28,387	**26,377**
Other	2,586	**2,822**
Total Ordinary Revenue	885,366	**916,261**
Total Ordinary Expenses	782,890	**847,722**
Ordinary Income	102,476	**68,539**
Extraordinary Losses	3,389	**—**
Impairment Losses	3,389	**—**
Profit before Income Taxes	99,086	**68,539**
Income Taxes–Current	20,124	**17,149**
Income Taxes–Deferred	(3,700)	**(3,947)**
Total Income Taxes	16,423	**13,201**
Profit	82,662	**55,337**
Profit Attributable to Non-Controlling Interests	14,213	**9,084**
Profit Attributable to Owners of Parent	68,448	**46,252**

Consolidated Statement of Cash Flows

(Millions of yen)

	2018/3	2019/3
Cash Flows from Operating Activities		
Profit before Income Taxes	99,086	**68,539**
Depreciation and Amortization	82,298	**79,979**
Loss on Retirement of Noncurrent Assets	3,039	**4,786**
Increase (Decrease) in Net Defined Benefit Liability	(1,046)	**(2,777)**
Interest and Dividend Income	(2,864)	**(2,950)**
Interest Expenses	28,387	**26,377**
Decrease (Increase) in Notes and Accounts Receivable–Trade	(10,801)	**6,211**
Decrease (Increase) in Inventories	(5,121)	**(1,315)**
Increase (Decrease) in Notes and Accounts Payable–Trade	(2,143)	**3,394**
Share of (Profit) Loss of Entities Accounted for Using Equity Method	(9,721)	**(9,657)**
Other, Net	10,253	**10,011**
Subtotal	191,366	**182,599**
Interest and Dividend Income Received	16,620	**15,749**
Interest Expenses Paid	(28,486)	**(26,102)**
Income Taxes Paid	(19,190)	**(23,822)**
Net Cash Provided by (Used in) Operating Activities	160,310	**148,423**
Cash Flows from Investing Activities		
Purchase of Noncurrent Assets	(98,816)	**(106,009)**
Payments of Investment and Loans Receivable	(8,149)	**(74,457)**
Collection of Investment and Loans Receivable	2,243	**10,410**
Other, Net	(4,913)	**(375)**
Net Cash Provided by (Used in) Investing Activities	(109,635)	**(170,432)**
Cash Flows from Financing Activities		
Proceeds from Issuance of Bonds	99,633	**119,548**
Redemption of Bonds	(160,100)	**(40,000)**
Proceeds from Long-Term Loans Payable	56,510	**79,720**
Repayment of Long-Term Loans Payable	(53,280)	**(74,860)**
Increase in Short-Term Loans Payable	67,708	**63,470**
Decrease in Short-Term Loans Payable	(75,813)	**(64,991)**
Proceeds from Issuance of Commercial Papers	15,000	**83,000**
Redemption of Commercial Papers	(15,000)	**(83,000)**
Cash Dividends Paid	(12,810)	**(13,729)**
Dividends Paid to Non-Controlling Interests	(7,342)	**(10,826)**
Other, Net	(329)	**16,289**
Net Cash Provided by (Used in) Financing Activities	(85,825)	**74,622**
Effect of Exchange Rate Change on Cash and Cash Equivalents	3,536	**(2,375)**
Net Increase (Decrease) in Cash and Cash Equivalents	(31,614)	**50,237**
Cash and Cash Equivalents at Beginning of the Period	168,454	**136,840**
Cash and Cash Equivalents at End of the Period	136,840	**187,077**

Financial Results

Operating Income

Sales (operating revenue) increased 4.8% from the previous fiscal year to ¥897.3 billion mainly due to the increase in the fuel price and increase in sales volume of electricity procured from wholesale electricity market, etc. in the electric power business.

Operating expenses increased 8.9% from the previous fiscal year to ¥818.5 billion. This was mainly due to the increase in fuel costs associated with increase in the fuel price, and also due to the increase in power procurement costs.

As a result, operating income decreased 24.4% from the previous fiscal year, to ¥78.8 billion, with the operating income margin falling 3.4 percentage points to 8.8%.

Ordinary Income

Ordinary revenue, the sum of operating and non-operating revenue, increased 3.5% from the previous fiscal year to ¥916.2 billion. Ordinary expenses, the sum of operating and non-operating expenses, rose 8.3% to ¥847.7 billion. As a result, ordinary income decreased 33.1% from the previous fiscal year to ¥68.5 billion.

Ordinary income by reportable segment for the subject fiscal year is as follows.

Electric Power Business

Electricity sales volume from thermal power plants showed 3.2% decrease from the previous fiscal year to 54.9 TWh, due mainly to the decrease in the load factor of thermal power plants of J-POWER (non-consolidated) from 80% to 79%. In hydroelectric power, the increase in water supply rate from 105% in the previous fiscal year to 106% resulted in 5.0% increase in electricity sales volume from the previous fiscal year to 9.7 TWh. In addition to these factors, the increase in sales volume of electricity procured from wholesale electricity market, etc. contributed to 3.4% increase in total electricity sales volume of the electric power business from the previous fiscal year to 69.3 TWh.

Sales (electric utility operating revenue) increased 9.8% from the previous fiscal year to ¥695.6 billion mainly due to the increase in the fuel price and increase in the sales volume of electricity procured from wholesale electricity market, etc.

Segment income decreased 62.1% from the previous fiscal year to ¥14.9 billion due mainly to the increase in fuel costs associated with increase in fuel price, and increase in the removal cost of existing facilities.

Electric Power-Related Business

Sales (other business operating revenue) increased 10.3% from the previous fiscal year to ¥455.3 billion mainly due to the increase in sales of coal in a consolidated subsidiary.

Segment income increased 14.6% from the previous fiscal year to ¥26.4 billion due mainly to the increase in sales.

Overseas Business

Electricity sales volume in the overseas business decreased 31.1% from the previous fiscal year to 10.9 TWh.

Sales (overseas business operating revenue) decreased 13.5% from the previous fiscal year to ¥141.0 billion due mainly to the decrease in electricity sales volume.

Segment income decreased 27.7% from the previous fiscal year to ¥29.2 billion due mainly to the fluctuations in foreign exchange.

Other Business

Sales (other business operating revenue) increased 11.4% from the previous fiscal year to ¥30.3 billion.

Segment income increased 10.3% from the previous fiscal year to ¥1.3 billion.

Profit before Income Taxes

Profit before income taxes decreased 30.8% (¥30.5 billion) compared with the previous fiscal year to ¥68.5 billion.

Profit Attributable to Owners of Parent

Total income taxes decreased 19.6% (¥3.2 billion) year on year to ¥13.2 billion, with profit attributable to owners of parent decreasing 32.4% (¥22.1 billion) from the previous fiscal year to ¥46.2 billion.

Earnings per Share

Earnings per share were ¥252.68 in fiscal 2018, compared with ¥373.93 in the previous fiscal year.

Dividend Policy

With regard to shareholder returns, taking into account such factors as the industry liberalization and other business environment in Japan, we strive to ensure stable, ongoing returns to shareholders enhanced in line with a consolidated payout ratio of around 30%, excluding factors causing short-term profit fluctuations.

For fiscal 2018, the Company paid a dividend of ¥75 per share, comprising interim and year-end dividends of ¥40 per share. As a result, the payout ratio was 26.0% (consolidated payout ratio: 29.7%), with the ratio of dividends to shareholders' equity at 2.3%.

Of note, the Company stipulates in the Articles of Incorporation that it is able to pay an interim dividend as prescribed by Article 454-5 of the Companies Act.

Financial Position

Assets

Total assets increased ¥119.1 billion from the end of the previous fiscal year to ¥2.7661 trillion mainly due to investment in the UK offshore wind power project and the increase in current assets.

Liabilities

Total liabilities increased ¥109.6 billion from the end of the previous fiscal year to ¥1.9205 trillion. Of this amount, interest-bearing debt increased ¥81.5 billion from the end of the previous fiscal year to ¥1.6428 trillion. Non-recourse loans in overseas business accounted for ¥255.8 billion of interest-bearing debt.

Net Assets

Total net assets increased ¥9.4 billion from the end of the previous fiscal year to ¥845.5 billion. This was mainly due to posting of profit attributable to owners of parent, despite decrease in foreign currency translation adjustment brought about by appreciation of the yen. The shareholders' equity ratio decreased from 29.7% at the end of the previous fiscal year to 28.8%.

Capital Expenditures

Capital expenditures amounted to ¥107.7 billion, an increase of ¥9.0 billion from the previous fiscal year. Of that amount, expenditures in the electric power business amounted to ¥99.9 billion, a decrease of ¥0.2 billion from the previous fiscal year, and expenditures related to the overseas business amounted to ¥4.7 billion, a decrease of ¥0.3 billion.

Fund Procurement

The majority of J-POWER's financing requirements are related to capital expenditures and debt refinancing. The Company's basic policy is to procure long-term funds. For the procuring of long-term funds, in the interest of ensuring low interest rates and funding stability, the Company issues straight bonds and procures long-term loans from financial institutions. The outstanding balances of straight bonds and borrowings at March 31, 2019, were ¥674.9 billion and ¥951.1 billion, respectively. For short-term funding, in addition to working capital, the Company obtains flexible bridge financing from the standpoint of enhancing responsiveness in procurement. To meet short-term funding needs, the Company is able to issue up to ¥300.0 billion in commercial paper.

Cash Flows

Cash Flows from Operating Activities

Cash inflow from operating activities decreased ¥11.8 billion from the previous fiscal year to ¥148.4 billion due mainly to the decrease in profit before income taxes.

Cash Flows from Investing Activities

Cash outflow from investment activities increased ¥60.7 billion from the previous fiscal year to ¥170.4 billion due mainly to the acquisition of interest in the UK offshore wind power project.

Cash Flows from Financing Activities

Cash flows from financing activities reversed from outflow of ¥85.8 billion in the previous fiscal year to inflow of ¥74.6 billion. This was mainly due to the increase in fund procurement by corporate bonds and loans.

As a result of these activities, cash and cash equivalents as of March 31, 2019 increased ¥50.2 billion from the end of the previous fiscal year to ¥187.0 billion.

Risk Factors

This section discusses the main potential risks related to J-POWER's financial position, business results, current and future business operations, and other matters. From the perspective of actively disclosing information to investors, this section also provides information to help investors understand business and other risks that the Company does not necessarily consider significant.

Impact of Reforms to the Electric Power Business Regulations on J-POWER's Electricity Revenue and Business

The Policy on Electricity System Reform was approved by the Cabinet in April 2013, bringing about drastic changes to the business environment surrounding J-POWER. Amendments to the Electricity Business Act fully liberalized market participation in the retail of electric power in April 2016 and eliminated regulations on wholesale electricity utilities (regulations of business permits and rates). Further, the legal unbundling of the transmission and distribution divisions of the former EPCOs and J-POWER will be required, with an approximate deadline of 2020. After the legal unbundling of transmission and distribution divisions, there are plans to review the regulations on electricity retail rates (transitional measures) for the former EPCOs.

With the revision of electric power business types in the system reforms, as of April 2016, J-POWER has changed from a wholesale electricity utility as prescribed in the Electricity Business Act prior to amendment to an electricity utility that conducts power generation and transmission businesses. Cost-basis rate regulations have been repealed, and rates related to the power generation business are now determined upon consultation with customers based on market competition. Rates related to the transmission business remain regulated, with a cost-basis rate system, to maintain a healthy transmission and distribution network system.

The majority of J-POWER's operating revenue comprises rate income from domestic sales to the former EPCOs. As market competition in the power generation business advances, to ensure that the value of our power generation business receives adequate assessment, we are therefore proceeding with appropriate rate consultations with customers, primarily the former EPCOs, while proceeding to diversify customers and trade using the Japan Electric Power Exchange (JEPX).

Still, in the case that there are major changes to business plans or operations due to shifts in long-term electricity demand, further market competition, consultations with customers, faults with facilities, or legislation, and such changes cause an inability to secure adequate revenue to cover power generation costs, such a situation may adversely affect our performance.

Global Warming

J-POWER owns many coal-fired thermal power plants, which emit a relatively higher level of CO_2 with respect to power output compared to power plants using other fossil fuels, such as LNG. The Company is working to increase the efficiency and reduce the carbon emissions of its coal-fired thermal power. Also, we are working to expand our use of CO_2-free power sources, such as renewable energy, and developing nuclear power plants. Furthermore, based on the electricity business's Action Plan for Achieving a Low-Carbon Society established by electricity utilities, including J-POWER, in July 2015, we will do our utmost to achieve the targets set for the overall electric power industry.

However, going forward, if new legal regulations or other rules related to global warming countermeasures were to be introduced, causing major changes to business plans or operations, it could potentially have an adverse effect on our performance.

New Businesses in and outside Japan, Including Overseas Power Generation Business

J-POWER aims to build a new revenue platform by engaging in new electric power businesses domestically and overseas, including the overseas power generation business.

Specifically, in the overseas power generation business, we are applying the experience gleaned through our consulting services businesses in various countries in the pursuit of independent power producer (IPP) projects.

Also, in domestic electric power business, we are proceeding with new development of high-efficiency coal-fired thermal power plants as well as power generation businesses utilizing wind, geothermal, waste-fueled thermal, and other renewable energies.

However, these businesses may not generate the level of profits that we anticipate, due to unforeseeable circumstances, including major changes in operating conditions; changes in demand or the market environment; and changes in regulations. Changes in our business plans or the suspension of operations or construction prompted by such circumstances could result in related expenses or a need for additional funding that could potentially have an adverse effect on the results of our operations. Furthermore, some of these businesses are operated as joint ventures with third parties. In cases where the joint venture format is revised due to changes in the business environment or J-POWER is a minority equity owner and thus unable to engage in management and administration, the results of the joint venture may not beneficially impact our performance. In addition, overseas businesses entail foreign exchange risk as well as country risk due to political instability and other factors.

Capital Funds

The Company has invested a very large amount in power plants and other facilities. The funds for these investments have been procured mainly through borrowings and the issuance of bonds payable. We anticipate the need to raise funds in the future to invest in new domestic and overseas projects, such as Ohma Nuclear Power Plant and Takehara Thermal Power Plant New No. 1, and to repay existing obligations. If we are unable to raise the required funds on acceptable terms and in a timely manner due to the prevailing conditions in the financial markets, the Company's credit situation, or other factors at that time, then this could potentially have material adverse effects on our business development and profitability.

Ohma Nuclear Power Plant Construction Project

With regard to the Ohma Nuclear Power Plant Project, the Japan Atomic Energy Commission concluded in the August 1995 decision that the plant has a policy-oriented role in enhancing flexibility of the plan to use MOX (uranium-plutonium mixed oxide) fuel in light water reactors because the plant adopts an advanced boiling water reactor with a view to using MOX fuel for the entire core (full MOX-ABWR). In addition, the commission expected the implementation of the plan not only by J-POWER, which has primary responsibility, but also under the auspices of the government and EPCOs. Accordingly,

under the government's guidelines, the Company is the recipient of an R&D grant for the use of MOX fuel for the entire reactor core. Furthermore, the Company has already concluded basic agreements with nine former EPCOs, excluding The Okinawa Electric Power Company, Incorporated, that require the nine former EPCOs to purchase the total amount of electricity at fair cost.

