INTEGRATED REPORT

The Hokuriku Electric Power Group

2023

CSR & Financial Report

This English translation is provided for reference purposes only, for use with the original Japanese version of the Hokuriku Electric Power Group's 2023 Integrated Report. In the event of any discrepancies between the original Japanese version and this English translation, the original Japanese version shall take precedence.

Hokuriku Electric Power Company Group

Building an Affluent, Lively Hokuriku through Power and Intelligence

CONTENTS

About the Hokuriku Electric Power Group

3 Corporate Profile
4 History of the Hokuriku Electric Power Company
5 Message from the President
7 Financial Highlights
8 Non-financial Highlights

Value Creation

9 The Value Creation Process of the Hokuriku Electric Power Group
11 Establishment of the Hokuriku Electric Power Group New Mid-term Business Plan
15 Measures for Improving Managerial Efficiency and Efforts toward Group-wide Productivity Improvement
16 DX Promotion
17 Taking on Challenges toward Carbon Neutrality
18 Future Vision for 2050
19 Thorough Compliance
20 Interview with an External Director
21 Investment in Human Resources

Business Activities

27 Power Generation
37 Power Transmission and Distribution
45 Sales / New Business

52 Efforts Related to Environmental, Social, and Corporate Governance Issues

E Environmental Efforts

53 Action on Climate Change
55 Active Efforts toward Environmental Conservation

S Social Efforts

58 Coexisting with the Local Community

G Governance Efforts

60 Maintaining the Corporate Governance System
66 Strengthening of Efforts to Support Our Business Foundation

Data

68 Financial Information
70 Environmental, Social, and Governance-related Information

Editorial Policy

Since FY 2006, the Hokuriku Electric Power Group has published CSR reports in order to share information on our way of thinking, policies on our efforts, and activities underway, regarding corporate social responsibility.

Starting in FY 2019, we have combined our financial and non-financial information into a single Integrated Report, so that all of our stakeholders can learn about the Group's efforts toward mid-to-long-term value creation.

Through this report, we hope to improve readers' understanding of the Group's efforts and attitude, and we hope to further improve two-way communication with everyone involved.

Reference Guidelines, etc.

- *International Integrated Reporting Framework* by the Value Reporting Foundation (VRF, formerly IIRC)
- *Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation* by the Ministry of Economy, Trade, and Industry
- Recommendations by the Task Force on Climate-related Financial Disclosures (TCFD)

Publication Date: November 2023
Scope of Report: Companies belonging to the Hokuriku Electric Power Group
Period Covered by Report: April 1, 2022 to March 31, 2023
(Portions of the report may also include information from outside this period)

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A Note on Forecasts

All Group plans, strategies, sales estimates, and other information printed in this report involving forecasts of the future are based on information available at the time of writing, and carry a degree of potential risk and uncertainty. As a result, please note that changes to economic conditions, market trends, revisions to related laws and regulations, and other factors may cause the Group's actual results and business environment to differ from as shown in this report.

Overview of the Hokuriku Electric Power Company and the Hokuriku Electric Power Transmission & Distribution Company

Hokuriku Electric Power Company

Main business:	Generation and sales of electricity
Head office location:	15-1 Ushijima-cho, Toyama-shi, Toyama Prefecture
Date of establishment:	May 1, 1951
Capital:	117.641 billion yen
Company representative:	Koji Matsuda, Executive President and Representative Director
Total Assets*:	1,805,318 million yen (1,716,651 million yen)
Sales*:	817,601 million yen (756,346 million yen)
Ordinary Income*:	△93,737 million yen (△92,916 million yen)
Net Income*:	△88,446 million yen (△81,942 million yen)

* Consolidated figures for FY 2022 or as of March 31, 2023, are shown. Figures in parentheses are nonconsolidated figures.

Major Shareholders (As of March 31, 2023)

Name	Number of Shares Held (thousands of shares)	Investment Ratio (%)*
The Master Trust Bank of Japan, Ltd. (Trust Account)	22,948	11.0
Toyama Prefecture	11,270	5.4
Hokuriku Electric Power Company Employee Stock Ownership	8,718	4.2
The Hokuriku Bank, Ltd.	7,700	3.7
The Hokkoku Bank, Ltd.	6,000	2.9
Custody Bank of Japan, Ltd. (Trust Account)	5,463	2.6
Nippon Life Insurance Company	4,752	2.3
Mizuho Bank, Ltd.	3,341	1.6
The First Bank of Toyama, Ltd.	2,740	1.3
Mizuho Trust & Banking Co., Ltd. (Pension Trust, Hokuriku Bank Account)	2,665	1.3

* Investment ratio is calculated after deducting treasury shares.

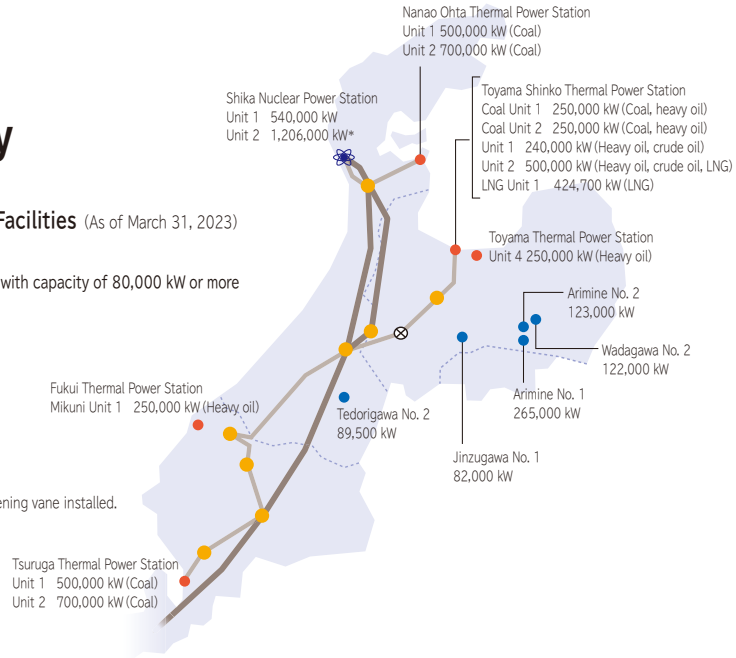
Hokuriku Electric Power Transmission & Distribution Company

Main business:	Power Transmission and Distribution
Head office location:	15-1 Ushijima-cho, Toyama-shi, Toyama Prefecture
Date of establishment:	April 1, 2019 (Operation commenced on April 1, 2020)
Capital:	10 billion yen
Company representative:	Kazuya Tanada, Executive President

Major Power Supply Facilities (As of March 31, 2023)

- Hydroelectric power station with capacity of 80,000 kW or more
- Thermal power station
- Nuclear power station
- Transmission line (500 kV)
- Transmission line (275 kV)
- Substation
- Switching station

* If operated with turbine straightening vane installed.



Overview (As of FY 2022 or March 31, 2023)

	Power-generating Facilities	Number of Power Stations	Capacity
Hokuriku Electric Power Company	Hydro power	131	1,935 MW
	Thermal power	5	4,565 MW
	Nuclear power	1	1,746 MW*1
	Photovoltaic	4	4 MW
	Total	141	8,249 MW
	Total Electricity Sales Volume	Retail	Wholesale*2
		26,273 GWh	6,418 GWh
	Total*2	32,691 GWh	
Hokuriku Electric Power Transmission & Distribution Company	Transmission Facilities	Overhead	Underground
	Total Length of Transmission Lines	3,200 km	165 km
	Transformation Facilities	Number of Substations	Capacity
		260	32,370 MVA
	Distribution Facilities	Overhead	Underground
	Total Length of Distribution Lines	42,079 km	1,579 km
	Power-generating Facilities	Number of Power Stations	Capacity
	Thermal power	1	288 kW

*1 Estimation based on the assumption that Shika Unit 2 is operated with turbine straightening vane installed.
*2 Due to rounding, the total figure may not exactly equal the sum of the individual figures.

