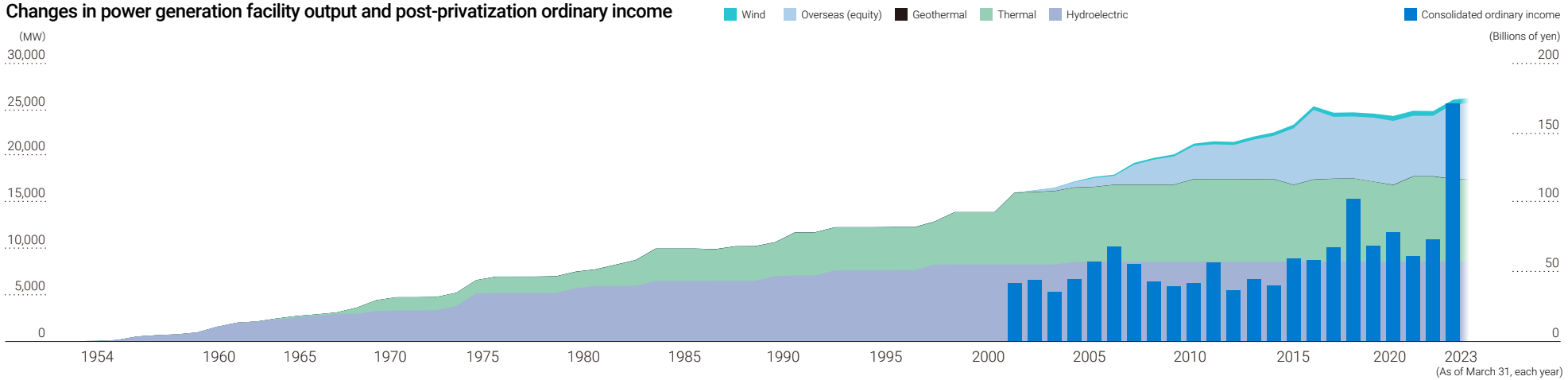
J-POWER Group's History

Over the past 70 years, J-POWER has continued growing to meet the power needs of the times.
Our current power supply mix is a well-balanced portfolio, enabling us to respond flexibly with the aim of becoming carbon neutral by 2050.

Changes in power generation facility output and post-privatization ordinary income



From post-war power shortage to period of rapid economic growth

Construction of large-scale hydroelectric and domestic coal-fired power plants
The J-POWER Group was established in September 1952. We developed massive dams, hydroelectric power plants, and electric power transmission and substation facilities to address Japan's postwar electricity crisis. Our domestic coal-fired power plants also supported the ensuing period of fast economic growth.

Development of pumped storage hydropower plants and cross-regional interconnecting lines
To fulfill peak demand, we continued construction of pumped storage hydropower plants, and to connect the different regions, we established interconnection lines.

Development of overseas consulting business
Overseas, we accumulated relevant experience in technical support and consulting services for power plant and transmission line construction.

The oil crisis and a growing interest in environmental issues

Diversification of power sources through development of overseas coal-fired power plants
Following two oil crises, we responded to the growing need for stable resource procurement and power source diversification by building Japan's first coal-fired power plant to utilize overseas coal and acquiring stakes in overseas coal mines.

Development of wind power generation begins
J-POWER became one of the first in Japan to operate a large-scale commercial wind farm in 2000, expanding the options for decarbonization at a time of rising concern over global environmental issues.

Global expansion and responding to issues of climate change

Privatization and global expansion
We began expanding our power generation business after being fully privatized in 2004, focusing primarily on Asia and the United States, to achieve profitable growth.

Provision of a stable supply of energy while addressing climate change
We are aiming for goals such as further developing renewable energy in Japan and abroad, building nuclear power plants, and converting thermal power plants to zero-emission plants in order to become carbon neutral by 2050 while maintaining a stable supply of electric power.