As a nuclear power plant using MOX fuel for the entire core, the Ohma Nuclear Power Plant Project received consent from the local municipality of Ohma as well as Aomori Prefecture and was included by the Electric Power Development Coordination Council in the national Electric Power Development Master Plan as laid out by the Electric Power Development Promotion Act in August 1999. (The Electric Power Development Promotion Act was abolished in October 2003, and, with it, the system of the Electric Power Development Master Plan ended. The functions of the plan were taken on by the major power development site designation system, under which the project received site designation in February 2005.) In April 2008, the nuclear reactor installation permit was granted based on the Act on Control of Nuclear Raw Material, Nuclear Fuel and Nuclear Reactors, and, in May of the same year, upon the initial approval of the construction work plan by the Minister of Economy, Trade and Industry, based on the Electricity Business Act, construction began. At that time, planned construction costs were ¥469.0 billion. Construction was suspended immediately after the Great East Japan Earthquake struck in March 2011 but was resumed in October 2012.

On December 16, 2014, we submitted an application for permission for alteration of a reactor installment license and an application for construction plan approval to the Nuclear Regulation Authority (NRA) in order to undergo a review of compliance with the New Safety Standards concerning nuclear power plants promulgated by the NRA in July 2013. Specific examples of the wide-ranging measures include the raising of assumptions and enhancement of countermeasures with regard to earthquakes and tsunamis as design-basis measures to prevent severe accidents, combined with measures to prevent damage to the core and the containment vessel that were newly drawn up under the New Safety Standards as severe accident countermeasures. Furthermore, as countermeasures against terrorism, such as the deliberate crashing of an aircraft into the facility, we have decided to install a specified severe accident response facility that will enable reactor decompression and other functions to be controlled remotely to inhibit the abnormal release of radioactive material due to damage sustained by the reactor containment vessel. The construction work for the additional safety enhancement measures compiled in the above-mentioned application will commence following confirmation that the content of the Company's application conforms to New Safety Standards when reviewed by the NRA. The Company forecasts that the additional construction work will cost approximately ¥130.0 billion. Moving forward, J-POWER will seriously and appropriately respond to the NRA's conformity reviews and steadily implement necessary safety measures or other measures required in a company-wide effort to build a safe power plant.

While it is impossible to predict the progress of the compliance review as an examinee, we aim to start construction work for the additional safety enhancement measures in the latter half of 2020, and aim to complete it in the latter half of 2025. However, the construction work schedule for the additional safety measures may be extended depending on changes surrounding the nuclear power business, the status of reviews by the NRA, and the emergence of a need for additional response to the New Safety Standards. Also, in such events, construction expenses may increase further, and other related costs may arise. In addition, nuclear power generation entails various risks, such as revisions to plans due to significant changes in conditions around the nuclear power business caused by the review of Japan's nuclear policy, the advance of market competition, or other unexpected circumstances as well as risks associated with the storage and handling of radioactive materials and risks all electric power plants are exposed to, such as natural disasters and unforeseen accidents after operations have commenced. J-POWER intends to ensure that these risks are avoided or minimized. However, if any of these risks should eventuate, it could adversely affect the business performance of the Company.

Fuel for Coal-Fired Thermal Power

J-POWER's coal-fired thermal power plants use imported coal as their main source of fuel. In procuring imported coal, the Company purchases coal from diverse sources in Australia, Indonesia, Russia, and elsewhere to seek both stable and economical supply. In addition, the Company holds interests in certain coal mines, aiming for stable coal supply. The Company's imported coal procurement is handled mainly under long-term or approximately one-year contracts, with spot

purchasing to fill gaps as necessary. Coal purchase prices under long-term contracts are normally adjusted once per year in light of market prices.

The Company's fuel cost is impacted by such factors as changes in imported coal prices, supply and demand in the transport vessel market, and problems with the facilities or operations of suppliers. According to the power purchase agreements with customers for our major coal-fired thermal power plants, the electricity rates corresponding to fuel price properly reflect market conditions relating to fuel procurement. As a result, fluctuations in fuel cost have a limited impact on the business performance of J-POWER. However, if coal prices rise sharply, there will be a delay before the rise in fuel prices is reflected in electricity rates. This could have a temporary adverse effect on the results of our performance. Furthermore, should a significant fall in coal prices have a significant effect on the performance of a mine in which the Company holds an interest, the Company's performance could also be adversely affected.

Natural Disasters and Accidents

Should a natural disaster, human error, terrorist activity, fuel supply stoppage, or other unforeseen circumstance result in a major disruption of one of J-POWER's power plants or transmission or transformation facilities, or should such an event disrupt the information systems that control operations at these facilities, this could potentially hamper our business operations and consequently have an adverse effect on the surrounding environment. To prevent accidents at power plants as well as transmission and transformation facilities, which are important infrastructure for Japan, to ensure the safety of involved parties and to preserve the surrounding environment, J-POWER works to establish security and disaster prevention systems, take accident and disaster prevention measures and emergency response and recovery countermeasures, and implement environmental monitoring.

Nevertheless, if an accident or other event were to halt operations of J-POWER's power plant, transmission, or transformation facilities, or if an accident or other event were to negatively impact the surrounding environment, the Company's performance could be adversely affected.

Legal Regulations

The electric power business, which comprises the majority of J-POWER's business, is regulated by the Electricity Business Act.

In line with the Amended Electricity Business Act of June 2014, regulations related to wholesale electricity utilities (regulations on business permits and rates) stipulated in the previous act were repealed in April 2016. However, J-POWER will continue to be regulated under the act as an electricity utility that operates power generation and transmission businesses. Thus, J-POWER is subject to business and safety regulations as well as change and suspension orders derived from such regulations, and also to provisions regarding the cancellation of licenses to operate transmission business. The Company's business operations are also subject to various other laws and regulations. If the Company is unable to comply with these laws and regulations, or if these laws and regulations are revised, this could potentially have an adverse effect on our business operations and performance.

Also, based on the concept of mutual aid for nuclear power operators, nuclear power business operators are obligated to contribute to expenses required for the Nuclear Damage Compensation and Decommissioning Facilitation Corporation, based on the Nuclear Damage Compensation and Decommissioning Facilitation Corporation Act, which aims to build a system that centers on a facilitation organization that can respond to nuclear damage compensation into the future. In relation to the Ohma Nuclear Power Plant Project, which is currently under way, J-POWER will pay contributions once the Ohma Nuclear Power Plant commences operation of the nuclear reactor, as stipulated in the Act on Compensation for Nuclear Damage. Depending on the amount of such contributions, this may adversely affect the performance of the Company.

Management of Business Information

J-POWER holds a large amount of important information that must be kept confidential, including personal information. J-POWER controls this information carefully by implementing information security measures, employee training programs, and other means. However, a leak of sensitive information outside the Company could adversely affect J-POWER's reputation and business performance.

Consolidated: Operating Revenue/Expenses Comparison

	2010/3	2011/3	2012/3	2013/3	2014/3
Operating Revenue	**584,484**	**635,975**	**654,600**	**656,056**	**706,835**
Electric Utility Operating Revenue	530,289	584,436	609,775	605,338	609,080
Hydroelectric (Wholesale Electric Power Business)	108,994	108,152	108,479	106,681	104,765
Thermal (Wholesale Electric Power Business)	349,693	406,488	424,436	413,938	411,850
Other Electric Power Business	14,754	13,723	22,371	30,707	37,875
Overseas Business Operating Revenue*1	1,576	1,881	2,005	1,647	42,834
Other Business Operating Revenue*2	52,617	49,657	42,819	49,070	54,920
Operating Expenses	**535,544**	**565,387**	**604,800**	**601,490**	**647,663**
Operating Income	**48,939**	**70,588**	**49,800**	**54,566**	**59,171**
Non-Operating Income	**18,734**	**14,965**	**15,356**	**17,577**	**22,357**
Share of Profit of Entities Accounted for Using Equity Method	11,722	9,072	9,565	11,728	16,380
Other	7,011	5,893	5,790	5,849	5,976
Non-Operating Expenses	**25,979**	**29,231**	**28,536**	**27,318**	**41,451**
Interest Expenses	23,085	22,371	22,005	22,362	25,305
Foreign Exchange Losses	—	—	—	991	11,190
Other	2,894	6,860	6,530	3,964	4,955
Ordinary Income	**41,694**	**56,322**	**36,619**	**44,825**	**40,077**
Extraordinary Income	—	1,635	—	—	2,386
Extraordinary Losses	—	19,176	3,382	—	—
Profit Attributable to Owners of Parent	**29,149**	**19,583**	**16,113**	**29,808**	**28,694**
Average Exchange Rates (Yen/US$)	92.89	85.74	79.08	82.91	100.17
Foreign Exchange Rate at December 31 (Yen/THB)	2.76	2.70	2.45	2.82	3.20
Foreign Exchange Rate at December 31 (THB/US$)	33.32	30.15	31.69	30.63	32.81

Consolidated: Electricity Sales Volume

Electric Power Business	**57,238**	**65,815**	**66,084**	**65,605**	**65,421**
Hydroelectric (Wholesale Electric Power Business)	9,214	10,267	10,318	9,032	8,759
Thermal (Wholesale Electric Power Business)	46,546	54,086	53,756	54,333	54,316
Other Electric Power Businesses	1,477	1,462	2,010	2,239	2,345
Overseas Business*4	**—**	**—**	**—**	**—**	**3,665**
Domestic Hydroelectric: Water Supply Rate	96%	106%	115%	102%	99%
Domestic Thermal: Load Factor	68%	78%	77%	78%	79%

*1 Revenues of the overseas business segment (including revenues of overseas consolidated subsidiaries, overseas consulting businesses, etc.)
*2 "Other Businesses Operating Revenue" is composed of revenues of "Electric Power-Related Business" and "Other Business."
*3 Electric power sales volume of electricity procured from wholesale electricity market, etc.
*4 Electric power sales volume of overseas consolidated subsidiaries (Electric power sales volume of equity method affiliates is not included.)

(Millions of yen)

2015/3	2016/3
750,627	**780,072**
588,184	570,837
105,705	109,034
389,192	380,382
41,707	30,265
108,916	155,952
53,526	53,282
677,767	**692,157**
72,859	**87,915**
22,714	**17,871**
15,659	10,889
7,054	6,981
36,223	**47,248**
28,224	30,495
1,547	12,888
6,451	3,865
59,350	**58,538**
2,127	—
—	—
43,206	**40,081**
109.76	120.15
3.67	3.34
32.96	36.09
	(Million kWh)
64,049	**67,317**
9,028	10,322
52,577	55,010
2,442	1,985
8,678	**13,896**
98%	111%
76%	80%

(Millions of yen)

Consolidated: Operating Revenue/Expenses Comparison

	2017/3	2018/3	2019/3
Operating Revenue	**744,402**	**856,252**	**897,366**
Electric Utility Operating Revenue	538,558	631,923	693,790
Electric Power Generation Business	487,263	577,861	642,409
Transmission/ Transformation Business	49,021	48,679	49,497
Overseas Business Operating Revenue*1	149,888	163,084	141,024
Other Business Operating Revenue*2	55,955	61,244	62,551
Operating Expenses	**662,675**	**751,916**	**818,521**
Operating Income	**81,726**	**104,336**	**78,844**
Non-Operating Income	**20,526**	**29,113**	**18,894**
Share of Profit of Entities Accounted for Using Equity Method	13,258	9,721	9,657
Other	7,268	19,392	9,237
Non-Operating Expenses	**35,103**	**30,974**	**29,200**
Interest Expenses	29,798	28,387	26,377
Other	5,304	2,586	2,822
Ordinary Income	**67,150**	**102,476**	**68,539**
Extraordinary Losses	—	3,389	—
Profit Attributable to Owners of Parent	**41,429**	**68,448**	**46,252**
Average Exchange Rates (Yen/US$)	108.34	110.85	110.92
Foreign Exchange Rate at December 31 (Yen/THB)	3.24	3.45	3.41
Foreign Exchange Rate at December 31 (THB/US$)	35.83	32.68	32.45

Consolidated: Electricity Sales Volume

(Million kWh)

Electric Power Business	**62,791**	**67,090**	**69,356**
Hydroelectric	8,508	9,247	9,709
Thermal	53,513	56,782	54,946
Wind	769	824	815
Other*3	—	235	3,886
Overseas Business*4	**14,687**	**15,871**	**10,927**
Domestic Hydroelectric: Water Supply Rate	92%	105%	106%
Domestic Thermal: Load Factor	75%	80%	79%

	2010/3	2011/3	2012/3
Consolidated: Balance Sheet Items			
Noncurrent Assets	1,879,804	1,842,658	1,849,786
Electric Utility Plant and Equipment	1,226,640	1,178,492	1,111,251
Overseas Business Facilities	—	—	—
Other Noncurrent Assets	49,619	64,920	65,657
Construction in Progress	309,740	301,676	380,425
Nuclear Fuel	38,688	46,693	54,157
Investments and Other Assets	255,115	250,875	238,295
Current Assets	144,276	169,727	166,607
Total Assets	**2,024,080**	**2,012,386**	**2,016,394**
Interest-Bearing Debt	1,452,515	1,429,037	1,435,736
Other	156,583	168,450	174,465
Total Liabilities	**1,609,099**	**1,597,487**	**1,610,202**
Shareholders' Equity	426,680	435,760	441,369
Accumulated Other Comprehensive Income	(14,003)	(19,997)	(33,985)
Non-Controlling Interests	2,304	(863)	(1,191)
Total Net Assets	**414,981**	**414,898**	**406,192**
Consolidated: Cash Flow Items			
Net Cash Provided by (Used in) Operating Activities	**169,148**	**151,236**	**125,891**
Profit before Income Taxes	42,105	38,739	33,237
(Reference) Depreciation and Amortization on a Non-Consolidated Basis	115,585	106,080	100,423
Net Cash Provided by (Used in) Investing Activities	**(129,504)**	**(124,675)**	**(136,852)**
Capital Expenditure for Subsidiaries	(13,502)	(30,200)	(64,235)
(Reference) CAPEX on a Non-Consolidated Basis	(97,908)	(73,796)	(68,493)
Free Cash Flow	**39,643**	**26,560**	**(10,960)**
Consolidated: Financial Indicators			
Return on Assets (ROA)	2.1%	2.8%	1.8%
ROA (after exclusion of the construction in progress of tangible fixed assets)	2.5%	3.3%	2.2%
Return on Equity (ROE)	7.4%	4.7%	3.9%
Net Income per Share (EPS) (Yen)	194.26	130.51	107.39
Net Assets per Share (BPS) (Yen)	2,750.20	2,770.77	2,714.94
Equity Ratio	20.4%	20.7%	20.2%
Debt-Equity Ratio	3.5	3.4	3.5
Number of Common Shares Issued at the End of the Period (excluding treasury stock) (Thousands)	150,053	150,053	150,053

(Millions of yen)