History of the Hokuriku Electric Power Company

The Hokuriku Electric Power Company was established in 1951, built on a foundation of the Toyama Electric Light Company, established in 1898 as the Hokuriku region's first electric power company, and other locally-capitalized electric power companies. In May 2021, we celebrated our 70th anniversary.

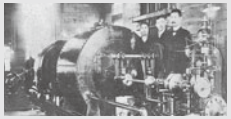
As a company established with the backing of the regional community, including industrial and economic circles, we have developed alongside the Hokuriku region by ensuring a stable supply of low-cost, high-quality energy, keeping coexistence and co-prosperity with the region in mind as our fundamental management philosophy, while aggressively undertaking projects such as the development of power sources. We will continue to make progress together with the region, and strive to contribute to the resolution of social issues, including the realization of carbon neutrality.

The Beginning of the Electricity Business in the Hokuriku Region — the Roots of the Hokuriku Electric Power Company

1898 Establishment of the Toyama Electric Light Company and the Kanazawa Electricity Company

1899 Establishment of the Kyoto Electric Light Company Fukui Branch

A number of electric power companies, including the Toyama Electric Light Company, were established in Hokuriku. Electric power resources were developed, capitalizing on the area's plentiful water resources. The low-cost electricity generated by hydropower allowed the area to develop industries, attracting industries that are heavy consumers of power, such as the steel and carbide industries, as well as the textile industry.



Okubo Power Station of the Toyama Electric Light Company Completed in 1899

Fushiki Industrial Area (Toyama Prefecture)

1941 Establishment of the Hokuriku Joint Electricity Company

Shosaku Yamada (later the first president of the Hokuriku Electric Power Company) approached electric utility companies in Hokuriku, and 12 companies voluntarily consolidated, establishing a unified electricity business in the Hokuriku region.

Shosaku Yamada

1951 Establishment of the Hokuriku Electric Power Company

When Japan's power supply framework was discussed during and after the war, the initial plan suggested that the whole country should be divided into eight blocks, with the Hokuriku area merged into the Chubu area. However, Shosaku Yamada, with the support of the local business community, strongly emphasized the unique distinctiveness of Hokuriku and persistently persuaded the national government, which led to approval for the Hokuriku area' s independence.

1951

The Hokuriku Electric Power Company has contributed to the development of the Hokuriku region through the stable supply of low-cost, high-quality energy, while diversifying power sources in line with the needs of the times. During the high economic growth period, the company supported the strong demand for electricity by developing thermal power sources, as well as developing hydroelectric power in the Arimine area, taking advantage of the region' s abundant water sources. The company's other efforts in this regard include ensuring energy security following the experience of the oil crises, and decarbonizing from power generation to help address global warming.

●Amount of Total Electricity Sales

2.1 billion kWh*
1951

32.7 billion kWh
2022

Today

1954

Jinzu River No. 1 Power Station (Hydro Power)

1964

Toyama Thermal Power Station Unit 1

1981

Arimine No. 1 Power Station (Hydro Power)

1991

Tsuruga Thermal Power Station Unit 1

2006

Shika Nuclear Power Station Unit 2

2012

Mikuni Photovoltaic Power Station

2018

LNG-fired Unit 1 of Toyama Shinko Thermal Power Station

* Retail electricity sales in the Hokuriku area

Message from the President

Aiming for Sustainable Development alongside Customers and Communities, through the 3 Cs (Change, Chance, and Challenge), by Delivering a Stable Supply of Electricity and Quickly Recovering as we Strengthen Our Financial Base

Koji Matsuda
Executive President and
Representative Director
Hokuriku Electric Power Company

The Business Environment the Group Faces Today

Last year, fuel prices and wholesale electricity market prices both soared to record-breaking levels following the Russian invasion of Ukraine, resulting in a major increase in costs to supply electricity. In response to this, I headed an emergency management task force to review all costs, including reductions and deferrals, to the extent that our stable supply was not impeded. We implemented every management efficiency measure we could, including measures to improve our income and expenditures by ¥14.0 billion in FY 2022. Despite this, rising costs far outpaced our ability to improve management efficiency, leaving us with a severely damaged financial base. If these circumstances were to continue, we would become unable to procure fuel and maintain our facilities, which would in turn threaten to affect the stable supply of electricity. We were left with no choice but to make the difficult decision to raise electricity rates for all customers.

We shall continue to fulfill our primary mission of providing a stable supply of electricity, and shall strive to recover and strengthen our financial base as soon as possible. We also aim to achieve sustainable development by flexibly addressing social changes, such as achieving carbon-neutrality by 2050, as well as by responding in good faith to feedback from customers and communities.

Toward Bringing About Our Ideal State

In 2019, we established the Hokuriku Electric Power Group Long-term Vision covering the period through FY 2030. The Group' s vision is to develop alongside the Hokuriku Region, and to create new value nationwide and internationally; our two main strategies to achieve this are expanding our comprehensive energy business based in Hokuriku, and cultivating new growth businesses.

In light of the significant damage suffered by our financial base since the initial announcement of the Long-term Vision, we have established a new Mid-term Business Plan for FY 2023–2027 that prioritizes improved profitability and a strengthened financial base through securing stable supply, thoroughly pursuing efficiency, and expanding our business domains. The Plan sets forth three pillars of management to serve as particular focuses.

The first of these is ensuring a stable supply, improving the financial balance, and strengthening the financial base. At the March 2023 review meeting for the Shika Nuclear Power Station — itself a crucial factor in achieving carbon neutrality — we were able to obtain understanding from the Nuclear Regulation Authority (NRA) that the faults at the site are not active. We will continue to work toward an early restart of the power station, on the major premise that we shall continue to handle the screening process without fail, and earn the understanding of the community. We shall also maximize supply-demand balance through the use of AI technology to forecast hydroelectric power generation, to control thermal power facility boilers, and to forecast electricity demand.

The financial targets for the period covered by the new Mid-term Business Plan include achieving consolidated ordinary income of ¥45.0 billion or higher, and a consolidated equity ratio of 20% or higher (by the end of FY 2027) from the perspective of fixing our damaged financial base, in order to continue to fulfill such social missions as delivering a stable supply of electricity and achieving carbon neutrality. In addition, from the perspective of management conscientious of capital efficiency, we shall ensure a consolidated return on equity (ROE) of 8% or higher.

The second of these three pillars is working with local communities to promote decarbonization. In recognition of the fact that achieving a decarbonized society is a key issue for the Group' s sustainable growth into the future, we have set a very aggressive renewable energy development target of 1 million kW or higher (3.0 billion kWh/year or higher) by the early 2030s, toward achieving carbon neutrality by 2050. We are also working to decarbonize power sources, through efforts such as increasing biomass co-combustion ratios at coal-fired power stations, new construction and repowering of hydroelectric power stations, and offshore wind farms, and are working to develop next-generation power transmission and distribution networks for large-scale introductions of renewable energy sources. In addition to these, we are also working to contribute to the Hokuriku region' s decarbonization in collaboration with local governments.

The third pillar is expansion of new business domains for sustainable growth. To this end, we shall leverage the Group' s resources and strengths to achieve Group growth, by creating new pillars of growth beyond our electricity business. In our electricity business, we have expanded the Easy series, which is a household-oriented carbon-neutral service, as well as PPA sales to businesses. We are also working on community development projects like Actibase Fukui, and shall continue to expand into new businesses in the future.