Sakuma Dam (completed in 1956)


Consulting business in Peru (1962)


Matsushima Thermal Power Plant (Commercial operation began in 1981)


Tomamae Winvilla (Commercial operation began in 2000) *Under replacement


Triton Knoll Offshore Wind Farm (Commercial operation began in 2022)

BLUE MISSION 2050

Value Creation Process

• Climate change • Stable power supply • Energy security
• Decline in domestic population • Growing interest in ESG

Engagement with Stakeholders → Identifying Risks and Opportunities → Changes in External Environment/ Megatrends → Stably Supplying Energy While Addressing Climate Change Issues

Material Issues

- Customers
- Local communities
- Employees
- Shareholders

- Supply of energy
- Response to climate change
- Respect for people
- Engagement with local communities
- Enhancement of our business foundation

Strategy and Goals

- BLUE MISSION 2050
- J-POWER "BLUE MISSION 2050"
- Medium-Term Management Plan
- CO_2-reduction goal

Input

Natural Capital

Total quantity of water intake: 60.7 billion m³ *1
Coal consumed: 15.14 million t *2, 3

Social and Relationship Capital

Cooperation with business partners
Relationships of trust with stakeholders

Intellectual Capital

Research and development costs: ¥10.30 billion (consolidated)
Technical prowess built up over decades

Human Capital

Consolidated employees: 7,078
(Engaged in the overseas business: 650)

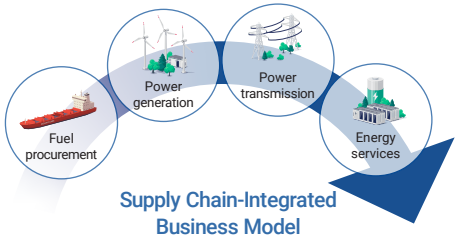
Manufactured Capital

Power generation facilities in operation:
Domestic: 17,970 MW (Renewable energy: 9,078 MW)
Overseas: 8,067 MW (Renewable energy: 819 MW)

Financial Capital

Shareholders' equity: ¥977.8 billion
Interest-bearing debt: ¥1,885.8 billion
Consolidated equity ratio: 32.3%

Business Activities



Supply Chain-Integrated Business Model

Enhance corporate value through complementary financial and non-financial initiatives

Management commitment

- p.13 Message from the President
- p.86 Officers' Compensation
- p.87 Message from Outside Directors

Business-Linked Sustainable Management

Enhancement of our business foundations
- Human resource development
- Respect for people
- Digital transformation (DX) initiatives
- Corporate Governance

Resolving social issues through business activities
- Response to climate change
- Addressing local environment issues
- Engagement with local communities

Output

Consolidated operating revenue
¥1,841.9 billion
Consolidated ordinary profit
¥170.7 billion

Segment Information

Electric Power Business
Operating revenue ¥1,420.2 billion
Segment income ¥54.5 billion
Domestic electric power sales 68.4 billion kWh

Overseas Business
Operating revenue ¥277.5 billion
Segment income ¥22.6 billion
Overseas electric power sales 14.2 billion kWh

Electric Power-Related Business
Operating revenue ¥321.7 billion
Segment income ¥92.8 billion

Other Business
Operating revenue ¥29.3 billion
Segment income ¥1.8 billion

Outcome

Natural Capital

Greenhouse gas emissions:
62,230 thousand tons of CO_2 *4, 5
SOx emissions 9,000 t
NOx emissions 23,000 t
Preservation of the river environment through ecological flow

Social and Relationship Capital

Power that supports everyday living
Building a sustainable supply chain

Intellectual Capital

Contributing to the realization of a sustainable world through the technological development of zero-emission technologies for fossil fuel power generation

Human Capital

Providing safe, healthy, and rewarding workplaces
Employees taking new parent leave:
101 men, 26 women
Employees taking childcare leave:
85 men, 43 women Etc.