2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	**2019/3**
1,975,202	2,149,579	2,275,453	2,232,286	2,271,046	2,325,256	2,401,671
1,058,849	1,023,751	986,552	948,252	958,754	951,149	944,323
14,311	125,018	264,800	357,448	332,010	341,418	312,128
104,529	109,787	115,111	101,827	92,501	93,404	94,836
464,674	512,604	506,967	441,080	476,171	525,740	582,083
59,769	69,216	71,467	73,447	73,682	73,800	74,514
273,067	309,201	330,555	310,231	337,926	339,743	393,785
194,707	235,636	383,695	308,436	335,239	321,798	364,508
2,169,909	**2,385,216**	**2,659,149**	**2,540,723**	**2,606,285**	**2,647,054**	**2,766,179**
1,523,059	1,649,993	1,723,659	1,628,783	1,620,082	1,561,361	1,642,867
192,964	215,745	239,191	236,506	222,183	249,568	277,729
1,716,024	**1,865,739**	**1,962,851**	**1,865,289**	**1,842,266**	**1,810,929**	**1,920,597**
460,673	478,860	629,463	650,817	689,542	745,176	777,699
(6,768)	37,350	59,268	15,775	34,276	42,114	19,760
(19)	3,265	7,566	8,839	40,200	48,833	48,123
453,885	**519,477**	**696,298**	**675,433**	**764,019**	**836,124**	**845,582**
119,786	**122,110**	**147,813**	**146,130**	**115,440**	**160,310**	**148,423**
45,176	42,770	61,598	58,421	67,150	99,086	68,539
89,485	81,500	77,824	73,475	49,696	53,469	51,050
(170,369)	**(177,375)**	**(142,964)**	**(131,541)**	**(137,663)**	**(109,635)**	**(170,432)**
(100,277)	(95,747)	(87,971)	(37,530)	(17,500)	(14,748)	(19,814)
(66,262)	(86,554)	(61,119)	(106,386)	(99,844)	(94,159)	(88,924)
(50,582)	**(55,264)**	**4,848**	**14,588**	**(22,223)**	**50,674**	**(22,008)**
2.1%	1.8%	2.4%	2.3%	2.6%	3.9%	2.5%
2.7%	2.2%	2.9%	2.8%	3.2%	4.8%	3.2%
6.9%	5.9%	7.2%	5.9%	6.0%	9.1%	5.8%
198.65	191.23	284.43	218.97	226.33	373.93	252.68
3,024.98	3,440.23	3,762.52	3,641.59	3,954.22	4,300.98	4,356.54
20.9%	21.6%	25.9%	26.2%	27.8%	29.7%	28.8%
3.4	3.2	2.5	2.4	2.2	2.0	2.1
150,052	150,051	183,050	183,049	183,049	183,049	183,048

Non-Consolidated: Operating Revenue/Expenses

	2010/3	2011/3	2012/3	2013/3	2014/3
Operating Revenue	**530,436**	**583,213**	**599,973**	**586,993**	**582,861**
Electric Utility Operating Revenue	518,682	573,878	590,553	577,284	572,937
Hydroelectric	108,994	108,152	108,479	106,681	104,765
Thermal	349,693	406,488	424,436	413,938	411,935
Transmission Revenue	59,993	59,237	57,638	56,664	56,236
Incidental Business Operating Revenue	11,753	9,335	9,419	9,708	9,923
Operating Expenses	**489,531**	**520,569**	**557,628**	**543,659**	**542,396**
Electric Utility Operating Expenses	479,085	513,395	549,010	534,765	533,444
Personnel Expenses	36,187	31,276	34,441	34,084	29,810
Amortization of the Actuarial Difference*	3,408	(2,213)	1,752	505	(3,099)
Fuel Cost	173,957	209,967	238,497	238,441	250,259
Repair Expenses	45,390	50,635	54,286	56,454	58,521
Depreciation and Amortization Cost	115,585	106,080	100,423	89,485	81,500
Other	107,965	115,435	121,362	116,299	113,352
Incidental Business Operating Expenses	10,446	7,174	8,617	8,894	8,952
Operating Income	**40,904**	**62,644**	**42,344**	**43,333**	**40,464**

(Amortization of the Actuarial Difference)						
Actuarial Difference	The Remainders in the Previous Year	4,983	1,574	(1,022)	809	233
	Actuarial Difference in the Present Year	—	—	—	—	—
	Actuarial Difference in the Previous Year	—	(4,811)	3,584	(70)	(4,746)
	Subtotal	4,983	(3,236)	2,561	738	(4,530)
Amortization*		3,408	(2,213)	1,752	505	(3,099)
The Remainders in the Present Year		1,574	(1,022)	809	233	(1,431)

[Repair Expenses]					
Hydroelectric	8,009	8,112	13,039	11,340	11,776
Thermal	33,242	38,765	35,733	40,438	41,942
Transmission/Transformation	2,327	2,259	3,761	3,161	3,205
Other	1,811	1,496	1,753	1,513	1,596
Total	45,390	50,635	54,286	56,454	58,521

[Depreciation]					
Hydroelectric	24,054	23,553	23,418	21,852	21,318
Thermal	69,307	61,318	56,707	48,411	40,879
Transmission/Transformation	17,752	16,849	16,053	15,302	15,074
Other	4,470	4,359	4,242	3,919	4,226
Total	115,585	106,080	100,423	89,485	81,500

* Until the year ended March 31, 2009, actuarial differences were amortized from the year in which they occurred. Since the year ended March 31, 2010, actuarial differences are amortized from the year following the year in which they occurred.

(Millions of yen)

2015/3	2016/3
557,943	**552,341**
548,580	543,019
105,705	109,034
389,607	381,201
53,267	52,783
9,363	9,322
513,387	**510,770**
504,946	502,326
28,566	31,811
(4,372)	(2,308)
228,482	218,481
61,005	58,325
77,824	73,475
109,067	120,231
8,441	8,444
44,555	**41,570**
(1,431)	(2,019)
—	—
(4,960)	(1,354)
(6,392)	(3,374)
(4,372)	(2,308)
(2,019)	(1,066)
13,391	12,160
42,382	40,985
3,671	3,495
1,558	1,683
61,005	58,325
20,947	20,640
37,982	33,409
14,395	13,871
4,500	5,553
77,824	73,475

(Millions of yen)

Non-Consolidated: Operating Revenue/Expenses

		2017/3	2018/3	2019/3
Operating Revenue		**552,460**	**614,591**	**646,958**
Electric Utility Operating Revenue		510,909	601,475	633,617
Sold power to other suppliers		457,953	545,659	580,652
Transmission and Other		52,955	55,816	52,964
Incidental Business Operating Revenue		11,551	13,115	13,340
Operating Expenses		**494,829**	**571,519**	**628,279**
Electric Utility Operating Expenses		484,288	559,300	615,712
Personnel Expenses		43,657	34,205	32,494
Amortization of the Actuarial Difference*		10,726	(103)	(1,463)
Fuel Cost		196,843	257,308	289,024
Repair Expenses		68,348	63,458	69,715
Depreciation and Amortization Cost		49,696	53,469	51,050
Other		125,743	150,858	173,427
Incidental Business Operating Expenses		10,540	12,219	12,567
Operating Income		**27,630**	**43,071**	**18,678**
(Amortization of the Actuarial Difference)				
Actuarial Difference	The Remainders in the Previous Year	(1,066)	4,955	(47)
	Actuarial Difference in the Present Year	—	—	—
	Actuarial Difference in the Previous Year	16,748	(5,106)	(2,092)
	Subtotal	15,682	(150)	(2,139)
Amortization*		10,726	(103)	(1,463)
The Remainders in the Present Year		4,955	(47)	(675)
[Repair Expenses]				
Hydroelectric		11,915	11,996	16,865
Thermal		50,770	46,027	45,238
Transmission/Transformation		3,948	3,924	5,950
Other		1,713	1,510	1,660
Total		68,348	63,458	69,715
[Depreciation]				
Hydroelectric		13,245	15,174	14,382
Thermal		23,007	24,318	23,093
Transmission/Transformation		10,068	10,516	10,033
Other		3,373	3,459	3,541
Total		49,696	53,469	51,050

Consolidated Balance Sheet

	2010/3	2011/3	2012/3
Assets			
Noncurrent Assets	**1,879,804**	**1,842,658**	**1,849,786**
Electric Utility Plant and Equipment	**1,226,640**	**1,178,492**	**1,111,251**
Hydroelectric Power Production Facilities	403,329	389,892	374,510
Thermal Power Production Facilities	482,045	454,823	423,049
Internal Combustion Engine Power Production Facilities	11,764	4,694	4,296
Renewable Power Production Facilities	24,334	38,436	34,479
Transmission Facilities	207,948	197,163	186,274
Transformation Facilities	35,089	34,456	31,774
Communication Facilities	9,339	9,539	9,065
General Facilities	52,789	49,486	47,801
Overseas Business Facilities	**—**	**—**	**—**
Other Noncurrent Assets	**49,619**	**64,920**	**65,657**
Construction in Progress	**309,740**	**301,676**	**380,425**
Construction and Retirement in Progress	309,740	301,676	380,425
Nuclear Fuel	**38,688**	**46,693**	**54,157**
Nuclear Fuel in Processing	38,688	46,693	54,157
Investments and Other Assets	**255,115**	**250,875**	**238,295**
Long-Term Investments	195,414	181,934	181,132
Net Defined Benefit Asset	—	—	—
Deferred Tax Assets	57,207	56,843	52,571
Other	2,964	13,292	5,653
Allowance for Doubtful Accounts	(471)	(1,196)	(1,062)
Current Assets	**144,276**	**169,727**	**166,607**
Cash and Deposits	38,749	37,202	35,112
Notes and Accounts Receivable–Trade	47,003	57,781	59,283
Short-Term Investments	2,253	2,346	1,331
Inventories	25,717	32,400	34,972
Deferred Tax Assets	5,560	5,998	6,688
Other	24,995	34,006	29,284
Allowance for Doubtful Accounts	(2)	(9)	(63)
Total Assets	**2,024,080**	**2,012,386**	**2,016,394**

Notes: 1. In accordance with revisions in Electric Utility Accounting Regulations, wind power and geothermal power production facilities are recorded as "Renewable Power Production Facilities" from the fiscal year ended March 31, 2010.
2. Until the year ended March 31, 2012, "Overseas Business Facilities" was included in "Other Noncurrent Assets," but it has been presented separately from the year ended March 31, 2014 due to the increase in monetary importance due to progress in the Thai projects. For year-on-year comparison purposes, it is also presented separately in the year ended March 31, 2013.
3. Accounting policies were partially changed from the year ended March 31, 2017 and the figures for the year ended March 31, 2016 reflect retroactive application of the change.
4. Partial amendments to "Accounting Standard for Tax Effect Accounting," were applied from the year ended March 31, 2019. For year-on-year comparison purposes, figures for the year ended March 31, 2018 have been restated according to the amended standard.

(Millions of yen)

2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	**2019/3**
1,975,202	**2,149,579**	**2,275,453**	**2,237,836**	**2,271,046**	**2,325,256**	**2,401,671**
1,058,849	**1,023,751**	**986,552**	**948,252**	**958,754**	**951,149**	**944,323**
363,437	355,616	348,911	343,193	346,037	346,719	351,141
387,957	362,307	334,252	313,744	313,198	305,191	302,274
3,956	5,414	5,105	3,754	3,301	3,029	2,967
31,358	36,698	40,877	35,960	46,170	50,784	44,169
185,754	176,102	168,680	161,491	157,790	153,180	150,699
30,608	30,482	30,206	29,884	29,598	29,718	29,833
8,638	8,596	8,469	8,449	8,186	8,375	8,552
47,137	48,532	50,049	51,772	54,470	54,148	54,684
14,311	**125,018**	**264,800**	**357,448**	**332,010**	**341,418**	**312,128**
104,529	**109,787**	**115,111**	**101,827**	**92,501**	**93,404**	**94,836**
464,674	**512,604**	**506,967**	**441,080**	**476,171**	**525,740**	**582,083**
464,674	512,604	506,967	441,080	476,171	525,740	582,083
59,769	**69,216**	**71,467**	**73,447**	**73,682**	**73,800**	**74,514**
59,769	69,216	71,467	73,447	73,682	73,800	74,514
273,067	**309,201**	**330,555**	**310,231**	**337,926**	**339,743**	**393,785**
202,464	244,181	269,891	234,506	253,660	256,715	313,339
—	—	278	—	2	—	—
47,234	40,734	38,705	43,818	40,514	47,744	53,321
24,416	24,331	21,725	31,950	43,794	35,283	27,123
(1,047)	(45)	(45)	(45)	(45)	—	—
194,707	**235,636**	**383,695**	**308,436**	**335,239**	**321,798**	**364,508**
49,283	50,333	69,151	87,659	117,240	129,675	121,187
61,644	70,135	71,288	66,312	78,805	91,432	84,686
402	35,000	167,433	72,410	51,344	9,045	66,000
38,160	34,053	37,781	41,199	47,172	52,368	53,483
7,423	8,637	5,736	5,268	4,564	—	—
37,847	37,477	32,337	35,601	36,129	39,322	39,149
(54)	(0)	(32)	(14)	(18)	(46)	—
2,169,909	**2,385,216**	**2,659,149**	**2,540,723**	**2,606,285**	**2,647,054**	**2,766,179**

	2010/3	2011/3	2012/3
Liabilities			
Noncurrent Liabilities	**1,346,526**	**1,319,146**	**1,324,663**
Bonds Payable	689,883	734,898	714,914
Long-Term Loans Payable	580,925	500,913	522,407
Lease Obligations	811	1,093	983
Provision for Retirement Benefits	57,855	57,069	58,015
Other Provision	1,111	16	25
Net Defined Benefit Liability	—	—	—
Asset Retirement Obligations	—	3,620	4,585
Deferred Tax Liabilities	3,459	5,869	6,390
Other	12,479	15,666	17,339
Current Liabilities	**261,837**	**277,563**	**284,761**
Current Portion of Noncurrent Liabilities	142,923	162,958	166,342
Short-Term Loans Payable	13,327	17,528	18,443
Commercial Paper	24,998	11,999	12,999
Notes and Accounts Payable–Trade	14,804	20,112	20,011
Accrued Taxes	7,952	21,322	11,408
Other Provision	855	317	325
Asset Retirement Obligations	—	473	626
Deferred Tax Liabilities	5	11	4
Other	56,970	42,839	54,599
Reserves under Special Laws	**734**	**777**	**777**
Reserve for Fluctuation in Water Levels	734	777	777
Total Liabilities	**1,609,099**	**1,597,487**	**1,610,202**
Net Assets			
Shareholders' Equity	**426,680**	**435,760**	**441,369**
Capital Stock	152,449	152,449	152,449
Capital Surplus	81,849	81,849	81,849
Retained Earnings	255,643	264,724	270,334
Treasury Shares	(63,262)	(63,263)	(63,264)
Accumulated Other Comprehensive Income	**(14,003)**	**(19,997)**	**(33,985)**
Valuation Difference on Available-for-Sale Securities	2,960	(137)	(772)
Deferred Gains or Losses on Hedges	(3,747)	611	(4,209)
Foreign Currency Translation Adjustment	(13,217)	(20,471)	(29,003)
Remeasurements of Defined Benefit Plans	—	—	—
Non-Controlling Interests	**2,304**	**(863)**	**(1,191)**
Total Net Assets	**414,981**	**414,898**	**406,192**
Total Liabilities and Net Assets	**2,024,080**	**2,012,386**	**2,016,394**

Notes: 1. The "Accounting Standards for Retirement Benefits" (Corporate Accounting Standard No. 26 of May 17, 2012) and the "Guidelines for Applying Accounting Standards for Retirement Benefits" (Corporate Accounting Standard Application Guideline No. 25 of May 17, 2012) are applied from the end of the consolidated fiscal year ended March 31, 2014.
2. Accounting policies were partially changed from the year ended March 31, 2017 and the figures for the year ended March 31, 2016 reflect retroactive application of the change.
3. Partial amendments to "Accounting Standard for Tax Effect Accounting," were applied from the year ended March 31, 2019. For year-on-year comparison purposes, figures for the year ended March 31, 2018 have been restated according to the amended standard.