In order to promote carbon neutrality and further increase corporate value, we shall make growth investments totaling ¥150.0 billion from FY 2023 through FY 2027. For investing, we shall carefully select the investments we make based on business evaluations via methods such as ROIC, while taking into account potential business risks and prioritizing profitability in order to achieve both growth and financial discipline. This past September, we also established the Investment Committee. Before making management decisions, we check and evaluate investment projects from objective, multifaceted perspectives, while also determining investment priority levels and making investments with a sense of speed.

Strengthening of Efforts to Support Our Business Foundation

In order to push forward with these three pillars, we shall strive to create comfortable work environments with thorough compliance enforcement, and to increase labor productivity.

Last fiscal year, we discovered an incident of customer information being improperly handled. We have since taken various steps toward preventing this from happening again, including establishing a new Committee for Proper Management of Information, chaired by the vice president. We shall continue to make efforts to foster and ensure an awareness of compliance, so that the Hokuriku Electric Power Group will remain a chosen and trustworthy partner to our customers.

In order to achieve our goals and accomplish each of our initiatives, we must also enhance the Group' s collective strength. To this end, we actively promote diversity, equity, and inclusion, such as by creating a working environment where employees can balance their personal and work lives, and where people can adopt diverse work styles. We also engage in management that values our human capital, including health activities such as encouraging employees to quit smoking, as well as efforts to improve labor productivity through technologies like DX and IoT. These are just some of the active efforts we are making throughout the Group.

Message to Stakeholders

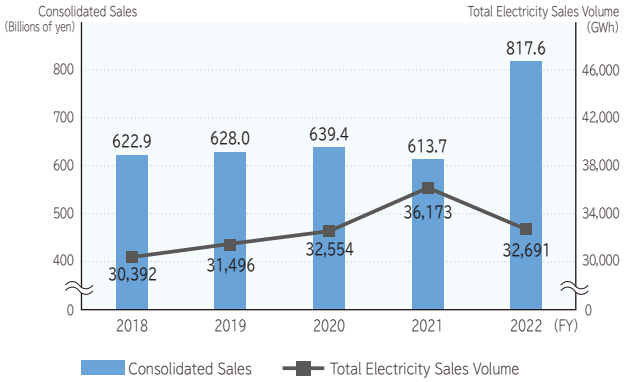
The Group has developed alongside the Hokuriku region by delivering a stable supply of inexpensive, high-quality energy. Even in the midst of severe CHANGE, we must leap upon this CHANCE to achieve sustainable growth with the Hokuriku region, and fearlessly take on each CHALLENGE, further improving our corporate value and contributing to the Hokuriku region through the Three Cs. Finally, I would like to express my sincere gratitude to all of our stakeholders, whose continued support of the Group' s business activities is greatly appreciated. Thank you very much.

FY 2022 Financial Results (Consolidated)

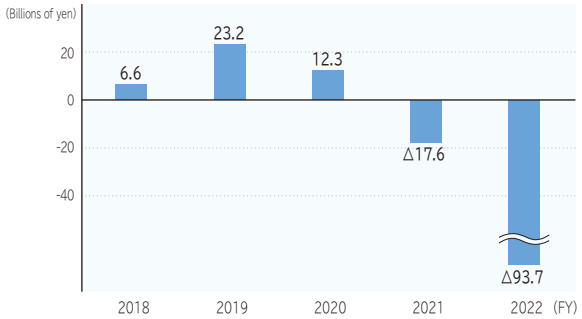
Sales (operating revenues) amounted to ¥817.6 billion, an increase of ¥203.8 billion from the previous fiscal year, due to an increase in fuel cost adjustment despite a decrease in total electricity sales; together with non-operating revenues, total ordinary revenues amounted to ¥822.9 billion, an increase of ¥201.7 billion.

Ordinary loss was ¥93.7 billion (with the previous fiscal year's ordinary loss being ¥17.6 billion), due to factors such as soaring fuel prices. Net loss attributable to owners of parent was ¥88.4 billion (with the previous fiscal year's net loss attributable to owners of parent being ¥6.7 billion).

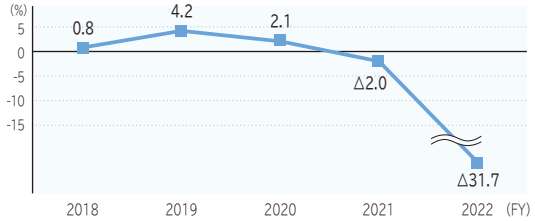
Consolidated Sales and Total Electricity Sales



Consolidated Ordinary Income (Loss)

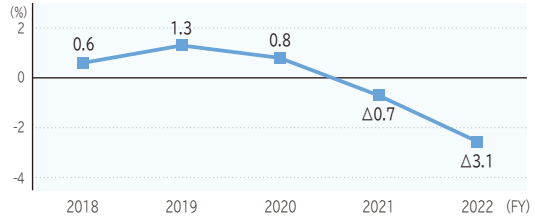


Consolidated Return on Equity (ROE)



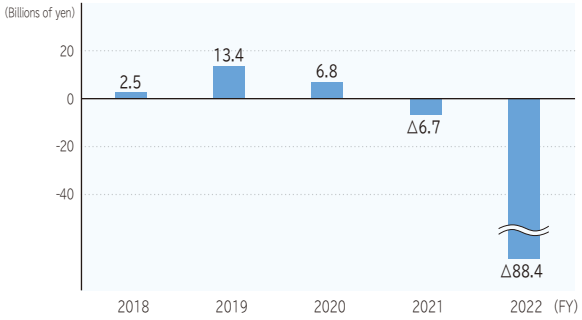
ROE = Profit (loss) attributable to owners of the parent/Average equity

Consolidated Return on Assets (ROA)



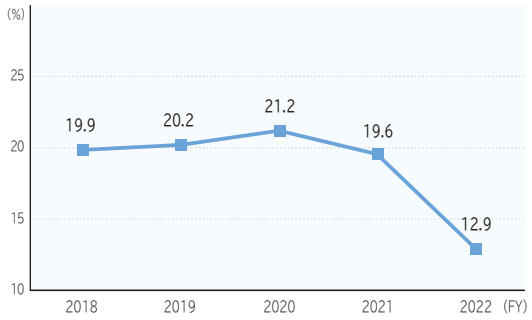
ROA = Operating income (loss) /Average total assets

Consolidated Net Income (Loss)



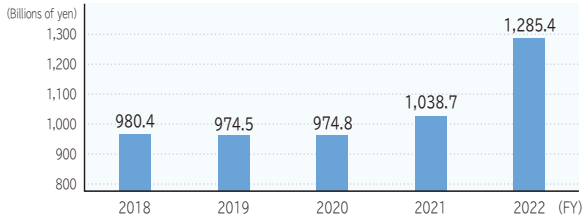
Net income (loss) attributable to owners of parent is shown

Consolidated Equity Ratio

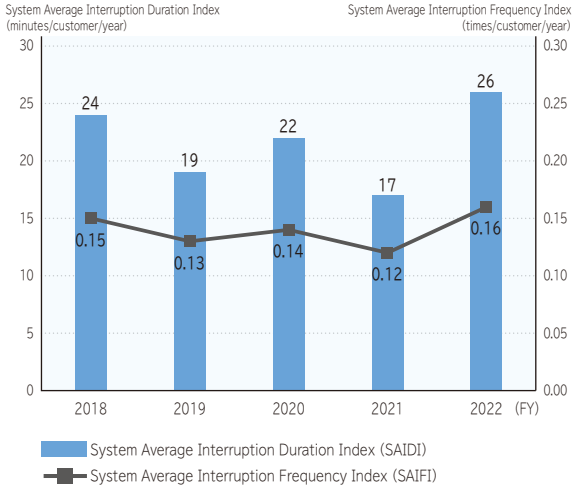


The equity ratio has been calculated by dividing shareholders' equity by total assets.