Manufactured Capital

Facilities which enable affordable, stable power supply

Financial Capital

Stable, ongoing shareholder returns
Consolidated payout ratio: 14.5%
*No dividend cuts since listing in 2004

Adequate returns and feedback for all stakeholders

*1 Consolidated subsidiaries, including those operating at home and abroad, are included in the figure for J-POWER and Electric Power Business and Electric Power-Related Business, etc.
*2 Consolidated subsidiaries, including those operating at home and abroad, are included in the figure for J-POWER and Electric Power Business and Electric Power-Related Business, etc. (Consolidated subsidiaries are considered in terms of investment ratio.)
*3 Dry coal: 28 MJ/kg equivalent
*4 The figure includes J-POWER and domestic consolidated subsidiaries and equity-method affiliates in Electric Power Business, Electric Power-Related Business, etc. (Consolidated subsidiaries and equity-method affiliates are considered in terms of investment ratio.)
*5 Total of Scope 1, 2, and 3

J-POWER Group's Business Model

Contributing to sustainable development of Japan and the rest of the world

The Group's business model is one in which revenue is earned through the construction and operation of power plants in Japan and overseas and the sale of generated electricity. With electric power transmission and substation facilities in Japan, the Company also earns revenue by receiving and transmitting electricity on consignment the former general utility companies.* Furthermore, as the J-POWER Group, we have the expertise to development, design, construct, and operate power plants, which are maintained and operated by Group companies, in an integrated manner.

In the thermal power generation business, we are involved in the establishment of supply chains for the stable supply of energy by investing in upstream interests in fuel. We have also established the Risk Management Committee with the aim of controlling the risks associated with electricity sales, as well as a system that enables us to flexibly respond to changes in the external environment, such as by performing maintenance in response to changes in power plant operation patterns.

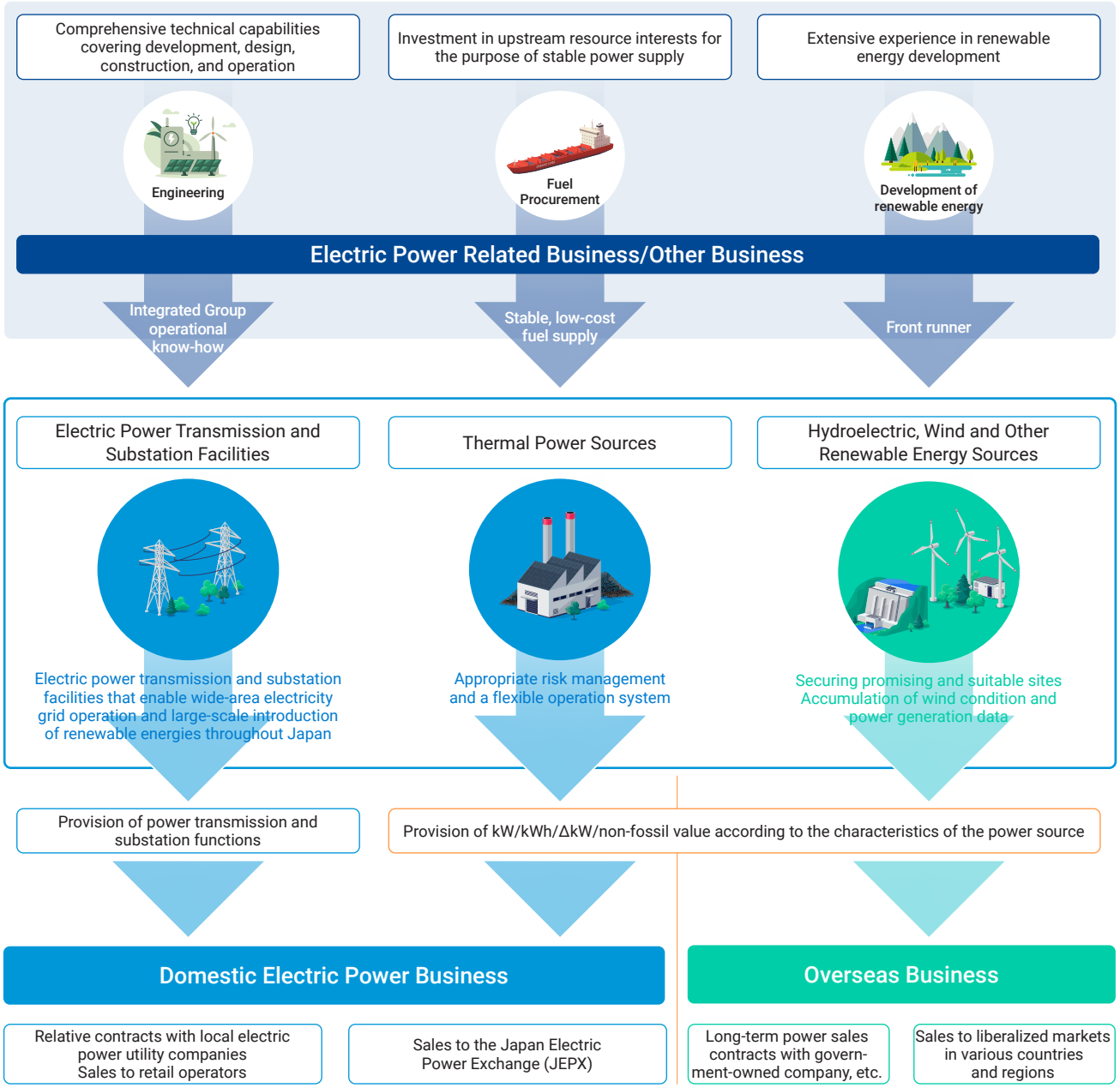
The Company has established itself as a front runner in the field of renewable energy through its abundant development and many years of operational experience, including wind power generation, which has been developed in an advanced manner since the early 2000s, and the hydroelectric power generation business, which was developed on a large scale to compensate for postwar power shortages.