(Millions of yen)

2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	2019/3
1,402,287	**1,522,905**	**1,633,825**	**1,561,072**	**1,497,888**	**1,561,828**	**1,622,378**
694,930	691,346	666,061	575,079	494,991	554,991	614,992
608,977	741,509	857,846	867,276	891,200	875,043	852,269
982	981	697	479	353	368	1,106
59,012	—	—	—	—	—	—
36	43	84	89	120	152	30
—	49,071	48,901	65,912	58,079	55,176	57,790
3,971	6,644	7,510	11,685	11,971	28,484	29,023
7,801	14,730	20,394	18,294	23,387	22,343	19,455
26,574	18,579	32,327	22,254	17,783	25,266	47,709
313,311	**342,714**	**329,025**	**304,100**	**344,377**	**249,100**	**298,219**
196,999	207,968	169,754	158,131	208,760	114,307	159,335
18,475	20,318	30,044	28,009	24,957	16,803	15,278
3,999	—	—	—	—	—	—
25,049	33,197	44,035	37,033	24,616	25,539	25,457
10,811	8,791	13,516	23,344	19,843	26,303	17,155
273	302	270	265	267	292	678
1,495	245	372	635	592	341	368
3	9	5	22	5	—	—
56,202	71,880	71,027	56,656	65,333	65,512	79,946
425	**119**	**—**	**116**	**—**	**—**	**—**
425	119	—	116	—	—	—
1,716,024	**1,865,739**	**1,962,851**	**1,865,289**	**1,842,266**	**1,810,929**	**1,920,597**
460,673	**478,860**	**629,463**	**650,817**	**689,542**	**745,176**	**777,699**
152,449	152,449	180,502	180,502	180,502	180,502	180,502
81,849	81,849	109,902	109,902	119,927	119,927	119,927
289,639	307,829	339,061	360,418	389,117	444,753	477,276
(63,265)	(63,268)	(2)	(4)	(5)	(6)	(7)
(6,768)	**37,350**	**59,268**	**15,775**	**34,276**	**42,114**	**19,760**
4,855	9,030	19,860	12,516	15,594	16,822	12,482
(6,929)	1,772	(15,821)	(14,395)	(2,183)	(6,580)	(7,293)
(4,693)	22,955	53,205	30,464	21,295	30,960	17,551
—	3,592	2,023	(12,809)	(430)	912	(2,979)
(19)	**3,265**	**7,566**	**8,839**	**40,200**	**48,833**	**48,123**
453,885	**519,477**	**696,298**	**675,433**	**764,019**	**836,124**	**845,582**
2,169,909	**2,385,216**	**2,659,149**	**2,540,723**	**2,606,285**	**2,647,054**	**2,766,179**

Consolidated Statement of Income

	2010/3	2011/3	2012/3
Operating Revenue	**584,484**	**635,975**	**654,600**
Electric Utility Operating Revenue	530,289	584,436	609,775
Overseas Business Operating Revenue	1,576	1,881	2,005
Other Business Operating Revenue	52,617	49,657	42,819
Operating Expenses	**535,544**	**565,387**	**604,800**
Electric Utility Operating Expenses	478,644	509,116	553,873
Overseas Business Operating Expenses	—	—	—
Other Business Operating Expenses	56,899	56,271	50,927
Operating Income	**48,939**	**70,588**	**49,800**
Non-Operating Income	**18,734**	**14,965**	**15,356**
Dividends Income	1,406	1,499	1,315
Interest Income	581	1,220	968
Share of Profit of Entities Accounted for Using Equity Method	11,722	9,072	9,565
Foreign Exchange Gains	—	—	—
Gain on Sales of Securities	—	—	—
Other	5,024	3,172	3,506
Non-Operating Expenses	**25,979**	**29,231**	**28,536**
Interest Expenses	23,085	22,371	22,005
Foreign Exchange Losses	—	—	—
Other	2,894	6,860	6,530
Total Ordinary Revenue	**603,218**	**650,941**	**669,957**
Total Ordinary Expenses	**561,524**	**594,619**	**633,337**
Ordinary Income	**41,694**	**56,322**	**36,619**
Provision or Reversal of Reserve for Fluctuation in Water Levels	**(411)**	**42**	**—**
Provision of Reserve for Fluctuation in Water Levels	—	42	—
Reversal of Reserve for Fluctuation in Water Levels	(411)	—	—
Extraordinary Income	**—**	**1,635**	**—**
Extraordinary Loss	**—**	**19,176**	**3,382**
Profit before Income Taxes	**42,105**	**38,739**	**33,237**
Income Taxes–Current	**11,270**	**20,403**	**12,953**
Income Taxes–Deferred	**1,883**	**2,459**	**4,370**
Total Income Taxes	**13,153**	**22,863**	**17,324**
Profit	**—**	**15,876**	**15,913**
Profit Attributable to Non-Controlling Interests	**(197)**	**(3,707)**	**(200)**
Profit Attributable to Owners of Parent	**29,149**	**19,583**	**16,113**

Notes: 1. Until the year ended March 31, 2012, "Overseas Business Operating Revenue" was included in "Other Business Operating Revenue," but it has been presented separately from the year ended March 31, 2014 due to the increase in monetary importance due to progress in the Thai projects. For year-on-year comparison purposes, it is also presented separately in the year ended March 31, 2013.

2. Until the year ended March 31, 2012, "Overseas Business Operating Expenses" was included in "Electric Utility Operating Expenses" and "Other Business Operating Expenses," but it has been presented separately from the year ended March 31, 2014 due to the increase in monetary importance due to progress in the Thai projects. For year-on-year comparison purposes, it is also presented separately in the year ended March 31, 2013.
Under each item, there are cases of fiscal years in which the monetary importance has been minor being included and represented under another item.

3. Accounting policies were partially changed from the year ended March 31, 2017 and the figures for the year ended March 31, 2016 reflect retroactive application of the change.

4. Under each item, there are cases of fiscal years in which the monetary importance has been minor being included and represented under another item.

(Millions of yen)

2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	2019/3
656,056	**706,835**	**750,627**	**780,072**	**744,402**	**856,252**	**897,366**
605,338	609,080	588,184	570,837	538,558	631,923	693,790
1,647	42,834	108,916	155,952	149,888	163,084	141,024
49,070	54,920	53,526	53,282	55,955	61,244	62,551
601,490	**647,663**	**677,767**	**692,157**	**662,675**	**751,916**	**818,521**
540,134	545,430	521,351	506,234	487,766	566,143	652,781
8,346	43,899	98,979	131,605	119,535	131,251	112,003
53,009	58,333	57,436	54,317	55,374	54,521	53,737
54,566	**59,171**	**72,859**	**87,915**	**81,726**	**104,336**	**78,844**
17,577	**22,357**	**22,714**	**17,871**	**20,526**	**29,113**	**18,894**
1,321	1,454	1,869	2,409	1,689	1,577	1,592
1,195	1,054	1,155	905	1,024	1,287	1,357
11,728	16,380	15,659	10,889	13,258	9,721	9,657
—	—	—	—	1,770	11,179	—
—	—	—	—	—	—	1,999
3,331	3,468	4,030	3,667	2,783	16,298	4,287
27,318	**41,451**	**36,223**	**47,248**	**35,103**	**30,974**	**29,200**
22,362	25,305	28,224	30,495	29,798	28,387	26,377
991	11,190	1,547	12,888	—	—	—
3,964	4,955	6,451	3,865	5,304	2,586	2,822
673,634	**729,192**	**773,341**	**797,944**	**764,929**	**885,366**	**916,261**
628,808	**689,115**	**713,991**	**739,405**	**697,779**	**782,890**	**847,722**
44,825	**40,077**	**59,350**	**58,538**	**67,150**	**102,476**	**68,539**
(351)	**(306)**	**(119)**	**116**	**—**	**—**	**—**
—	—	—	116	—	—	—
(351)	(306)	(119)	—	—	—	—
—	**2,386**	**2,127**	**—**	**—**	**—**	**—**
—	**—**	**—**	**—**	**—**	**3,389**	**—**
45,176	**42,770**	**61,598**	**58,241**	**67,150**	**99,086**	**68,539**
11,940	**8,372**	**7,468**	**12,821**	**18,634**	**20,124**	**17,149**
3,622	**6,579**	**9,917**	**5,059**	**2,847**	**(3,700)**	**(3,947)**
15,562	**14,952**	**17,386**	**17,880**	**21,482**	**16,423**	**13,201**
29,613	**27,817**	**44,212**	**40,540**	**45,667**	**82,662**	**55,337**
(194)	**(876)**	**1,005**	**459**	**4,238**	**14,213**	**9,084**
29,808	**28,694**	**43,206**	**40,081**	**41,429**	**68,448**	**46,252**

Consolidated Statement of Cash Flows

	2010/3	2011/3	2012/3
Cash Flows from Operating Activities			
Profit before Income Taxes	42,105	38,739	33,237
Depreciation and Amortization	120,313	111,644	105,271
Impairment Loss	384	9,266	946
Loss on Liquidation of Business	—	4,550	—
Loss on Retirement of Noncurrent Assets	2,516	2,941	2,434
Disaster Recovery Expenses	—	—	3,382
Increase (Decrease) in Provision for Retirement Benefits	5,923	(779)	971
Increase (Decrease) in Net Defined Benefit Liability	—	—	—
Increase (Decrease) in Reserve for Fluctuation in Water Levels	(411)	42	—
Interest and Dividend Income	(1,987)	(2,720)	(2,284)
Interest Expenses	23,085	22,371	22,005
Decrease (Increase) in Notes and Accounts Receivable–Trade	6,311	(10,753)	(1,607)
Decrease (Increase) in Inventories	17,645	(6,132)	(2,488)
Increase (Decrease) in Notes and Accounts Payable–Trade	7,034	3,171	3,148
Loss (Gain) on Sales of Securities	(231)	(1,450)	(484)
Loss (Gain) on Valuation of Securities	—	5,359	1,791
Share of (Profit) Loss of Entities Accounted for Using Equity Method	(11,722)	(9,072)	(9,565)
Loss (Gain) on Sales of Shares of Subsidiaries	—	—	—
Loss (Gain) on Sale of Noncurrent Assets	(590)	432	747
Distribution by Dissolution of Anonymous Association	—	—	—
Other, Net	(10,205)	8,355	8,526
Subtotal	200,170	175,965	166,031
Interest and Dividend Income Received	5,845	7,644	6,869
Interest Expenses Paid	(22,987)	(22,881)	(21,765)
Income Taxes Paid	(13,880)	(9,492)	(25,244)
Net Cash Provided by (Used in) Operating Activities	**169,148**	**151,236**	**125,891**
Cash Flows from Investing Activities			
Proceeds from Contribution Received for Construction	9,962	7,068	3,102
Purchase of Noncurrent Assets	(114,967)	(115,827)	(133,711)
Proceeds from Sales of Noncurrent Assets	1,860	2,453	2,285
Payments of Investments and Loans Receivable	(23,456)	(14,184)	(6,068)
Collections of Investments and Receivable	3,896	5,235	4,915
Purchase of Investments in Subsidiaries Resulting in Change in Scope of Consolidation	(495)	—	—
Proceeds from Purchase of Investments in Subsidiaries, Net of Cash Acquired	—	—	—
Proceeds from Sales of Shares of Subsidiaries Resulting in Change in Scope of Consolidation	—	—	1,425
Other, Net	(6,305)	(9,419)	(8,802)
Net Cash Provided by (Used in) Investing Activities	**(129,504)**	**(124,675)**	**(136,852)**
Cash Flows from Financing Activities			
Proceeds from Issuance of Bonds	59,792	79,726	—
Redemption of Bonds	—	(88,000)	(35,000)
Proceeds from Long-Term Loans Payable	122,794	49,036	176,745
Repayment of Long-Term Loans Payable	(121,555)	(53,988)	(127,173)
Increase in Short-Term Loans Payable	42,500	84,880	103,760
Decrease in Short-Term Loans Payable	(38,294)	(80,680)	(103,070)
Proceeds from Issuance of Commercial Papers	475,905	392,965	359,968
Redemption of Commercial Papers	(561,000)	(406,000)	(359,000)
Proceeds from Issuance of Common Shares	—	—	—
Proceeds from Stock Issuance to Minority Shareholders	—	—	—
Purchase of Treasury Stock	—	—	—
Proceeds from Sales of Treasury Shares	—	—	—
Proceeds from Sales of Subsidiaries' Shares that Do not Result in Changes in Scope of Consolidation	—	—	—
Cash Dividends Paid	(10,503)	(10,503)	(10,502)
Dividends Paid to Minority Shareholders	(2)	(8)	(196)
Dividends Paid to Non-Controlling Interests	—	—	—
Other, Net	11	3,398	3,764
Net Cash Provided by (Used in) Financing Activities	**(30,351)**	**(29,172)**	**9,296**
Effect of Exchange Rate Change on Cash and Cash Equivalents	**1,506**	**285**	**(585)**
Net Increase (Decrease) in Cash and Cash Equivalents	**10,798**	**(2,326)**	**(2,248)**
Cash and Cash Equivalents at Beginning of the Period	**29,530**	**40,329**	**38,002**
Increase (Decrease) in Cash from the Addition of Consolidated Subsidiaries	**—**	**—**	**(394)**
Cash and Cash Equivalents at the End of the Period	**40,329**	**38,002**	**35,359**

Notes: 1. Accounting policies were partially changed from the year ended March 31, 2017 and the figures for the year ended March 31, 2016 reflect retroactive application of the change.
2. Under each item, there are cases of fiscal years in which the monetary importance has been minor being included and represented under another item.