Consolidated Outstanding Interest-bearing Debt

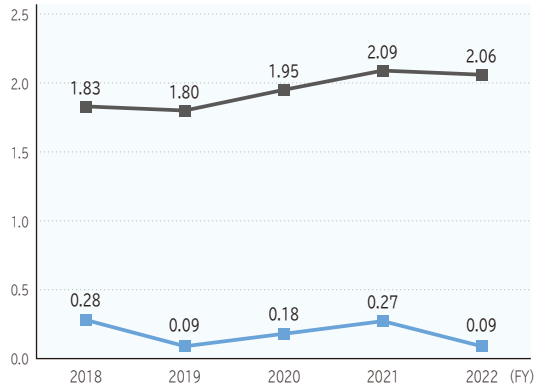


System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI)



Per-customer data shown.

Rate of Lost-worktime Injuries

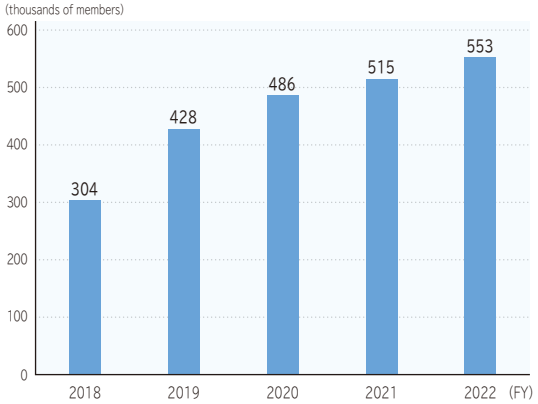


Hokuriku Electric Power Company
National Average (National averages are based on calendar year rather than fiscal year.)

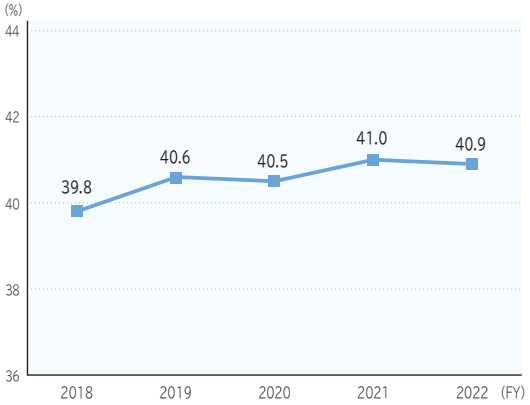
$$\text{Rate of Lost-worktime Injuries} = \frac{\text{Number of work-related casualties}}{\text{Total actual hours worked}} \times 1{,}000{,}000$$

Results for the Hokuriku Electric Power Company and the Hokuriku Electric Power Transmission & Distribution Company

Hoku-Link Membership

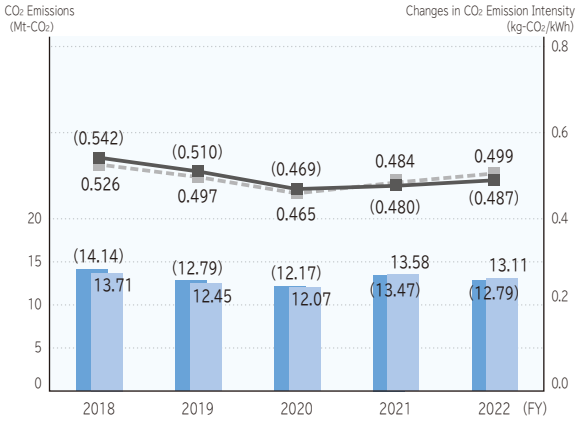


Overall Thermal Power Generation Efficiency (Benchmark Index B of the Act on the Rational Use of Energy)



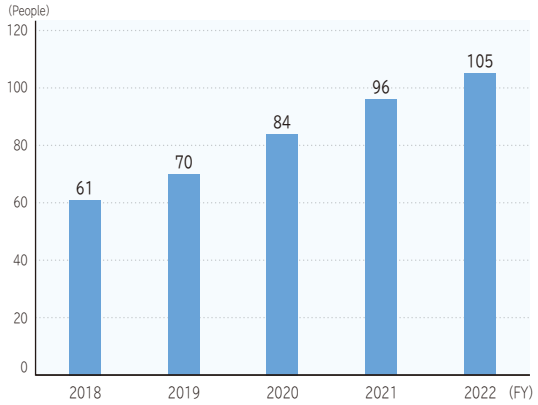
Index B = (actual coal-fired power generation efficiency × ratio of coal-fired power generation to total thermal power generation) +(actual LNG-fired power generation efficiency × ratio of LNG-fired power generation to total thermal power generation) +(actual oil-fired power generation efficiency × ratio of oil-fired power generation to total thermal power generation)

Changes in CO_2 Emission Intensity/CO_2 Emissions



Figures in parentheses indicate amount of basic CO_2 emissions and emission intensity.
The adjusted values reflect the adjustment amounts based on the feed-in tariff system for renewable energy, and other factors.
Calculations were made based on the Law Concerning the Promotion of the Measures to Cope with Global Warming.

Number of Female Managers



Results for the Hokuriku Electric Power Company and the Hokuriku Electric Power Transmission & Distribution Company

The Value Creation Process of the Hokuriku Electric Power Group

We shall leverage our strengths and management resources to create new value for society, solving local issues and leading to further Group growth.

INPUT Source of Value

Competitive Advantages & Strengths

- Long track record of Hokuriku-region-based business operations, and trust from the community
- Tireless efforts to ensure stable supply and improve power quality, and excellent technical capabilities
- Groupwide collaboration and collective strength

Capital Invested* ▶ P68-73

Financial Capital

Consolidated Total Assets	1,805,318 Million yen
Consolidated Equity Ratio	12.9 %

Human Capital

Consolidated No. of Employees	8,565
Percentage of Female Employees	12.5 %

Social, Facility, and Natural Capital, and Customer Base

The Trust of the Region	71 years since our establishment
No. of Group Companies	56
Total Electricity Sales Volume	32.7 billion kWh
Hoku-Link Membership	553 thousands of members
Number of Power Stations	142
Total Power Station Output	8,249 MW
Total Length of Transmission Lines	3,365 km
Total Length of Distribution Lines	43,658 km
Abundant Water Resources (No. of Hydroelectric Power Stations)	131
No. of Patents	114

Business Environment/Corporate Philosophy and Business Activities

The Hokuriku Electric Power Group's Business Environment ▶ P11-12

Current Business Environment

- Instability in energy market (volatile fuel prices and electricity prices) due to the Russian invasion of Ukraine and other international instability

Expectations of the Mid-to-long-term Business Environment

- Progress of the government's green transformation policy
- New post-COVID lifestyle taking root
- Advent of new business models using digital technology (digital transformation)

The Hokuriku Electric Power Group Philosophy

Building an Affluent, Lively Hokuriku through Power and Intelligence

Business Activities

Electricity Business Domain

Power Generation ▶ P27 → Transmission and Distribution ▶ P37 → Sales ▶ P45

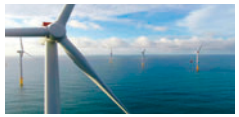
We utilize the Group's value chain to deliver a stable supply of inexpensive, high-quality energy

+

Domains Other than Electricity Business ▶ P50

Plant Maintenance

LNG Sales


Overseas Business

We deliver diverse value through aggressive expansion of our business domains, from domains peripheral to our electricity business to other business domains entirely

Technical Capabilities | The Group's Collective Strength | Customer Base

The Hokuriku Electric Power Group 2030 Long-Term Vision
Hokuriku Electric Power Group New Mid-term Business Plan (FY 2023-2027) ▶ P11-14

OUTPUT Services Provided

Electricity Business Domain

- Sales of stable, low-cost electricity

Domains Other than Electricity Business

Domains Peripheral to Electricity Business

- Asset Outsourcing Service for Energy-Related Equipment
- ESCO services
- Installation and maintenance of power generation equipment
- Design, construction, and maintenance of electrical equipment, etc.
- Manufacture and sales of equipment related to electric power
- Municipal gas business (Fukui City Gas Co., Ltd.; Kanazawa Energy Co., Ltd.)
- Sales of liquefied natural gas (LNG)
- Overseas electricity business

Kanazawa Energy Co., Ltd.