The main products of the above power generation businesses are the sale of electricity according to supply and demand (kWh), generation capacity (kW), the ability to adjust supply and demand in a short time (ΔkW), and the provision of CO_2-free electricity (non-fossil value).

The transmission and substation business plays a role in enabling wide-area electricity grid operation and further expansion of renewable energy throughout Japan with unique facilities such as inter-regional connection lines, HVDC (high-voltage direct current) power transmission systems, and frequency conversion stations.

In the overseas power generation business, with the knowledge we have gathered in Japan and the networks we have developed via our consulting business, we are collaborating with trustworthy local partners to develop and provide energy sources that match the demands of each region of the world.

*The transmission and substation business is an initiative of J-POWER Transmission Network Co., Ltd.



Risks, Opportunities and Material Issues

J-POWER Group's Material Issues

Under our Corporate Philosophy of "We will meet people's needs for energy without fail, and play our part in the sustainable development of Japan and the rest of the world," the J-POWER Group has worked to improve its corporate value by contributing to the achievement of an affluent society through its business activities.

In order to further enhance our corporate value in 2021, we identified social issues that are important to the J-POWER Group, and have identified five material issues, taking into consideration the interests of our stakeholders, the relationship with our Corporate Philosophy, and the impact on our business. After preparing a materiality proposal based on third-party opinions, the Sustainability Promotion Committee and the Executive Committee discuss it, and then the Board of Directors makes a resolution.

We have decided to set targets (KPIs) for 2022 and further disclose actual results in 2023, as well as to add five material issues as non-financial indicators to the evaluation indexes for executive compensation (performance-linked compensation).

By steadily promoting materiality initiatives, we will contribute to the achievement of the SDGs and work to enhance our corporate value over the medium- to long-term.

*Targets (KPIs) and their status of achievement in FY2022 are shown on page 11.