(Millions of yen)

2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	**2019/3**
45,176	42,770	61,598	58,421	67,150	99,086	68,539
95,254	91,408	93,309	94,582	75,660	82,298	79,979
—	14	2,489	1,392	2,624	3,389	—
—	—	—	—	—	—	—
2,418	2,241	2,359	3,656	2,842	3,039	4,786
—	—	—	—	—	—	—
987	—	—	—	—	—	—
—	(4,800)	(4,611)	(3,351)	9,276	(1,046)	(2,777)
(351)	(306)	(119)	116	—	—	—
(2,517)	(2,508)	(3,024)	(3,314)	(2,713)	(2,864)	(2,950)
22,362	25,305	28,224	30,495	29,798	28,387	26,377
(2,133)	(7,753)	23	2,445	(13,433)	(10,801)	6,211
(3,133)	4,223	(3,593)	(3,259)	(5,503)	(5,121)	(1,315)
5,642	9,244	6,639	(3,085)	(6,477)	(2,143)	3,394
(620)	(280)	(252)	—	—	—	—
242	—	—	—	—	—	—
(11,728)	(16,380)	(15,659)	(10,889)	(13,258)	(9,721)	(9,657)
—	—	(2,127)	—	—	—	—
526	—	—	—	—	—	—
—	—	—	—	—	—	—
(8,742)	2,123	6,841	3,134	6,786	6,863	10,011
143,385	145,302	172,097	170,342	152,753	191,366	182,599
7,926	12,626	10,735	13,573	13,229	16,620	15,749
(21,974)	(25,131)	(28,211)	(30,554)	(30,224)	(28,486)	(26,102)
(9,552)	(10,687)	(6,807)	(7,232)	(20,317)	(19,190)	(23,822)
119,786	**122,110**	**147,813**	**146,130**	**115,440**	**160,310**	**148,423**
6,343	—	—	—	—	—	—
(165,201)	(176,982)	(148,404)	(140,840)	(108,149)	(98,816)	(106,009)
—	—	—	—	—	—	—
(1,347)	(1,149)	(4,429)	(2,537)	(18,005)	(8,149)	(74,457)
7,938	6,460	4,053	15,960	2,577	2,243	10,410
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	1,665	—	—	—	—
(18,101)	(5,704)	4,150	(4,123)	(14,086)	(4,913)	(375)
(170,369)	**(177,375)**	**(142,964)**	**(131,541)**	**(137,663)**	**(109,635)**	**(170,432)**
39,877	79,740	39,858	—	79,702	99,633	119,548
(20,000)	(63,599)	(85,298)	(60,999)	(90,000)	(160,100)	(40,000)
207,887	241,625	189,320	96,697	83,762	56,510	79,720
(146,048)	(158,518)	(120,062)	(110,783)	(69,108)	(53,280)	(74,860)
108,500	97,221	104,942	100,944	87,663	67,708	63,470
(110,038)	(95,374)	(95,582)	(102,994)	(90,194)	(75,813)	(64,991)
326,969	83,996	—	2,999	15,000	15,000	83,000
(336,000)	(88,000)	—	(3,000)	(15,000)	(15,000)	(83,000)
—	—	59,359	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	59,740	—	—	—	—
—	—	—	—	42,363	—	—
(10,501)	(10,504)	(10,505)	(12,811)	(12,811)	(12,810)	(13,729)
—	—	—	—	—	—	—
—	—	—	—	—	(7,342)	(10,826)
856	1,709	2,148	1,315	(916)	(329)	16,289
61,502	**88,295**	**143,920**	**(88,632)**	**30,461**	**(85,825)**	**74,622**
2,615	**3,297**	**2,446**	**(2,446)**	**267**	**3,536**	**(2,375)**
13,535	**36,328**	**151,216**	**(76,490)**	**8,505**	**(31,614)**	**50,237**
35,359	**48,894**	**85,223**	**236,439**	**159,949**	**168,454**	**136,840**
—	**—**	**—**	**—**	**—**	**—**	**—**
48,894	**85,223**	**236,439**	**159,949**	**168,454**	**136,840**	**187,077**

Segment Information

	2010/3	2011/3	2012/3
Sales to External Customers			
Electric Power Business	**530,289**	**584,436**	**609,775**
Electric Power-Related Business	**24,095**	**26,294**	**23,133**
Overseas Business	**1,576**	**1,881**	**2,005**
Other Businesses	**28,522**	**23,363**	**19,686**
Consolidated	584,484	635,975	654,600
Operating Income			
Electric Power Business	**38,294**	**—**	**—**
Electric Power-Related Business	**11,207**	**—**	**—**
Other Business	**(301)**	**—**	**—**
Adjustments	(260)	—	—
Consolidated	48,939	—	—
Ordinary Income			
Electric Power Business	**22,320**	**41,832**	**22,290**
Electric Power-Related Business	**11,521**	**10,425**	**8,373**
Overseas Business	**6,511**	**5,047**	**3,499**
Other Business	**1,614**	**(1,517)**	**(3)**
Adjustments	(273)	533	2,460
Consolidated	41,694	56,322	36,619
Depreciation and Amortization			
Electric Power Business	**119,241**	**110,179**	**104,344**
Electric Power-Related Business	**2,839**	**3,362**	**3,514**
Overseas Business	**48**	**115**	**55**
Other Business	**1,349**	**1,231**	**521**
Adjustments	(3,166)	(3,244)	(3,164)
Consolidated	120,313	111,644	105,271
Increase in the Tangible and Intangible Noncurrent Assets			
Electric Power Business	**106,737**	**70,742**	**68,286**
Electric Power-Related Business	**2,507**	**5,236**	**7,119**
Overseas Business	**5,727**	**18,091**	**62,548**
Other Business	**344**	**643**	**340**
Adjustments	(3,084)	(1,584)	(570)
Consolidated	112,233	93,128	137,725

Notes: 1. From the year ended March 31, 2011, overseas business that had been included under “Other Business” was made into a separate segment. For year-on-year comparison purposes, it is also presented separately in the year ended March 31, 2010.
2. From the year ended March 31, 2011, segment income is stated in terms of ordinary income rather than operating income as before. For year-on-year comparison purposes, ordinary income is also stated in the year ended March 31, 2010.
3. Accounting policies were partially changed from the year ended March 31, 2017 and the figures for the year ended March 31, 2016 reflect retroactive application of the change.

(Millions of yen)

2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	2019/3
605,338	**609,080**	**588,184**	**570,837**	**538,558**	**631,923**	**693,790**
26,599	**29,944**	**30,467**	**31,973**	**34,004**	**36,934**	**35,518**
1,647	**42,834**	**108,916**	**155,952**	**149,888**	**163,084**	**141,024**
22,471	**24,975**	**23,059**	**21,309**	**21,950**	**24,309**	**27,032**
656,056	706,835	750,627	780,072	744,402	856,252	897,366
—	**—**	**—**	**—**	**—**	**—**	**—**
—	**—**	**—**	**—**	**—**	**—**	**—**
—	**—**	**—**	**—**	**—**	**—**	**—**
—	—	—	—	—	—	—
—	—	—	—	—	—	—
31,088	**29,088**	**33,386**	**32,239**	**22,212**	**39,561**	**14,995**
9,099	**9,626**	**8,970**	**14,462**	**14,244**	**23,098**	**26,468**
3,907	**52**	**15,990**	**11,483**	**31,229**	**40,528**	**29,284**
986	**956**	**611**	**810**	**1,376**	**1,258**	**1,388**
(256)	353	392	(456)	(1,912)	(1,970)	(3,597)
44,825	40,077	59,350	58,538	67,150	102,476	68,539
93,163	**85,173**	**81,924**	**77,628**	**54,650**	**60,606**	**58,413**
4,498	**5,308**	**5,776**	**6,252**	**5,975**	**5,786**	**5,579**
84	**3,299**	**7,820**	**12,833**	**16,448**	**17,443**	**17,527**
492	**512**	**468**	**422**	**314**	**282**	**303**
(2,984)	(2,884)	(2,680)	(2,553)	(1,728)	(1,819)	(1,845)
95,254	91,408	93,309	94,582	75,660	82,298	79,979
69,390	**94,307**	**67,038**	**119,176**	**107,841**	**100,129**	**99,924**
46,713	**4,889**	**7,071**	**2,820**	**2,153**	**3,639**	**4,850**
60,175	**95,815**	**75,158**	**11,472**	**1,358**	**5,018**	**4,711**
494	**546**	**317**	**301**	**553**	**346**	**700**
(1,667)	(532)	(2,692)	(7,450)	(6,070)	(10,417)	(2,406)
175,106	195,026	146,894	126,320	105,837	98,716	107,780

Non-Consolidated Balance Sheet

	2010/3	2011/3	2012/3
Assets			
Noncurrent Assets	**1,808,678**	**1,768,302**	**1,728,454**
Electric Utility Plant and Equipment	**1,215,919**	**1,159,857**	**1,095,654**
Hydroelectric Power Production Facilities	413,221	399,744	384,125
Thermal Power Production Facilities	489,556	462,070	429,797
Renewable Power Production Facilities	2,084	1,765	1,526
Transmission Facilities	211,312	200,373	189,304
Transformation Facilities	36,360	35,721	32,944
Communication Facilities	10,121	10,274	9,767
General Facilities	53,261	49,907	48,187
Incidental Business Facilities	**2,070**	**2,297**	**2,186**
Non-Operating Facilities	**248**	**335**	**260**
Construction in Progress	**287,204**	**295,682**	**315,318**
Construction in Progress	286,540	295,449	314,737
Retirement in Progress	664	233	580
Nuclear Fuel	**38,688**	**46,693**	**54,157**
Nuclear Fuel in Processing	38,688	46,693	54,157
Investments and Other Assets	**264,546**	**263,435**	**260,877**
Long-Term Investments	72,083	62,572	60,522
Long-Term Investments for Subsidiaries and Affiliates	152,399	164,876	169,582
Long-Term Prepaid Expenses	1,824	2,480	1,548
Deferred Tax Assets	39,079	38,992	35,411
Allowance for Doubtful Accounts	(840)	(5,485)	(6,188)
Current Assets	**93,826**	**116,528**	**115,806**
Cash and Deposits	5,151	4,362	4,295
Accounts Receivable–Trade	39,848	49,264	50,745
Other Accounts Receivable	4,870	4,845	507
Short-Term Investments	—	—	—
Supplies	19,087	28,529	31,565
Advance payments	—	—	—
Prepaid Expenses	1,219	1,672	2,388
Short-Term Receivables from Subsidiaries and Affiliates	9,516	11,637	6,876
Deferred Tax Assets	2,993	3,732	4,599
Other Current Assets	11,138	12,604	14,895
Allowance for Doubtful Accounts	—	(121)	(65)
Total Assets	**1,902,504**	**1,884,830**	**1,844,261**

Notes: 1. Corresponding to the revision of electric utility accounting regulations, the disclosure of “Renewable Power Production Utilities” began and a geothermal power production facility was booked as “Renewable Power Production Facilities” from the year ended March 31, 2010.
2. Accounting policies were partially changed from the year ended March 31, 2017 and the figures for the year ended March 31, 2016 reflect retroactive application of the change.
3. Partial amendments to “Accounting Standard for Tax Effect Accounting,” were applied from the year ended March 31, 2019. For year-on-year comparison purposes, figures for the year ended March 31, 2018 have been restated according to the amended standard.

(Millions of yen)

2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	**2019/3**
1,749,201	**1,780,429**	**1,795,979**	**1,820,204**	**1,892,648**	**1,936,710**	**2,015,859**
1,045,889	**1,003,628**	**965,328**	**931,795**	**932,819**	**921,000**	**922,427**
372,980	365,343	359,001	353,685	357,508	358,916	363,959
394,071	367,935	341,313	320,428	318,961	311,298	309,185
1,533	1,541	2,523	1,061	939	—	—
188,695	178,925	171,471	164,220	160,596	155,982	153,577
31,762	31,645	31,424	31,132	30,988	31,097	31,156
9,308	9,257	9,095	9,039	8,815	9,022	9,255
47,537	48,979	50,497	52,227	55,009	54,683	55,293
1,980	**2,213**	**2,088**	**1,944**	**2,199**	**2,029**	**2,361**
798	**857**	**406**	**331**	**313**	**452**	**409**
331,810	**367,748**	**384,957**	**438,730**	**483,067**	**533,741**	**559,618**
331,120	367,563	384,859	438,592	482,143	531,567	558,080
690	185	98	138	923	2,174	1,538
59,769	**69,216**	**71,467**	**73,447**	**73,682**	**73,800**	**74,514**
59,769	69,216	71,467	73,447	73,682	73,800	74,514
308,954	**336,763**	**371,731**	**373,953**	**400,565**	**405,685**	**456,527**
67,029	70,612	83,250	61,773	63,824	65,105	54,408
212,363	236,195	252,708	265,759	277,179	284,479	348,888
3,760	9,597	16,718	25,553	36,609	28,011	21,034
31,004	24,041	19,203	20,866	22,953	28,205	32,195
(5,204)	(3,682)	(149)	—	—	(116)	—
121,090	**146,302**	**262,629**	**165,044**	**168,232**	**138,995**	**195,956**
4,440	3,934	4,380	3,969	5,169	10,550	12,060
48,758	46,228	32,145	26,789	43,488	50,026	36,832
3,618	782	649	4,636	2,838	1,932	1,242
—	35,000	167,398	72,399	51,000	9,000	66,000
33,083	28,210	30,048	31,758	36,360	39,350	39,175
—	—	—	71	—	—	—
2,405	2,370	2,385	2,140	2,752	2,764	2,213
7,808	11,079	6,197	5,293	5,381	5,835	15,694
4,917	5,289	3,885	3,217	2,305	—	—
16,166	13,405	15,539	14,767	18,936	20,447	22,737
(108)	—	—	—	—	(913)	—
1,870,291	**1,926,731**	**2,058,609**	**1,985,248**	**2,060,881**	**2,075,706**	**2,211,815**

	2010/3	2011/3	2012/3
Liabilities			
Noncurrent Liabilities	**1,302,695**	**1,257,747**	**1,211,719**
Bonds Payable	689,883	734,898	714,914
Long-Term Loans Payable	550,955	461,256	429,373
Long-Term Accrued Liabilities	1	0	—
Lease Obligations	218	314	392
Long-Term Debt to Subsidiaries and Associates	4,887	5,709	5,192
Provision for Retirement Benefits	46,351	45,259	46,053
Assets Retirement Obligations	—	158	175
Other Noncurrent Liabilities	10,396	10,149	15,617
Current Liabilities	**252,974**	**277,226**	**285,725**
Current Portion of Noncurrent Liabilities	136,703	159,747	163,166
Short-Term Loans Payable	12,750	17,350	18,350
Commercial Papers	24,998	11,999	12,999
Accounts Payable–Trade	4,452	5,055	2,194
Accounts Payable–Other	9,892	2,970	3,094
Accrued Expenses	10,407	9,760	10,191
Accrued Taxes	3,790	18,821	8,877
Deposits Received	278	282	454
Short-Term Debt to Subsidiaries and Associates	47,298	47,634	60,697
Other Advances	583	1,034	666
Other Current Liabilities	1,818	2,569	5,032
Reserves under the Special Laws	**734**	**777**	**777**
Reserve for Fluctuation in Water Levels	734	777	777
Total Liabilities	**1,556,404**	**1,535,751**	**1,498,222**
Net Assets			
Shareholders' Equity	**343,879**	**348,159**	**346,824**
Capital Stock	**152,449**	**152,449**	**152,449**
Capital Surplus	**81,852**	**81,852**	**81,852**
Legal Capital Surplus	81,852	81,852	81,852
Retained Earnings	**172,839**	**177,121**	**175,787**
Legal Retained Earnings	6,029	6,029	6,029
Other Retained Earnings	166,810	171,092	169,758
Reserve for Special Disaster	53	57	70
Exchange-Fluctuation Preparation Reserve	1,960	1,960	1,960
General Reserve	137,861	142,861	147,861
Retained Earnings Brought Forward	26,935	26,213	19,866
Treasury Stock	**(63,262)**	**(63,263)**	**(63,264)**
Valuation and Translation Adjustments	**2,220**	**919**	**(785)**
Valuation Difference on Available-for-Sale Securities	2,634	(479)	(1,158)
Deferred Gains or Losses on Hedges	(414)	1,399	373
Total Net Assets	**346,099**	**349,079**	**346,039**
Total Liabilities and Net Assets	**1,902,504**	**1,884,830**	**1,844,261**

Note: Accounting policies were partially changed from the year ended March 31, 2017 and the figures for the year ended March 31, 2016 reflect retroactive application of the change.