Municipal Gas Production Site

Other Business Domains

- Real estate business
- Temporary staffing, and nursing care and welfare services
- Interoffice data communications and internet access services
- Network/data center solutions
- Construction consulting
- Surveying and geological investigations, and construction design
- Environmental measurement and analysis, of water quality, air quality, etc.
- Radioactivity measurement and asbestos surveys, soil contamination surveys, coal ash sales

* Consolidated figures are shown for FY 2022, or as of March 31, 2023.

OUTCOME Value Delivered to Stakeholders

We have set forth the future vision of the Group for the year 2050, with a determination to contribute to the resolution of social issues concerning global warming, sustainable regional development, and the realization of a smart society, by developing businesses that transcend the framework of our existing electricity business. We aim to be a leading problem-solving company that proactively addresses issues faced by the region, in cooperation with local governments and enterprises.

Future Vision for 2050 — **Connect, Support, and Deliver — Working with Local Communities toward a Sustainable Smart Society** ▶P18

1. Creating a Society Friendly to People and the Environment with Decarbonization of Energy
2. Bringing Vibrant Communities to the Next Generation
3. Bringing Peace of Mind to Everyday Life through Connected Networks
4. Bringing Comfort to People's Lives with Digital Technologies

Ongoing Development of the Hokuriku Region | **Safety and Peace of Mind** | **Enriching Lifestyles**

Customers

We help enrich customers' lifestyles by providing a stable supply of inexpensive, high-quality energy and creating new value.

Shareholders & Investors

We work to provide stable power supply operation and increase our operational efficiency to improve our income and expenditures and our cash flow. At the same time, we aim to expand our comprehensive energy business and create growth businesses, thus ensuring financial health, and allowing us to meet shareholders' expectations.

Local Community

Using our home region of Hokuriku as a foundation, we work to bring about sustainable development for the Hokuriku region, as we develop alongside the region. We aim to be a business trusted and chosen by the local community.

Business Partners

Based on our fair and impartial procurement activities, we build long-term relationships of trust with all of our business partners, as we work toward the development of both our company and theirs.

Employees

We work to build safe and comfortable work environments through our safety-first policy and thorough compliance.

Related SDGs

5 GENDER EQUALITY | 7 AFFORDABLE AND CLEAN ENERGY | 8 DECENT WORK AND ECONOMIC GROWTH | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 11 SUSTAINABLE CITIES AND COMMUNITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION | 16 PEACE, JUSTICE AND STRONG INSTITUTIONS | 17 PARTNERSHIPS FOR THE GOALS

Main Management Indicators

Financial Capital

- Consolidated Ordinary Income ¥45.0 billion or higher
- Consolidated Equity Ratio 20% or Higher (as of the end of FY 2027)
- Consolidated Return on Equity (ROE) 8% or Higher

▶P13

Manufactured Capital

- Renewable energy development amount (Compared to FY 2018) 1 million kW or higher (3.0 billion kWh/year or higher) (by the early 2030s)
- Ratio of Non-fossil Sources (based on electricity generated) 50% or Higher (by FY 2030)

▶P17

- Amount of Power Outages No More than 6.7 MWh/year (average from FY 2022 through FY 2027) (Including low-voltage electric power customers experiencing power outages due to endogenous factors)

Natural Capital

CO_2 Emissions (Compared to FY 2013) (based on retail electricity sales volume)

Change of 50% or Higher (by FY 2030)

▶P17

Human Capital

- Percentage of Male Employees Taking Child-care Leave 100%
- Promotion of Women in Active Roles, Diversity, Equity, and Inclusion
- Promotion of Health-conscious Management and Development of Human Resources

▶P21-26

Establishment of the Hokuriku Electric Power Group New Mid-term Business Plan (FY 2023-2027)

The Russian invasion of Ukraine caused significant problems, including fuel and wholesale electricity market prices soaring to record-breaking levels, which severely damaged the Group's financial base in an unprecedented manner. In order to overcome this situation through group-wide efforts and ensure the stable supply of electricity, which is our greatest mission, we have established a new mid-term business plan (period covered: FY 2023-2027).

STEP 1 Business Environment Analysis

Major Environmental Changes Shaking Our Business Foundation

March 2011: Great East Japan Earthquake
(Shika Nuclear Power Station shut down ever since)

- Despite the prolonged shutdown of Shika Nuclear Power Station and rising thermal power fuel costs, our thorough streamlining efforts enabled us to avoid raising the regulated price, and to maintain a stable supply of electricity.

✓ Amount of reduced costs: 48 billion yen (cumulative total)

February 2022: Russian invasion of Ukraine
(Fuel and wholesale electricity market prices soared and remained high)

✓ Fuel cost adjustment unit price reached the upper limit
Increased supply costs unable to be recovered through electricity charges

✓ Establishment of 2022 Emergency Management Countermeasures Headquarters
Compiled measures to improve income and expenditures by ¥14.0 billion.

FY 2022 Financial Results: Largest deficit ever
Consolidated Ordinary Income = Deficit of 93.7 billion yen

- Due to the increased supply costs far exceeding the reduced costs through streamlining, we were not able to stem the deterioration of the balance, and **raised electricity rates.**

Status of Our Efforts regarding Risk Management

Management risks are handled appropriately: after being grasped and evaluated as appropriate, they are reflected in various plans, including the business plan, established for each fiscal year at the board of directors' meeting. In addition, we establish organizations to discuss the issues and policies relating to such risks, as well as setting up company-wide cross-department committees and other equivalent units, on an as-needed basis.