FY2021 Identification of material issues
▼
FY2022 Identification of KPIs
▼
FY2023 Adopt material issues as non-financial evaluation indicators for performance-based remuneration

Identifying Social Issues and Needs → **Main Business Environment Challenges and the Associated Risks and Opportunities** → **Material Issues** → **Contributions to SDGs**

	Risks	Opportunities
Power resilience •Stable operation of electric power facilities •Being prepared for natural disasters •Protecting the local environment	•Facility accidents from natural disasters •Difficulty in procuring fuel (soaring resource prices, supply shortages, geopolitical risks)	•Investment in aging facilities •Investment in network facilities
Changes in the business environment •Changes in the electric power business system •Changes in society's perception of nuclear power	•Revenue fluctuations due to changes in market value •Decreasing electricity sales •Delays starting operations at Ohma Nuclear Power Plant	•Strengthen revenue and financial base •Overseas business development •Promote safe nuclear power generation business
Climate change •Development of renewable energies •Exploration of CO_2-free hydrogen •CO_2 reduction, Carbon Capture Storage (CCS) promotion	•Profit deterioration due to CO_2 emission regulations •Difficulties implementing CCS in society •Difficulties securing suitable land for renewable energy	•Development of CO_2-free hydrogen •Development of CO_2-free power sources •Network enhancement
Transition to a digital society •Digital transformation (DX), Cybersecurity	•Cyber attacks •Delayed use of digital technologies	•Improve productivity by upgrading equipment maintenance •Strengthen IT risk system, improve IT literacy
Domestic population decline, depopulation •Human resource development •Regional revitalization	•Difficulty in maintaining technological capabilities •Less workers in rural areas	•Use of diverse human resources •Improve productivity through streamlining work
Growing interest in ESG •Corporate governance •Thorough compliance •Improved information disclosure	•Decline in reputation •Increased difficulty in raising funds	•Attract ESG investment •Strengthen governance •Strengthen compliance

Supply of energy

The J-POWER Group's corporate philosophy states, "We will meet people's needs for energy without fail, and play our part in the sustainable development of Japan and the rest of the world." As such, the supply of energy is not only the Company's main goal but also the cornerstone for addressing a number of social issues.

Response to climate change

Energy supply and climate change response are social issues that cannot be taken into consideration separately in light of the growing global concern over climate change.

The J-POWER Group aims to balance stable energy supply and adaptability to climate change by leveraging its technological capabilities.

Respect for people

As the activities of the J-POWER Group are supported by our employees and other human resources, we will create an environment in which they can play an active role. We will also proactively address related social issues such as diversity and human rights.

Engagement with local communities

Large-scale energy supply projects have an impact on local communities and the environment. They are only possible with the understanding of local residents. Therefore, we will work to preserve the local environment and build relationships of trust with local communities.

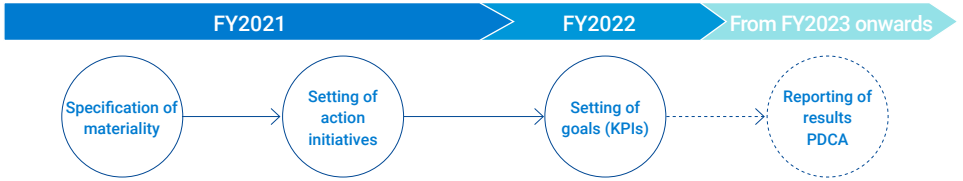
Enhancement of our business foundation

We will work to ensure corporate governance and compliance as we strengthen our earnings and financial base so that we can solve social issues and increase corporate value through our business activities.

Progress Toward KPIs for Material Issues

FY2022 Progress

The progress toward KPIs for material issues set for FY2022 is presented on this page. Each fiscal year, we report the status of our goals to the Sustainability Promotion Board and the Board of Directors as well as make a public announcement as part of our efforts toward the enhancement our business foundation. In order to steadily advance toward achieving materiality and improve our corporate value for the medium- to long-term, we will also periodically assess our goals and apply the PDCA cycle.