(Millions of yen)

2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	2019/3
1,206,654	**1,226,516**	**1,245,889**	**1,184,707**	**1,156,280**	**1,226,571**	**1,293,525**
694,930	691,346	666,061	575,079	494,991	554,991	614,992
438,228	479,549	524,557	562,520	605,486	607,250	606,370
—	269	271	269	269	5,269	5,269
374	342	249	188	133	157	221
4,999	4,932	6,346	1,425	1,805	1,652	1,636
47,155	42,089	41,945	38,548	47,395	46,340	43,561
189	202	214	1,604	1,646	6,231	6,149
20,777	7,784	6,242	5,070	4,552	4,677	15,324
304,261	**325,406**	**300,443**	**282,557**	**342,408**	**258,207**	**296,013**
192,821	201,395	157,661	145,540	190,745	94,210	140,789
18,350	18,350	18,350	16,250	16,650	16,650	14,750
3,999	—	—	—	—	—	—
2,375	1,839	3,341	1,731	6,141	7,233	5,612
2,843	8,362	11,996	7,587	10,560	12,035	14,329
10,276	9,519	10,801	10,016	14,391	12,833	15,116
7,201	4,919	7,972	9,319	7,362	13,892	5,512
474	308	315	323	294	491	498
59,093	74,979	84,544	87,863	92,253	97,507	94,200
741	694	602	786	3,067	201	658
6,081	5,037	4,857	3,137	941	3,152	4,545
425	**119**	**—**	**116**	**—**	**—**	**—**
425	119	—	116	—	—	—
1,511,341	**1,552,042**	**1,546,332**	**1,467,381**	**1,498,688**	**1,484,778**	**1,589,538**
354,914	**366,524**	**494,713**	**506,807**	**545,629**	**574,753**	**613,807**
152,449	**152,449**	**180,502**	**180,502**	**180,502**	**180,502**	**180,502**
81,852	**81,852**	**109,904**	**109,904**	**109,904**	**109,904**	**109,904**
81,852	81,852	109,904	109,904	109,904	109,904	109,904
183,878	**195,491**	**204,309**	**216,405**	**255,228**	**284,352**	**323,408**
6,029	6,029	6,029	6,029	6,029	6,029	6,029
177,848	189,462	198,280	210,375	249,198	278,323	317,379
77	82	65	66	69	72	71
1,960	1,960	1,960	1,960	1,960	1,960	1,960
147,861	152,861	152,861	162,861	182,861	222,861	262,861
27,950	34,558	43,393	45,488	64,308	53,429	52,486
(63,265)	**(63,268)**	**(2)**	**(4)**	**(5)**	**(6)**	**(7)**
4,035	**8,164**	**17,562**	**11,059**	**16,562**	**16,174**	**8,469**
4,281	8,154	18,663	11,178	14,276	15,592	11,313
(245)	9	(1,101)	(118)	2,286	581	(2,843)
358,950	**374,689**	**512,276**	**517,867**	**562,192**	**590,927**	**622,277**
1,870,291	**1,926,731**	**2,058,609**	**1,985,248**	**2,060,881**	**2,075,706**	**2,211,815**

Non-Consolidated Statement of Income

	2010/3	2011/3	2012/3
Operating Revenue	**530,436**	**583,213**	**599,973**
Electric Utility Operating Revenue	**518,682**	**573,878**	**590,553**
Sold Power to Other Suppliers	458,688	514,640	532,915
Transmission Revenue	54,402	54,343	53,059
Other Electricity Revenue	5,591	4,894	4,579
Incidental Business Operating Revenue	**11,753**	**9,335**	**9,419**
Operating Expenses	**489,531**	**520,569**	**557,628**
Electric Utility Operating Expenses	**479,085**	**513,395**	**549,010**
Hydroelectric Power Production Expenses	60,904	60,005	66,325
Thermal Power Production Expenses	319,569	358,156	381,201
Renewable Power Production Expenses	802	976	2,274
Purchased Power from Other Suppliers	15	1,388	3,428
Transmission Expenses	27,523	26,943	29,031
Transformation Expenses	6,785	6,453	5,968
Selling Expenses	1,225	1,223	1,482
Communicating Expenses	6,275	6,480	6,360
General and Administrative Expenses	49,349	44,466	45,429
Expenses for Third Party's Power Transmission Service	—	—	—
Enterprise Taxes	6,634	7,300	7,508
Incidental Business Operating Expenses	**10,446**	**7,174**	**8,617**
Operating Income	**40,904**	**62,644**	**42,344**
Non-Operating Income	**6,463**	**6,348**	**9,089**
Financial Revenue	**3,547**	**4,649**	**6,726**
Dividend Income	2,346	3,403	5,401
Interest Income	1,200	1,246	1,325
Non-Operating Revenue	**2,916**	**1,699**	**2,362**
Gain on Sales of Noncurrent Assets	600	82	76
Miscellaneous Revenue	2,316	1,616	2,286
Non-Operating Expenses	**23,576**	**25,800**	**25,756**
Financial Expenses	**22,175**	**21,627**	**20,525**
Interest Expenses	21,967	21,353	20,525
Share Issuance Cost	—	—	—
Bond Issue Cost	207	273	—
Non-Operating Expenses	**1,400**	**4,173**	**5,230**
Loss on Sales of Noncurrent Assets	—	625	643
Miscellaneous Loss	1,400	3,547	4,587
Total Ordinary Revenue	**536,899**	**589,561**	**609,062**
Total Ordinary Expenses	**513,107**	**546,370**	**583,384**
Ordinary Income	**23,791**	**43,191**	**25,677**
Provision or Reversal of Reserve for Fluctuation in Water Levels	**(411)**	**42**	**—**
Provision of Reserve for Fluctuation in Water Levels	—	42	—
Reversal of Reserve for Fluctuation in Water Levels	(411)	—	—
Extraordinary Income	**—**	**1,635**	**—**
Extraordinary Losses	**—**	**13,757**	**3,434**
Profit before Income Taxes	**24,203**	**31,027**	**22,243**
Income Taxes–Current	6,660	16,395	10,148
Income Taxes–Deferred	1,170	(153)	2,924
Total Income Taxes	7,831	16,242	13,073
Profit	**16,372**	**14,785**	**9,169**

Notes: 1. Corresponding to the revision of electric utility accounting regulations, the disclosure of "Renewable Power Production Expenses" began and expenses related to a geothermal power production facility was booked as "Renewable Power Production Expenses" from the year ended March 31, 2010.
2. Accounting policies were partially changed from the year ended March 31, 2017 and the figures for the year ended March 31, 2016 reflect retroactive application of the change.

(Millions of yen)

2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	2019/3
586,993	**582,861**	**557,943**	**552,341**	**522,460**	**614,591**	**646,958**
577,284	**572,937**	**548,580**	**543,019**	**510,909**	**601,475**	**633,617**
520,620	516,701	495,313	490,235	457,953	545,659	580,652
52,632	52,182	49,281	48,991	49,021	48,679	49,497
4,031	4,054	3,985	3,792	3,933	7,136	3,467
9,708	**9,923**	**9,363**	**9,322**	**11,551**	**13,115**	**13,340**
543,659	**542,396**	**513,387**	**510,770**	**494,829**	**571,519**	**628,279**
534,765	**533,444**	**504,946**	**502,326**	**484,288**	**559,300**	**615,712**
60,762	60,633	62,171	62,715	57,093	58,562	64,834
377,701	383,857	359,690	344,062	322,317	388,300	415,484
2,036	926	367	2,183	645	—	—
256	520	10	14	4,283	6,588	17,110
26,586	27,054	26,459	25,848	23,560	23,485	33,540
6,623	6,218	6,317	6,338	5,751	6,175	5,756
2,570	3,197	1,244	1,362	1,209	970	1,036
5,815	4,714	4,853	4,671	4,301	4,342	4,340
45,040	39,018	36,828	48,135	58,071	62,998	63,434
—	—	—	—	478	179	2,195
7,371	7,301	7,001	6,993	6,577	7,697	7,980
8,894	**8,952**	**8,441**	**8,444**	**10,540**	**12,219**	**12,567**
43,333	**40,464**	**44,555**	**41,570**	**27,630**	**43,071**	**18,678**
8,304	**14,773**	**8,599**	**18,319**	**45,458**	**27,036**	**51,469**
6,063	**11,700**	**6,626**	**17,079**	**43,456**	**25,846**	**46,227**
4,395	10,275	5,250	15,825	42,543	25,000	45,532
1,668	1,425	1,375	1,253	913	846	695
2,241	**3,072**	**1,973**	**1,240**	**2,002**	**1,190**	**5,242**
109	89	3	10	2	12	0
2,131	2,983	1,969	1,230	1,999	1,177	5,241
22,799	**24,177**	**24,217**	**19,715**	**16,619**	**17,648**	**15,742**
20,707	**20,348**	**19,531**	**17,874**	**15,739**	**14,526**	**13,569**
20,585	20,088	19,115	17,874	15,442	14,159	13,118
—	—	274	—	—	—	—
122	259	141	—	297	366	451
2,091	**3,829**	**4,685**	**1,840**	**879**	**3,122**	**2,172**
630	631	55	4	15	1	6
1,461	3,197	4,629	1,835	863	3,120	2,166
595,298	**597,635**	**566,543**	**570,661**	**567,919**	**641,628**	**698,428**
566,459	**566,574**	**537,605**	**530,486**	**511,449**	**589,168**	**644,022**
28,839	**31,060**	**28,938**	**40,174**	**56,470**	**52,460**	**54,405**
(351)	**(306)**	**(119)**	**116**	**—**	**—**	**—**
—	—	—	116	—	—	—
(351)	(306)	(119)	—	—	—	—
—	**—**	**2,280**	**—**	**—**	**—**	**—**
—	**—**	**—**	**—**	**—**	**3,205**	**—**
29,190	**31,367**	**31,337**	**40,058**	**56,470**	**49,254**	**54,405**
7,999	4,375	3,444	6,267	7,691	10,350	3,278
2,596	4,874	5,450	2,970	(2,773)	(3,033)	(1,657)
10,595	9,250	8,895	9,238	4,917	7,316	1,621
18,594	**22,117**	**22,442**	**30,820**	**51,552**	**41,938**	**52,784**

Major Group Companies

(As of March 31, 2019)

	Company Name	Main Businesses	Equity Stake (%)	①	②
Consolidated Subsidiaries	**Electric Power Business**				
	J-POWER SUPPLY & TRADING Co., Ltd.	Power supply business	100.0	✓	✓
	Mihama Seaside Power Co., Ltd.	Thermal power business	100.0	✓	✓
	ITOIGAWA POWER Inc.	Thermal power business	64.0	✓	✓
	J-Wind Co., Ltd.	Wind power business	100.0	✓	✓
	J-Wind NIKAHO Co., Ltd.	Wind power business	100.0		
	J-Wind KUZUMAKI Co., Ltd.	Wind power business	100.0		
	J-Wind SETANA Co., Ltd.	Wind power business	90.0		
	J-Wind Kaminokuni, Ltd.	Wind power business	100.0		
	Nagasaki-Shikamachi Wind Power Co., Ltd.	Wind power business	70.0	✓	✓
	Electric Power-Related Business				
	JPec Co., Ltd.	Construction, technical development, design, consulting, maintenance, and research for thermal and nuclear power plants; unloading and transporting of coal at thermal power plants; sale of fly ash; shipping of coal for thermal power plants; research and planning of environmental conservation	100.0	✓	
	JPHYTEC Co., Ltd.	Construction, technical development, design, consulting, maintenance, and research for hydroelectric power plants, substations, and transmission lines; surveying of and compensation for construction sites; civil engineering, construction management, and construction services	100.0	✓	
	JP Business Service Corporation	Operation of welfare facilities; facility maintenance; business process out-sourcing; development of computer software	100.0	✓	
	KEC Corporation	Construction and maintenance of electronic and communications facilities	100.0	✓	
	JP Design Co., Ltd.	Design, management, and research for electric power facilities and other facilities and construction consulting	100.0	✓	
	J-POWER RESOURCES Co., Ltd.	Import, sales, and transportation of coal	100.0	✓	
	J-POWER AUSTRALIA PTY. LTD.	Investment in coal mines in Australia	100.0		
	J-Wind Service Co., Ltd.	Maintenance and operation of wind power plants	100.0	✓	
	J-POWER EnTech Co., Inc.	Engineering services for atmospheric and water pollutant removal equipment	100.0	✓	
	Miyazaki Wood Pellet Co., Ltd.	Operation of manufacturing facilities of wood pellets and procurement of forest offcut	98.3	✓	
	JM Activated Coke, Inc.	Manufacturing, sales, and marketing of activated coke	90.0	✓	
	EPDC CoalTech and Marine Co., Ltd.	Marine transportation of ash and fly ash	100.0 (100.0)	*	
	and 10 other companies				
	Overseas Business				
	J-Power Investment Netherlands B.V.	Management of investments	100.0		
	J-POWER Holdings (Thailand) Co., Ltd.	Management of investments	100.0 (100.0)		
	J-POWER Generation (Thailand) Co., Ltd.	Management of investments, research and development of projects	100.0 (100.0)		
	Gulf JP Co., Ltd.	Management of investments	60.0 (60.0)		
	Gulf JP UT Co., Ltd.	Thermal power business	60.0 (60.0)		✓
	Gulf JP NS Co., Ltd.	Thermal power business	60.0 (60.0)		✓
	Gulf JP NNK Co., Ltd.	Thermal power business	60.0 (60.0)		✓
	Gulf JP CRN Co., Ltd.	Thermal power business	60.0 (60.0)		✓
	Gulf JP NK2 Co., Ltd.	Thermal power business	60.0 (60.0)		✓
	Gulf JP TLC Co., Ltd.	Thermal power business	60.0 (60.0)		✓
	Gulf JP KP1 Co., Ltd.	Thermal power business	60.0 (60.0)		✓
	Gulf JP KP2 Co., Ltd.	Thermal power business	60.0 (60.0)		✓
	Gulf JP NLL Co., Ltd.	Thermal power business	45.0 (45.0)		✓
	J-POWER North America Holdings Co., Ltd.	Management of investments	100.0		
	J-POWER USA Investment Co., Ltd.	Management of investments	100.0 (100.0)		
	J-POWER USA Development Co., Ltd.	Management of investments, research and development of projects	100.0 (100.0)		
	JP Renewable Europe Co., Ltd.	Management of investments	100.0		
	J-POWER Consulting (China) Co., Ltd.	Management of investments, research and development of projects	100.0		
	and other 15 companies				

① 22 domestic consolidated subsidiaries that are covered in environment-related data calculations

Note: In addition to the companies shown in the list above, coverage includes JP Enterprise Corporation (100% equity stake owned by J-POWER) and Biocoal Yokohama-South CO., LTD. (60% equity stake owned by J-POWER).

*Data for EPDC CoalTech and Marine Co., Ltd., are included as a portion of the data for JPec Co., Ltd.