Risks and Opportunities Surrounding Our Business

Category	Risks	Opportunities
Stable Supply	● Prolonged shutdown of Shika Nuclear Power Station ● Increased burden of grid congestion management and lack of reserve capacity due to large amount of renewable energy system interconnection and reduction of thermal power sources ● Violent fluctuations in fuel and wholesale electricity market prices and deterioration of the energy procurement environment ● Unscheduled shutdowns of coal-fired and other power generation facilities ● Power facility problems due to large-scale natural disasters, such as typhoons and earthquakes, becoming increasingly severe ● Aging of power generation, transmission, and distribution facilities	● Improved performance of equipment due to technological innovations ● Acceleration of discussions on the maximum use of nuclear power (pushing forward toward restarts, reexamining regulations for operating lifetimes, constructing/expanding/renovating facilities)
Enhancing Competitiveness	● Decrease in electricity demand due to population declines, deteriorating economic conditions, etc. ● Tighter environmental regulations toward carbon neutrality by 2050 (Fade-out of coal-fired power, carbon pricing [carbon levies, emissions trading]) ● Expansion of renewable energy sources leading to decreases in electricity sales, declines in wholesale electricity market prices, degradation of power quality, declines in the superiority of large-scale power sources, and revision of grid formation and grid utilization rules ● Decrease in electricity sold and purchased through the grid, due to the expansion of distributed resources and in-house generation and consumption. ● Decline in profitability of renewable energy sources (rises in material and construction costs, etc.) ● Degradation of the value of our renewable energy sources (revisions to RE100 rules, etc.) ● Manifestation of insufficient recovery of costs of reserve capacity associated with the expansion of the reserve capacity market ● Risk of water shortages and water flow rate fluctuations due to precipitation fluctuations ● Increased volatility in wholesale electricity market prices (increased procurement costs associated with tight supply-demand conditions or price spikes, decreased sales revenues associated with price slumps) ● Persistently high or volatile fuel prices ● Steep rise in costs for the procurement of materials and equipment ● Increased interest rates in the U.S. leading to yen depreciation and higher interest rates in Japan	● Increased advantages of nuclear power generation and renewable energy ● Government policies to promote carbon neutrality (including investments totaling roughly 150 trillion yen for public and private green transformation) ● Growing customer needs for renewable-energy-oriented electricity (RE100, joint development of renewable energy sources, power purchase agreements, etc.) ● Growing needs for energy savings following the rise in rates (attraction to the Hoku-Link membership service, power purchase agreements, etc.) ● Diversification of customer needs, such as for added-value services ● Cost recovery through utilization of various markets (non-fossil value trading market, capacity market, etc.) ● Establishment of a framework to ensure long-term fixed income to encourage new power source investments (long-term decarbonized power source auctions) ● Increased demand for electricity due to progress in electrification and increased use of electric vehicles. Creation of new business models, such as energy management services with storage batteries and other equipment ● Growing needs for disaster prevention and mitigation within society
Business Domain Expansion	● Delayed investment decisions resulting in loss of profit opportunities ● Country risks associated with overseas operations (foreign exchange, geopolitical risks)	● Expansion of business opportunities due to the liberalization of the electricity and gas markets ● Expansion of business opportunities by solving issues such as SDGs and local issues ● Increasing demand for electricity in Asia and other overseas markets ● Productivity improvement and new business creation through the utilization of digital technologies
Strengthening of Business Foundation	● Obsolescence of business models due to technological innovations and other changes in the business environment ● Deteriorating perceptions of companies reluctant to address climate change ● Decline in social trust caused by a breach of business ethics ● Delay in developing specialists, resulting in loss of business opportunities ● Impact on business operations due to cyber attacks	● New value creation through the utilization of diverse human resources ● Productivity improvement through the progress of digital transformation and work style reforms

STEP 2 New Mid-term Business Plan in Light of Changes in the Business Environment

Since the announcement of the Hokuriku Electric Power Group 2030 Long-term Vision (hereafter, the "Long-Term Vision") in April 2019, we experienced various changes in the social environment, including the soaring fuel and wholesale electricity market prices and the resulting damage to our financial base, as well as the government's declaration on the realization of carbon neutrality by 2050, and lifestyle changes following the COVID-19 pandemic. In order to address these circumstances, we have established the Hokuriku Electric Power Group New Mid-term Business Plan (FY 2023-2027) to ensure a stable supply and to recover and strengthen our financial base, while maintaining our ideal future state of "Developing alongside the Hokuriku Region" and the main strategies included in the Long-Term Vision.

Changes in the Business Environment

At the Establishment of the Long-Term Vision (2019)

- Progress in Electricity System Reform (Competition intensified following the full liberalization of the retail market)
- Increased Environmental Awareness (80% reduction in greenhouse gas emissions by 2050)
- Progress in Technological Reforms (AI, IoT, EV, etc.)
- Changes to the Structure of Society (Shrinking and aging population)
- Diversification of Values (Sustainability, diversified lifestyles)

Major Ongoing Changes in Our Environment (2023)

Deteriorating Business Foundation

- Increasing risk of electricity supply-demand crunch
- Damage to financial base

Environmental Changes about Growing Business Domains

- Progress of the government's green transformation policy
- New post-COVID lifestyle taking root
- Advent of new business models using digital technology (digital transformation)

Overview of New Mid-term Business Plan

The Hokuriku Electric Power Group 2030 Long-Term Vision (FY 2019-2030) ＊Publicly announced in April 2019

Ideas to Continue to Be Maintained

■Our Ideal Future State
Developing alongside the Hokuriku Region, Creating New Value Nationwide and Internationally

■Main Strategies toward Bringing About Our Ideal State
(1) Expanding Our Comprehensive Energy Business Based in Hokuriku
(2) Cultivating New Growth Businesses

■Financial Objectives
Financial objectives to contribute to the following are to be proposed going forward:
- Improved financial balance and strengthened financial base
- Growth business cultivation with emphasis on profitability

Hokuriku Electric Power Group New Mid-term Business Plan (FY 2023-2027) ＊Publicly announced in April 2023

We will improve financial balance through the pursuit of thorough streamlining and expansion of our business domains, with the aim of recovering and strengthening our financial base.

●Three Pillars of Management

Pillar I — Ensuring a Stable Supply, Improving the Financial Balance, and Strengthening the Financial Base
- Actions for the early restart of Shika Nuclear Power Station Unit 2
- Stable operation of equipment, and further improvement of resilience
- Maximization of supply-demand balance

Pillar II — Working with Local Communities to Promote Decarbonization
- Actions for decarbonization of power sources and implementation of next-generation transmission and distribution networks
- Contribution to decarbonization of the Hokuriku region in collaboration with local governments

Pillar III — Expansion of New Business Domains for Sustainable Growth
- Promotion of energy business including carbon neutrality services
- Expansion of new business domains transcending the framework of the energy business

■Strengthening of Efforts to Support Our Business Foundation
- Creation of pleasant workplaces (diversity, equity, and inclusion; occupational safety; health-conscious management; etc.)
- Improvements in labor productivity
- Ensuring and strengthening compliance

New Mid-Term Business Plan (Setting New Financial Targets, etc.)

We had intended to review the financial targets that were set forth in April 2019' s Long-term Vision, but in light of factors such as the current competitive environment, we have opted to set new targets, both financial and otherwise, because we are once again able to foresee future business operations to an extent.

We shall continue contributing to the Hokuriku region, through investments in maintenance and replacement of the facilities necessary for stable supply, and early recovery of our financial base, as well as promotion of carbon-neutrality in the Hokuriku region and investments in growth businesses.

- In FY 2023 through FY 2027, we shall achieve stable income even without the restart of Shika Nuclear Power Station, and rapidly recover our financial base through thorough efforts to improve efficiency and expand our business domains.
- After achieving our equity ratio target, we aim to maintain a certain level of capital profitability, toward stable business operations and Group growth.

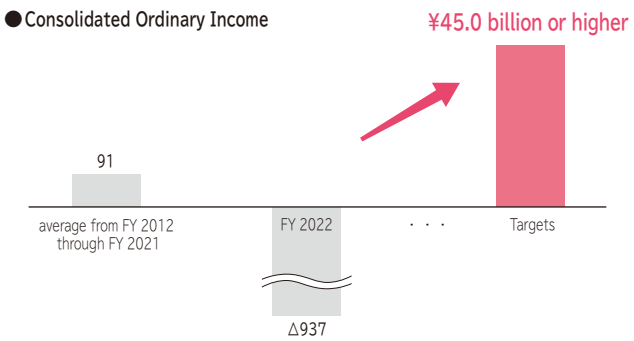
Financial Objectives

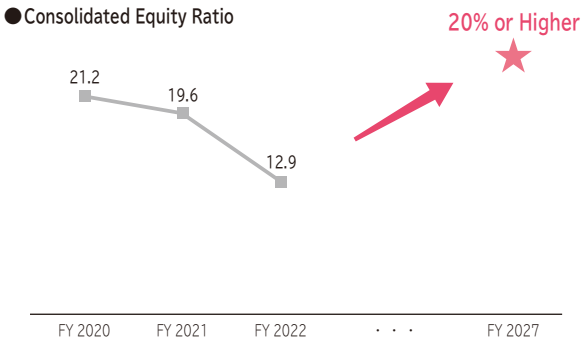
Consolidated Ordinary Income / Consolidated Equity Ratio

In order to continue to fulfill such social missions as delivering a stable supply of electricity and achieving carbon neutrality, we aim to achieve consolidated ordinary income of ¥45.0 billion or higher.
From the perspective of preparing our financial base for these tasks, we aim to achieve a consolidated equity ratio of 20% or higher (by the end of FY 2027).