Material Issues	Initiatives	Goals (KPIs)	Results	Evaluation	Reference
Supply of energy	**Stable operation of electric facilities**	•Electricity Sales: Achieve initial fiscal year forecasts*1	(Total) / (Items) Electric Power Business / Overseas Business Electricity Sales Volume; Hydroelectricity; Thermal; Wind; Other*2; Overseas*3 Achievement rate: 100%; 94%; 104%; 91%; 117%; 82% Results: 82.7 billion kWh; 8.8 billion kWh; 45.6 billion kWh; 1.0 billion kWh; 12.8 billion kWh; 14.2 billion kWh Initial fiscal year forecasts: 82.7 billion kWh; 9.4 billion kWh; 43.8 billion kWh; 1.1 billion kWh; 10.9 billion kWh; 17.4 billion kWh * Due to the processing of fractions, totals do not add up.	Achievements	p.96 p.32 p.43
	Preparation for/and response to natural disasters	•Appropriate review of BCP based on latest knowledge •Expanded facility measures and crisis management system (including education and training)	•Conducted review of BCP with advice given by outside experts •Fortified the power plant's main structure and the headquarters building against earthquakes •Planned infrastructure improvements to maintain and enhance crisis management response capabilities as well as ensure supply capacity •Regularly conducted various disaster drills	Ongoing	p.91
	Strengthening of cybersecurity	•Zero major security incidents	•Zero major security incidents •Established the J-POWER Group Basic Policies on Personal Information and Information Security	Achieved	p.92
Response to climate change	**Reduction of greenhouse gases**	•CO_2 reduction from the domestic power generation business (Compared to FY2013) •Reduction of 9.2 million tons by FY2025*4 •Reduction of 46% (22.5 million tons) by 2030*4	•CO_2 emissions in FY2022 40.64 million tons (Compared to a 8.13 million ton reduction in FY2013)	Ongoing	p.18-20 p.56 p.102
	Development of renewable energy	•New development of renewable energy to 1,500 MW or more by FY2025 (compared to FY2017)	FY2022 Results: Start of commercial operation: 271 MW FY2017-FY2022 Accumulated Results: Start of operation: 432 MW; Start of construction: 301 MW; Start of surveys: Approx. 1,050 MW * Data for April 2023 is included.	Ongoing	p.21-22
	Steady promotion of the Ohma Nuclear Power Plant Project, with safety as a major prerequisite	•Promotion of the CO_2-free Ohma Nuclear Power Plant Project on the basis of safety	•Addressing the assessment of nuclear power facilities' adherence to the New Safety Standard for Nuclear Power Stations •Depending on the review's outcome, examine the start and end dates of the construction on facility safety reinforcement	Ongoing	p.23
	Pursuit of the possibility of CO_2-free hydrogen	•Promotion of green and blue hydrogen production and utilization of technologies in Japan and overseas	•(Overseas blue hydrogen) Deliberations on whether to participate in a large-scale export project of blue ammonia to Asia -Investigations on the commercialization of clean hydrogen production through brown coal gasification in Victoria, Australia •(Overseas green hydrogen) Deliberations on possible participation in demonstration and commercial projects for green hydrogen production in Europe •(Domestic green hydrogen) Investigation on the cost of overseas projects, and consideration of the commercialization of hydrogen production and supply using domestic renewable energy sources •(CCS) Establishment of a joint venture to commercialize CCS in 2030 in Japan (February 2023) * CCS is an essential technology for blue hydrogen production	Ongoing	p.24-27

*1 Initial forecast of electricity sales for the fiscal year ended March 31, 2022 (FY2021), as announced in the financial results presentation.
*2 Sales of electricity procured from the wholesale electricity trading market, etc.
*3 Electricity sales by overseas consolidated subsidiaries (excluding electricity sales by equity method affiliates)
*4 In the Progress of the Medium-Term Management Plan released on May 10, 2023, the base year for the CO_2 emissions reduction target was changed from the three-year average results for FY2017-2019 to the FY2013 results.
In addition, we have raised our 2030 CO_2 emissions reduction target by 1.3 million tons. Compared to the three-year average results for FY2017-2019, the target for FY2025 is a reduction of 7 million tons, and the target for FY2030 is a reduction of 44% / 20.3 million tons.