② 6 electric power business companies and 33 overseas business companies that are covered in the calculation of CO_2 emissions for domestic and overseas power generation

Note: In addition to the companies shown in the list above, coverage includes ShanXi TianShi Power Generation Co., Ltd. J-POWER sold its entire stake in this company in the year ended March 31, 2019 (before this sale, J-POWER held 24.0% of the company's voting rights).

	Company Name	Main Businesses	Equity Stake (%)	①	②
Consolidated Subsidiaries	**Other Businesses**				
	Kaihatsu Hiryou Co., Ltd.	Production and sales of fertilizer using ash	100.0	✓	
	Japan Network Engineering Co., Ltd.	Telecommunications; operation and maintenance of telecommunications facilities	100.0	✓	
	Omuta Plant Service Co., Ltd.	Operation and maintenance of a waste-fueled power generation plant	100.0	✓	
	J-POWER Latrobe Valley Pty. Ltd.	Participating in Australian Brown Coal Hydrogen Pilot Test Project	100.0		
	Biocoal Osaka-Hirano Co., Ltd.	Construction and operation of a sewage sludge-based fuel manufacturing facility	60.0	✓	
	Green Coal Saikai Co., Ltd.	Operation of an ordinary waste-based fuel manufacturing facility	60.0	✓	
	and 1 other company				
Affiliates Accounted for by the Equity Method	**Electric Power Business**				
	Kashima Power Co., Ltd.	Thermal power business	50.0		
	TOSA POWER Inc.	Thermal power business	45.0		✓
	Osaki CoolGen Corporation	Large-scale demonstration trials of oxygen-blown IGCC and CO_2 separation and capture	50.0		
	ENERES Co., Ltd	Energy-related consulting business, power generation business, etc.	40.6		
	Yuzawa Geothermal Power Generation Corporation	Geothermal power business	50.0		
	Hibiki Wind Energy Co., Ltd.	Offshore wind power generation surveying	40.0		
	Suzuyo-Power Co., Ltd.	Electricity sale	49.9		
	Appi Geothermal Energy Corporation	Geothermal power business	15.0		
	and 7 other companies				
	Overseas Business				
	Gulf Electric Public Co., Ltd.	Management of investments	49.0 (49.0)		
	Gulf Power Generation Co., Ltd.	Thermal power business	49.0 (49.0)		✓
	Nong Khae Cogeneration Co., Ltd.	Thermal power business	49.0 (49.0)		✓
	Samutprakarn Cogeneration Co., Ltd.	Thermal power business	49.0 (49.0)		✓
	Gulf Cogeneration Co., Ltd.	Thermal power business	49.0 (49.0)		✓
	Gulf Yala Green Co., Ltd.	Thermal power business	49.0 (49.0)		✓
	EGCO Green Energy Co., Ltd.	Management of investments	26.0 (26.0)		
	EGCO Cogeneration Co., Ltd.	Thermal power business	20.0 (20.0)		✓
	Roi-Et Green Co., Ltd.	Thermal power business	— [95.0]		✓
	J-POWER USA Generation, L.P.	Management of investments	50.0 (50.0)		
	Birchwood Power Partners, L.P.	Thermal power business	50.0 (50.0)		✓
	Tenaska Pennsylvania Partners, LLC	Thermal power business	25.0 (25.0)		✓
	Green Country Energy, LLC	Thermal power business	— [100.0]		✓
	Pinelawn Power LLC	Thermal power business	— [100.0]		✓
	Equus Power I, L.P.	Thermal power business	— [100.0]		✓
	Edgewood Energy, LLC	Thermal power business	— [100.0]		✓
	Shoreham Energy, LLC	Thermal power business	— [100.0]		✓
	Orange Grove Energy, L.P.	Thermal power business	— [100.0]		✓
	Elwood Energy, LLC	Thermal power business	— [100.0]		✓
	Tenaska Virginia Partners, L.P.	Thermal power business	— [30.0]		✓
	Tenaska Frontier Partners, Ltd.	Thermal power business	— [25.0]		✓
	JM Energy Co., Ltd.	Management of investments	50.0		
	Shaanxi Hanjiang Investment & Development Co., Ltd.	Hydroelectric power business	27.0		✓
	China Resources Power (Hezhou) Co., Ltd.	Thermal power business	— [34.0]		✓
	Chiahui Power Corporation	Thermal power business	40.0 (40.0)		✓
	PT. BHIMASENA POWER INDONESIA	Thermal power business	34.0		
	CBK Netherlands Holdings B.V.	Management of investments	50.0 (50.0)		
	CBK Power Co., Ltd.	Hydroelectric power business	— [100.0]		✓
	Zajaczkowo Windfarm Sp. z o.o.	Wind power business	50.0 (50.0)		✓
	Triton Knoll Offshore Wind Farm Ltd.	Wind power business	25.0 (25.0)		
	and 52 other companies				

Notes: 1. The percentages in parentheses present indirect holding ratios and are included in the percentages above. Those shown in brackets are the ratios held by closely related parties or parties in agreement and excluded from the percentages above.
2. JPec Co., Ltd., J-POWER RESOURCES Co., Ltd., J-POWER AUSTRALIA PTY. LTD., J-POWER Holdings (Thailand) Co., Ltd., Gulf JP Co., Ltd., and JP Renewable Europe Co., Ltd. are specified subsidiaries.

Power Generation Facilities in Operation[1] (As of June 30, 2019)

	Generation Capacity	Owned Capacity
Power Generation Facilities in Operation (Domestic, Overseas)	**39,347 MW**	**24,213 MW**

	Generation Capacity	Owned Capacity
Domestic Total (96 bases)	**17,572 MW**	**17,316 MW**

Type	Power Plants	Location (Prefecture)	River System	Start of Operation	Output Capacity (MW)
Hydroelectric	Horoka	Hokkaido	Tokachigawa	1965	10
	Nukabira	Hokkaido	Tokachigawa	1956	44
	Metou No. 1	Hokkaido	Tokachigawa	1958	27
	Metou No. 2	Hokkaido	Tokachigawa	1958	28
	Ashoro	Hokkaido	Tokachigawa	1955	40
	Honbetsu	Hokkaido	Tokachigawa	1962	25
	Kumaushi	Hokkaido	Tokachigawa	1987	15
	Satsunaigawa	Hokkaido	Tokachigawa	1997	8
	Kuttari	Hokkaido	Tokachigawa	2015	0.5
	Katsurazawa	Hokkaido	Ishikarigawa	1957	15
	Kumaoi	Hokkaido	Ishikarigawa	1957	5
	Towa	Iwate	Kitagamigawa	1954	27
	Isawa No. 1	Iwate	Kitagamigawa	2014	14
	Shimogo (Pumped storage plant)	Fukushima	Aganogawa	1988	1,000
	Otsumata	Fukushima	Aganogawa	1968	38
	Okutadami	Fukushima	Aganogawa	1958	560
	Okutadami (Ecological Flow)	Fukushima	Aganogawa	2003	3
	Otori	Fukushima	Aganogawa	1963	182
	Tagokura	Fukushima	Aganogawa	1959	400
	Tadami	Fukushima	Aganogawa	1989	65
	Taki	Fukushima	Aganogawa	1961	92
	Kurotani	Fukushima	Aganogawa	1994	20
	Kuromatagawa No. 1	Niigata	Shinanogawa	1958	62
	Kuromatagawa No. 2	Niigata	Shinanogawa	1964	17
	Suezawa	Niigata	Shinanogawa	1958	2
	Aburumagawa	Niigata	Shinanogawa	1985	5
	Okukiyotsu (Pumped storage plant)	Niigata	Shinanogawa	1978	1,000
	Okukiyotsu No. 2 (Pumped storage plant)	Niigata	Shinanogawa	1996	600
	Numappara (Pumped storage plant)	Tochigi	Nakagawa	1973	675
	Hayakido	Nagano	Tenryugawa	1985	11
	Misakubo	Shizuoka	Tenryugawa	1969	50
	Shintoyone (Pumped storage plant)	Aichi	Tenryugawa	1972	1,125
	Sakuma	Shizuoka	Tenryugawa	1956	350
	Sakuma No. 2	Shizuoka	Tenryugawa	1982	32
	Akiba No. 1	Shizuoka	Tenryugawa	1958	47
	Akiba No. 2	Shizuoka	Tenryugawa	1958	35
	Akiba No. 3	Shizuoka	Tenryugawa	1991	47
	Funagira	Shizuoka	Tenryugawa	1977	32
	Miboro	Gifu	Shougawa	1961	215
	Miboro No. 2	Gifu	Shougawa	1963	59
	Ogamigou	Gifu	Shougawa	1971	20
	Nagano (Pumped storage plant)	Fukui	Kuzuryugawa	1968	220
	Yugami	Fukui	Kuzuryugawa	1968	54
	Konokidani	Fukui	Kuzuryugawa	2016	0.2
	Tedorigawa No. 1	Ishikawa	Tedorigawa	1979	250
	Nishiyoshino No. 1	Nara	Shingugawa	1956	33
	Nishiyoshino No. 2	Nara	Kinokawa	1955	13
	Totsugawa No. 1	Nara	Shingugawa	1960	75
	Totsugawa No. 2	Wakayama	Shingugawa	1962	58
	Owase No. 1	Mie	Shingugawa, Choushigawa	1962	40
	Owase No. 2	Mie	Choushigawa	1961	25
	Ikehara (Pumped storage plant)	Nara	Shingugawa	1964	350
	Nanairo	Wakayama	Shingugawa	1965	82
	Komori	Mie	Shingugawa	1965	30
	Yanase	Kochi	Naharigawa	1965	36
	Futamata	Kochi	Naharigawa	1963	72
	Nagayama	Kochi	Naharigawa	1960	37
	Sameura	Kochi	Yoshinogawa	1972	42
	Setoishi	Kumamoto	Kumagawa	1958	20
	Sendaigawa No. 1	Kagoshima	Sendaigawa	1965	120
	Sendaigawa No. 2	Kagoshima	Sendaigawa	1964	15
Total (Domestic Hydroelectric, 61 plants)					**8,575**

Type	Power Plants	Location (Prefecture)	Start of Operation	Output Capacity (MW)	Ownership (%)	Owned Capacity (MW)
Wind Power	Sarakitomanai Wind Farm	Hokkaido	2001	15	100	15
	Tomamae Winvilla	Hokkaido	2000	31	100	31
	Shimamaki Wind Farm	Hokkaido	2000	5	100	5
	Setana Seaside	Hokkaido	2005	12	100	12
	Kaminokuni Wind Farm	Hokkaido	2014	28	100	28
	Ohma Wind Farm	Aomori	2016	20	100	20
	Green Power Kuzumaki	Iwate	2003	21	100	21
	Nikaho Kogen	Akita	2001	25	100	25
	Yurihonjo Bayside	Akita	2017	16	100	16
	Koriyama-Nunobiki	Fukushima	2007	66	100	66
	Hiyama Kogen	Fukushima	2011	28	100	28
	Tokyo Bayside	Tokyo	2003	2	100	2
	Irouzaki	Shizuoka	2010	34	100	34
	Tahara Bayside	Aichi	2005	22	100	22
	Tahara	Aichi	2004	2	100	2
	Awara-Kitagata	Fukui	2011	20	100	20
	Yokihi no Sato Wind Park	Yamaguchi	2003	5	100	5
	Minami Ehime	Ehime	2016	29	100	29
	Nagasaki-Shikamachi Wind Farm	Nagasaki	2005	15	70	11
	Aso-Nishihara Wind Farm	Kumamoto	2005	18	100	18
	Aso-Oguni Wind Farm	Kumamoto	2007	9	100	9
	Minami Oosumi	Kagoshima	2004	25	100	25
Total (Domestic Wind Power, 22 farms)				**444**		**439**
Geothermal	Wasabizawa	Akita	2019	46	50	23
Total (Domestic Geothermal, 1 plant)				**46**		**23**

Type	Power Plants	Location (Prefecture)		Start of Operation	Output Capacity (MW)	Ownership (%)	Owned Capacity (MW)
Coal Fired	Isogo	Kanagawa	New No.1	2002	600	100	600
			New No.2	2009	600	100	600
	Takasago	Hyogo	No.1	1968	250	100	250
			No.2	1969	250	100	250
	Takehara[2]	Hiroshima	No. 3	1983	700	100	700
	Tachibanawan	Tokushima	No. 1	2000	1,050	100	1,050
			No. 2	2000	1,050	100	1,050
	Matsushima	Nagasaki	No. 1	1981	500	100	500
			No. 2	1981	500	100	500
	Matsuura	Nagasaki	No. 1	1990	1,000	100	1,000
			No. 2	1997	1,000	100	1,000
	Ishikawa Coal	Okinawa	No.1	1986	156	100	156
			No.2	1987	156	100	156
	Thermal (J-POWER) : 7 power plants				**7,812**		**7,812**
Gas Fired (CCGT)	J-POWER SUPPLY & TRADING Ichihara	Chiba			108	100	108
	Mihama Seaside Power Shinminato	Chiba			105	100	105
Coal Fired	Itoigawa	Niigata			149	64	95
	Tosa	Kochi			167	45	75
Demonstration tests facility	Osaki CoolGen	Hiroshima			166	50	83
	Thermal(Related companies): 5 power plants				**694**		**466**
Total (Domestic Thermal, 12 plants)					**8,506**		**8,278**

1. Power generation facilities of the Electric Power Business segment and Overseas Business segment.
2. Takehara Thermal Power Plant Unit No. 1 was shut down in April 2018, and Unit No. 2 in June 2019, for replacement.