Consolidated Return on Equity (ROE)

From the perspective of management conscientious of capital efficiency, we aim to secure a consolidated ROE of 8% or higher.





Growth Investment Policy

- To promote carbon neutrality in the Hokuriku region and implement growth projects, we shall conduct growth investments totaling approx. 150 billion yen in a timely manner from FY2023 - 2027.
- For investing, we shall carefully select the investments we make based on business evaluations via methods such as ROIC, while taking into account potential business risks and prioritizing profitability in order to achieve both growth and financial discipline.

Shareholder Return Policy

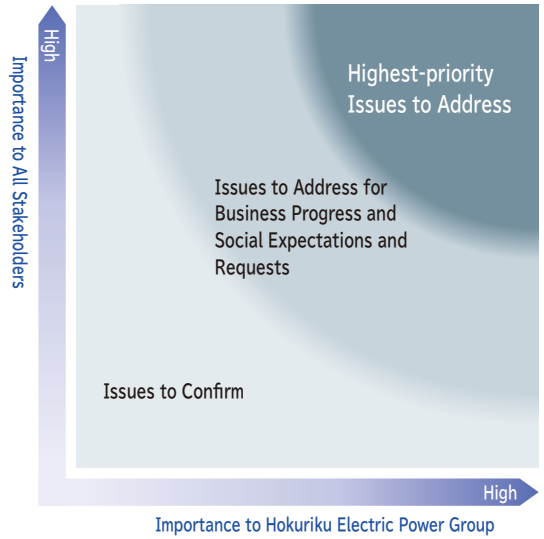
We shall meet shareholders' expectations while working to repair our damaged financial base.

STEP 3 Specifying the Priority Measures Based on the Importance Evaluation

Importance Evaluation

Based on the three pillars of the New Mid-term Business Plan, we develop specific action plans that we should focus on, by evaluating their importance from the perspective of the Group and our stakeholders.

●Importance Evaluation



Specifying the Priority Measures

Pillar Ⅰ Ensuring a Stable Supply, Improving the Financial Balance, and Strengthening the Financial Base	Corresponding Page(s)
(1) Ensuring a stable supply of electricity	
Early restart of Shika Nuclear Power Station	P29-31
Efforts toward stable equipment operation	P32, 39-40
(2) Increased competitiveness of the Group's electricity business	
Maximization of supply-demand balance	P33
Strengthening of sales strategy	P46-48
Further strengthening of cost-competitiveness	P32, 43
(3) Efforts to strengthen business foundation	
Response to national government policies	P34
Thorough Compliance	P19
Efforts to improve the quality of operations and services	P44
Consideration for safety and environmental friendliness	P22
Efforts to improve labor productivity	P15-16
Development of human resource strategies aimed at improved employee engagement	P21-26
Pillar Ⅱ Working with Local Communities to Promote Decarbonization	**Corresponding Page(s))**
(1) Efforts toward decarbonization of power sources	
Consideration of optimal power source mix based on government policy trends and customers' decarbonization needs	P35
Efforts toward achieving the renewable energy development target	P34-35
(2) Implementation of next-generation transmission and distribution networks to contribute to the realization of carbon neutrality	P41-42
(3) Promotion of regional decarbonization in collaboration with local governments and other interested parties	P49
Pillar Ⅲ Expansion of New Business Domains for Sustainable Growth	**Corresponding Page(s)**
(1) Development of carbon neutrality businesses to contribute to customers' decarbonization	P46-48
(2) Group-wide efforts to secure further profits	P51
(3) Strengthening of efforts to create new businesses	P18, 50

Measures for Improving Managerial Efficiency

For the next three years, starting in FY 2023, we will work to streamline our operations to reduce costs by 13.2 billion yen per year, through application of AI technologies for optimized equipment utilization and supply-demand control, promotion of upstream purchasing for further reduction of material procurement costs, and other efforts.

We will continue our efforts to streamline our operations on a group-wide basis, including further reduction of costs.

Category	Main Details	Streamlined Amount*
Reductions in personnel-related costs	● Review of executive compensation, salaries, and allowances ● Personnel cuts, etc.	¥2.3 billion
Streamlining related to supply and demand costs	● Application of AI technologies for optimized equipment utilization and supply-demand control ● Further reduction in fuel procurement costs, etc.	¥4.7 billion
Reductions in repair and other equipment-related costs	● Further reduction in material procurement costs through promotion of upstream purchasing ● Introduction of new technologies to improve construction methods, etc.	¥3.5 billion
Other cost reductions	● Further reduction in material procurement costs through promotion of upstream purchasing ● Further reduction in base overheads through the efforts of the Emergency Management Countermeasures Headquarters	¥2.6 billion
Total		¥13.2 billion

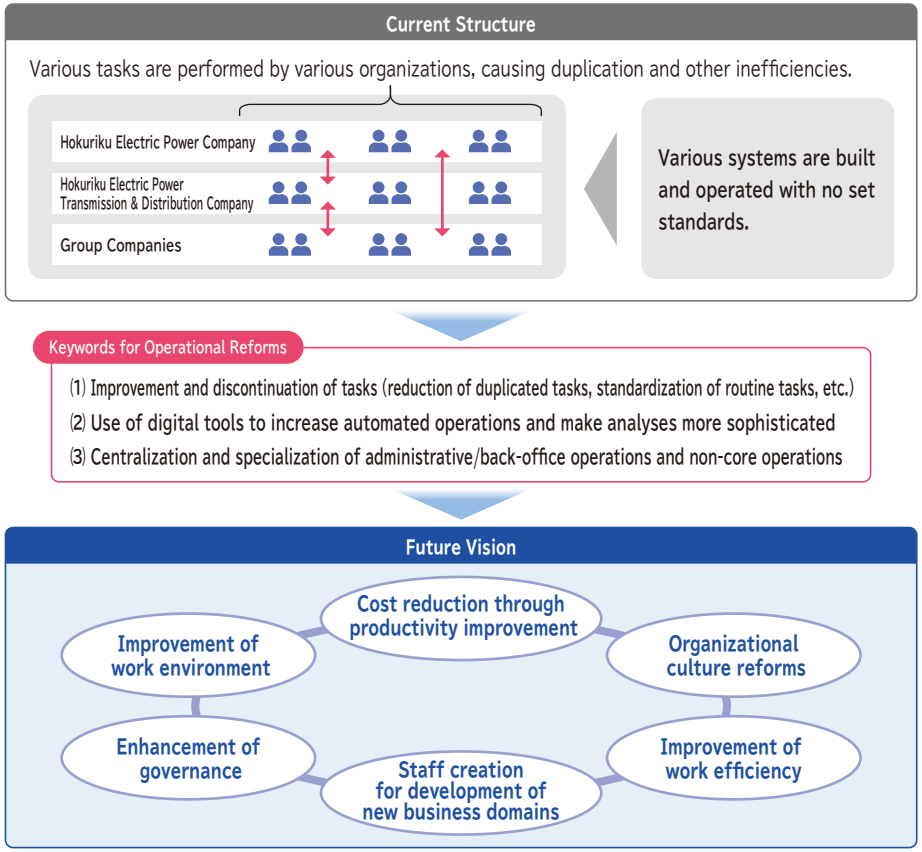
* The streamlined amounts shown are the averages of figures for the three years from FY 2023 to FY 2025.