Progress Toward KPIs for Material Goals (KPI)

Material Issues	Initiatives	Goals (KPIs)	Results	Evaluation	Reference
Respect for people	Respect for human rights	•Formulation of a Human Rights Policy and promote initiatives	•Formulation and publishing of the J-POWER Group Basic Policy on Human Rights •Establishing a Human Rights Subcommittee under the Sustainability Promotion Board and initiating human rights due diligence	Ongoing	p.67
	Human resource development	•Fostering human resources who can take on various management issues through the creation of a workplace that promotes continuous innovation	•Average hours of training per employee ..... 33.9 hours/person •Training cost per employee ..... ¥245 thousand/person	Ongoing	p.71-73 p.103
	Assurance occupational health and safety	•Eliminate major disasters (zero fatalities or serious injuries) •Maintain and improve high uptake rate of thorough medical check-ups (over 90%) •Employee satisfaction surveys*1	•Fatalities: None Serious injuries: 8 (previous year: 11) *See p.75 for efforts to eliminate industrial accidents.	Not yet achieved	p.74-76 p.103
			•Percentage of people receiving medical check-ups: 93%	Achieved	
			•Conducting an employee satisfaction survey	Achieved	
	Promotion of diversity	•Number of female employees with senior roles: More than three times the number of employees in FY2021 (24 employees) by 2030*1 •Appointment of foreign nationals to senior roles: Increase from FY2021 (147 employees) by 2030 in line with expanded overseas business •Number of employees in senior roles among mid-career hires: More than 1.5 times the number of employees in FY2021 (110 employees) by 2030*1 •Percentage of female employees among new hires: 20% or more*1 •Percentage of employees taking childcare leave: 100%*1	•Number of female employees in senior roles 32	Ongoing	p.64-70 p.74 p.103
			•Number of foreign nationals appointed to senior roles 150	Achieved (Ongoing)	
			•Number of employees with senior roles among mid-career hires 124	Ongoing	
			•Percentage of female employees among new hires ..... New graduate employees who joined the Company on April 1, 2023 21%	Achieved	
			•Percentage of employees taking childcare leave..... 88% (Men: 86%, Women: 100%) *See p.74 for details on initiatives and systems	Not yet achieved	
Engagement with local communities	Preservation of local environment	•Zero serious violations of environmental laws and agreements •Effective utilization rate of industrial waste: Approx. 97%	•Number of serious violations of environmental laws, agreements, etc.: 0	Achieved	p.61 p.63-64 p.101
			•Effective utilization rate of industrial waste: 96%	Largely achieved	
	Creation of relationships of trust with local communities	•Active participation in local contribution activities	•Number of activities: 453 •3,263 J-POWER Group employee participants in total (a significant increase from 2,182 in FY2021). The activities include tree planting, cleanup activities, visiting lectures, facility tours, participation in local events and financial support, traffic safety patrols, etc.	Ongoing	p.65-66
Enhancement of our business foundation	Enforcement of corporate governance	•Continuous efforts to identify issues and improve them through annual evaluation of the effectiveness of the Board of Directors	•Steady transition to a company with an Audit & Supervisory Committee •Based on the results of the evaluation from the previous year, some significant business execution decisions were delegated to Directors, decision-making authority was transferred to positions from the president and below, and a list of opinions and feedback from the Board of Directors was given.	Ongoing	p.80-86
	Enforcement of compliance	•Strengthening efforts through the Compliance Action Committee via compliance activity reports, understanding the issues, and incident analysis	•Identification of issues and analysis of cases through questionnaires targeting J-POWER Group employees and opinion exchange meetings where directors and employees directly communicate with each other, and reflection in compliance promotion activities such as various training programs and events in the next fiscal year.	Ongoing	p.89-90
	Strengthening of our profit and financial bases	•Consolidated ordinary income: 90 billion yen or more in FY2023 •Consolidated equity ratio: 30% or more in FY2023	•Consolidated ordinary profit 170.7 billion yen Consolidated equity ratio 32.3%	Ongoing	p.29 p.32-34

*1 Applies to J-POWER only
*2 In August 2023, the name of the Company-wide Compliance Committee was changed to the J-POWER Group Compliance Committee.