	Generation Capacity	Owned Capacity
Overseas Total (36 projects)	**21,775 MW**	**6,898 MW**

Countries	Type	Projects	Output Capacity (MW)	Ownership (%)	Owned Capacity (MW)	Power Purchasers	Validity of Purchase Agreement
Thailand	Gas Fired (CCGT)[1]	7 SPPs[2]	790	—	456	EGAT[3]/ Companies in the industrial park	Valid to 2038
		KP1	110	60	66		
		KP2	110	60	66		
		TLC	110	60	66		
		NNK	110	60	66		
		NLL	120	45	54		
		CRN	110	60	66		
		NK2	120	60	72		
	Gas Fired (CCGT)	Nong Seang	1,600	60	960	EGAT	Valid to 2039
	Gas Fired (CCGT)	U-Thai	1,600	60	960	EGAT	Valid to 2040
		Total (Consolidated)	**3,990**		**2,376**		
	Biomass (Chaff)	Roi-Et	10	25	2.5	EGAT	Valid to 2024
	Gas Fired (CCGT)	Rayong	112	20	22	EGAT/ Companies in the industrial park	Valid to 2024
	Gas Fired (CCGT)	Gulf Cogeneration	110	49	54	EGAT/ Companies in the industrial park	Valid to 2019
	Gas Fired (CCGT)	Samutprakarn	117	49	57	EGAT/ Companies in the industrial park	Valid to 2020
	Gas Fired (CCGT)	Nong Khae	120	49	59	EGAT/ Companies in the industrial park	Valid to 2021
	Biomass (Rubber Wood Waste)	Yala	20	49	10	EGAT	Valid to 2031
	Gas Fired (CCGT)	Kaeng Khoi 2	1,468	49	719	EGAT	Valid to 2033
		Total (Non-consolidated)	**1,957**		**924**		
Thailand (Total, 16 projects)			**5,947**		**3,300**		
The United States	Gas Fired (CCGT)	Tenaska Frontier	830	31	257	Exelon Generation Company, LLC	Valid to 2020
	Gas Fired (SCGT)[4]	Elwood Energy	1,350	50	675	PJM market	—
	Gas Fired (CCGT)	Green Country	795	50	398	Exelon Generation Company, LLC	Valid to 2022
	Coal Fired	Birchwood	242	50	121	Virginia Electric and Power Company	Valid to 2021
	Gas Fired (CCGT)	Pinelawn	80	50	40	Long Island Power Authority	Valid to 2025
	Gas Fired (SCGT)	Equus	48	50	24	NYISO market	—
	Gas Fired (CCGT)	Fluvanna	885	15	133	Shell Energy North America	Valid to 2024
	Gas Fired (SCGT)	Edgewood	88	50	44	Long Island Power Authority	Valid to 2023
	Jet Fuel (Simple cycle)	Shoreham	90	50	45	Long Island Power Authority	Valid to 2020
	Gas Fired (SCGT)	Orange Grove	96	50	48	San Diego Gas & Electric	Valid to 2035
	Gas Fired (CCGT)	Westmoreland	925	25	232	PJM market	—
The United States (Total, 11 projects)			**5,429**		**2,016**		
China	Hydroelectric	Hanjiang (Xihe/Shuhe)	450	27	122	Shaanxi Electric Power Company	Renewed every year[6]
	Mainly Coal Fired	Gemeng[5]	6,413	7	449	Shanxi Province Power Corporation	—
	Coal Fired	Hezhou	2,090	17	355	Guanxi Power Grid Co.	Renewed every year[6]
China (Total, 4 projects)			**8,953**		**926**		
Philippines	Hydroelectric	CBK (3 projects)	728	50	364	National Power Corporation	Valid to 2026
Taiwan	Gas Fired (CCGT)	Chiahui	670	40	268	Taiwan Power Company	Valid to 2028
Poland	Wind Power	Zajaczkowo	48	50	24	ENERGA OBROT S.A.	Valid to 2023
Other countries/region (5 projects)			**1,446**		**656**		

Major Transmission and Transformation Facilities (As of June 30, 2019)

Transmission and Transformation Facilities

Major Transmission Lines	Beginning of Operation	Location	Distance (km)	Voltage (kV)
Tokachi Trunk Line	1956	Hokkaido Prefecture	214.4	187
Hokkaido-Honshu HVDC Interconnection Line	1979	Hokkaido Prefecture – Aomori Prefecture	167.4	DC±250
Tadami Trunk Line	1959	Fukushima Prefecture – Tokyo metropolitan area	216.2	275-500
Sakuma East Trunk Line	1956	Shizuoka Prefecture – Tokyo metropolitan area	197.2	275
Sakuma West Trunk Line	1956	Shizuoka Prefecture – Aichi Prefecture	107.7	275
Miboro Trunk Line	1960	Gifu Prefecture – Aichi Prefecture	108.6	275
Honshu-Shikoku Interconnection Line	1994	Kagawa Prefecture – Okayama Prefecture	127.0	500
Kii Channel HVDC Interconnection Line	2000	Tokushima Prefecture – Wakayama Prefecture	99.8	DC±250
Nahari Trunk Line	1960	Kochi Prefecture – Ehime Prefecture	120.0	187
Kanmon Interconnection Line	1980	Fukuoka Prefecture – Yamaguchi Prefecture	64.2	500

1. CCGT (combined cycle gas turbine): A combined cycle generating system that uses a gas turbine and a steam turbine driven by the exhaust gas from the gas turbine.
2. The 7 SPPs project, which commenced operation in 2013.
3. EGAT: Electricity Generating Authority of Thailand (State-owned electric power utility in Thailand)
4. SCGT (simple cycle gas turbine): A generating system using only a gas turbine.
5. Gemeng International Energy Co., Ltd., is an electric power company that owns 13 power generation companies.
6. Although power purchase agreements are renewed every year, J-POWER concludes memoranda of understanding regarding power grid connection and management with province-level transmission and distribution companies to, in principle, continuously purchase power for the duration of a given facility's operation.

Substations

Substations	Beginning of Operation	Location	Output (kVA)
Isawa	2012	Iwate Prefecture	9,000
Minami Kawagoe	1959	Saitama Prefecture	1,542,000
Nishi Tokyo	1956	Tokyo metropolitan area	1,350,000
Nagoya	1956	Aichi Prefecture	1,400,000

Frequency Converter Station

Frequency Converter Station	Beginning of Operation	Location	Output (MW)
Sakuma	1965	Shizuoka Prefecture	300

AC/DC Converter Stations

AC/DC Converter Stations	Beginning of Operation	Location	Output (MW)
Hakodate	1979	Hokkaido Prefecture	600
Kamikita	1979	Aomori Prefecture	600
Kihoku	2000	Wakayama Prefecture	1,400
Anan	2000	Tokushima Prefecture	1,400

Power Generation Facilities under Development (As of June 30, 2019)

	Generation Capacity	Owned Capacity
Projects under Development (Domestic, Overseas)	**7,843 MW**	**5,406 MW**

Domestic

Type	Projects	Location (Prefecture)	Status		Output Capacity (MW)	Ownership (%)	Owned Capacity (MW)	Start of operation
Nuclear	Ohma	Aomori	Under construction		1,383	100	1,383	To be determined
Coal Fired	Takehara New No. 1 (Replacement)	Hiroshima	Under construction		600	100	600	Jun. 2020
	Kashima Power	Ibaraki	Under construction		645	50	323	Jul. 2020
	Yamaguchi Ube Power	Yamaguchi	Plan under review		—	—	—	—
Hydroelectric	Shinkatsurazawa/Kumaoi	Hokkaido	Under construction		22	100	22	Jun. 2022
	Ashoro (Repowering)	Hokkaido	Under construction		40▶42	100	40▶42	Construction completion in FY2022
Wind power	Setana-Ohsato	Hokkaido	Under construction		50	90	45	FY2019
	Nikaho No.2	Akita	Under construction		41	100	41	FY2019
	Kuzumaki No.2	Iwate	Under construction		45	100	45	FY2020
	Kaminokuni No.2	Hokkaido	Under construction		42	100	42	FY2021
	Minami Ehime No.2	Ehime	Under environmental assessment	Max	41	100	41	—
	Kaminokuni No.2[1]	Hokkaido	Preparing for construction	Max	78	100	78	—
	Hibikinada Offshore	Fukuoka	Under environmental assessment	Max	220	40	88	—
	Seiyo Yusuhara	Ehime/Kochi	Under environmental assessment	Max	163	100	163	—
	Kita Kagoshima	Kagoshima	Under environmental assessment	Max	215	100	215	—
	Wajima	Ishikawa	Under environmental assessment	Max	90	100	90	—
	Youra	Oita	Under environmental assessment	Max	65	100	65	—
	Kunimiyama	Kochi	Under environmental assessment		51	100	51	—
	New Sarakitomanai (Replacement)	Hokkaido	Under environmental assessment		15▶15	100	15▶15	—
	New Tomamae (Replacement)	Hokkaido	Starting construction work in FY2020 (planned)		31▶31	100	31▶31	—
	New Shimamaki (Replacement)	Hokkaido	Starting construction work in FY2020 (planned)		4▶4	100	4▶4	—
Geothermal	Appi	Iwate	Preparing for construction		149	15	2	FY2024
	Onikobe (Replacement)	Miyagi	Under construction		149	100	149	FY2023
Domestic	**Total**			**Max**	**3,783[2]**		**3,311[2]**	

Overseas

Type	Projects	Location	Status	Output Capacity (MW)	Ownership (%)	Owned Capacity (MW)	Start of operation
Coal Fired	Central Java	Indonesia	Under construction	2,000	34	680	2020
Offshore Wind	Triton Knoll	U.K.	Under construction	860	25	215	2021
Gas Fired (CCGT)	Jackson	The United States	Under construction	1,200	100	1,200	2022
Overseas	**Total**			**4,060**		**2,095**	

1. In addition to the 42 MW of capacity currently under construction at Kaminokuni No. 2, the construction of additional facilities is being considered.
2. The amount shown is the increase in capacity.

Major Transmission/Transformation Development Plans

Project	Status	Capacity	Start of operation
Construction of the New Sakuma Frequency Converter Station and replacement and expansion of related transmission lines	Undergoing detailed review in preparation for construction	New Sakuma Frequency Converter Station: 300 MW Sakuma East Trunk Line: Approx. 125 km Sakuma West Trunk Line: Approx. 14 km	Expansion scheduled for completion at the end of fiscal 2027

(As of March 31, 2019)

Corporate Name	Electric Power Development Co., Ltd.
Communication Name	J-POWER
Date of Establishment	Sept. 16, 1952
Headquarters Address	15-1, Ginza 6-chome, Chuo-ku, Tokyo 104-8165, Japan
Paid-in Capital	¥180,502,169,192
Number of Shares Authorized	660,000,000
Number of Shares Issued	183,051,100
Number of Shareholders	31,266
Stock Exchange Listing	Tokyo Stock Exchange
Independent Public Accountants	Ernst & Young ShinNihon LLC
Transfer Agent	Sumitomo Mitsui Trust Bank, Limited

Major Offices

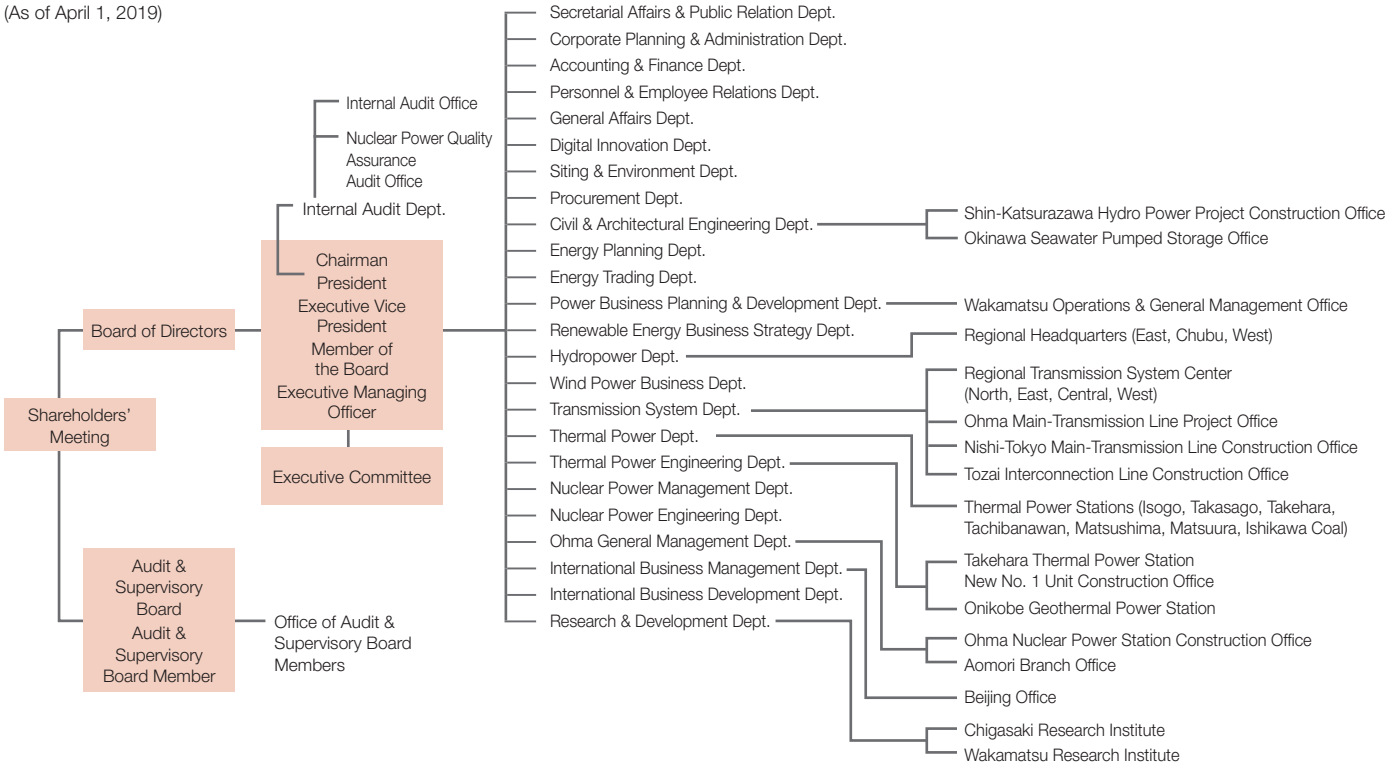
- Head Office (Tokyo)
- East Regional Headquarters (Saitama)
- Chubu Regional Headquarters (Aichi)
- West Regional Headquarters (Osaka)
- North Regional Transmission System Center (Hokkaido)
- East Regional Transmission System Center (Saitama)
- Central Regional Transmission System Center (Aichi)
- West Regional Transmission System Center (Okayama)
- Thermal Power Stations
  Isogo (Kanagawa), Takasago (Hyogo), Takehara (Hiroshima), Tachibanawan (Tokushima) ,Matsushima (Nagasaki), Matsuura (Nagasaki), Ishikawa Coal (Okinawa), Onikobe (Miyagi)
- Aomori Branch Office (Aomori)
- Wakamatsu Operations & General Management Office (Fukuoka)
- Chigasaki Research Institute (Kanagawa)

Major Overseas Subsidiaries

- J-POWER USA Development Co., Ltd. (U.S.)
- J-POWER Generation (Thailand) Co., Ltd. (Thailand)
- J-POWER Consulting (China) Co., Ltd. (China)

Organization Chart

(As of April 1, 2019)

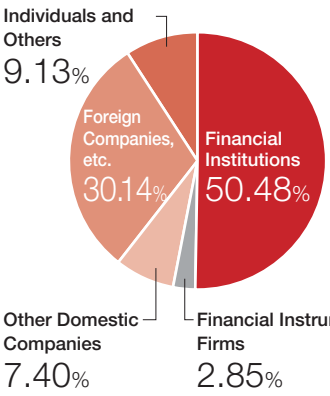


Major Shareholders (Top 10)

(As of March 31, 2019)

Name or Designation	Number of Shares Held (Thousands of Shares)	Percentage to Total Shares Issued (%)
Japan Trustee Services Bank, Ltd. (Trust Account)	11,773	6.43
The Master Trust Bank of Japan, Ltd. (Trust Account)	10,024	5.48
Nippon Life Insurance Company	9,152	5.00
Japan Trustee Services Bank, Ltd. (Trust Account 9)	6,760	3.69
Mizuho Bank, Ltd.	6,055	3.31
JP MORGAN CHASE BANK 385632	5,416	2.96
Sumitomo Mitsui Banking Corporation	4,295	2.35
J-POWER Employees Shareholding Association	3,912	2.14
MUFG Bank, Ltd.	3,331	1.82
Japan Trustee Services Bank, Ltd. (Trust Account 5)	3,120	1.70

Breakdown of Issued Shares by Type of Shareholders



* "Individuals and Others" includes 2,151 shares of treasury stock.

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VEGETABLE OIL INK

J-POWER

Electric Power Development Co., Ltd.

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