Efforts toward Group-wide Productivity Improvement

In order to strengthen the Group's competitiveness, as well as to create more comfortable work environments, we promote productivity improvement through operational reforms.

Promotion of Operational Reforms

By reviewing the current work practices and structure, and utilizing state-of-the-art digital tools and other methods, we strive to enhance our competitiveness through various efforts, including reductions in tasks and indirect costs by correcting inefficiencies.

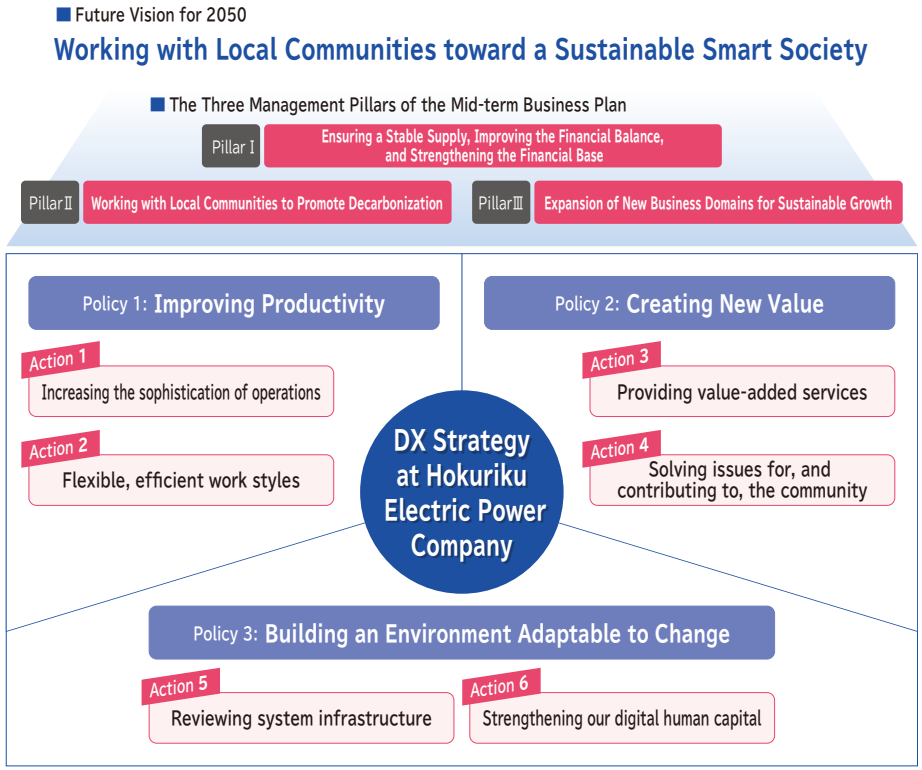


DX Promotion

In 2023, we published the Digital Transformation (DX) Strategies of for both Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company.
No Digital Transformation without a future vision. We shall focus on improving productivity, reforming our services, and strengthening our digital human capital.

DX Strategy at Hokuriku Electric Power Company

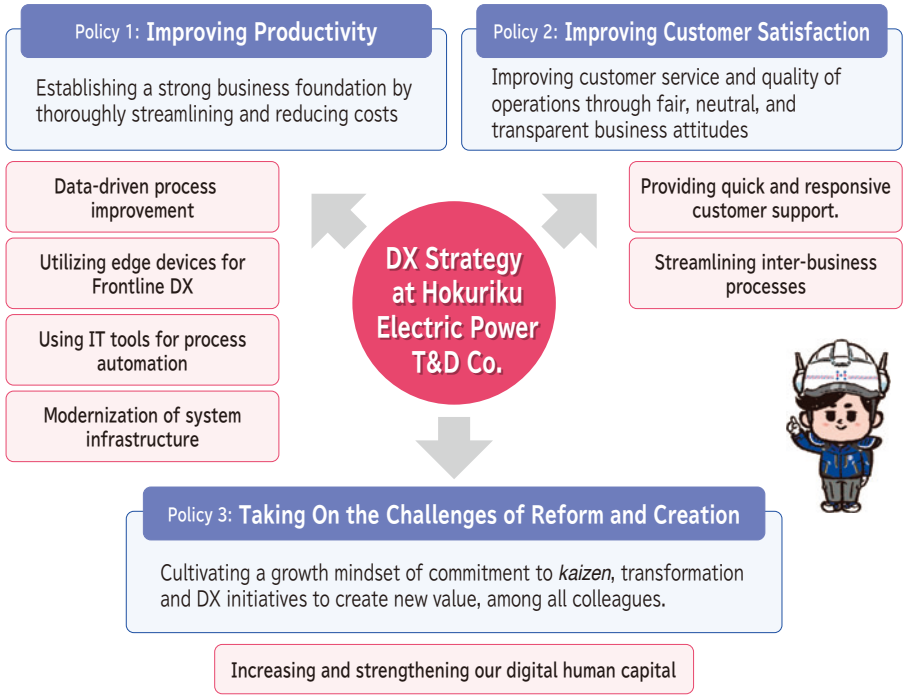
We shall actively promote DX, respond flexibly to changes in the business environment, and continue to improve our productivity on the major premise of securing a stable supply of electricity. We shall also accelerate and evolve our businesses through DX, by creating new added value that contributes to solving issues faced by customers and communities, unhindered by the existing framework of the electricity business.



DX Strategy at the Hokuriku Electric Power Transmission & Distribution Company

We shall stabilize and strengthen our financial base, improve our services, and take on the challenges of reform and creation, with *kaizen*, transformation, and DX promotion at the core of these efforts.

Our Mid-term Business Plan includes a key policy, 'Action for DX and New Technologies'. This policy is based on three policies: improving productivity, improving customer satisfaction, and taking on the challenges of reform and creation. To realize these principles, we shall promote DX, making use of concrete strategies based on the roadmap and application of digital technologies.



Taking on Challenges toward Carbon Neutrality

In April 2021, we established a roadmap toward achieving carbon neutrality, and are working on various efforts toward this, such as decarbonization of power sources, implementation of next-generation transmission and distribution networks, and support for customers' and the region's decarbonization.

In FY 2021, we issued our first green bond as part of our proactive promotion of green finance. In FY2022, we issued transition bonds to further promote efforts to achieve carbon neutrality.

Roadmap toward Achieving Carbon Neutrality

●Group Targets

- **50% or greater reduction in CO_2 emissions** by FY 2030 (compared to FY 2013, based on retail electricity sales volume)
- **50% or more electricity generated from non-fossil-fuel sources** by FY 2030
- **Renewable energy development amount increased by 1 million kW or higher (3.0 billion kWh/year or higher)** by the early 2030s (compared to FY 2018)

			up through 2030	up through 2050
Decarbonization of Power Sources	Utilizing Renewable Energy as the Major Power Source		Expanding the introduction of hydropower, wind power, photovoltaic power, and other sources to increase renewable power generation Renewable energy development amount 1 million kW or higher (3.0 billion kWh/year or higher)	Expanding the introduction of renewable energy sources to the maximum (Inside and outside the region, overseas)
	Maximum Use of Nuclear Power		Early restart and stable operation as a base load generation source, efforts toward the world's highest level of safety Examination and utilization of new nuclear technologies	
	Zero Emission Thermal Power	Clean Fuel	Increase in biomass fuel co-combustion for coal-fired power generation (an increase of 1.5 billion kWh/year) Studies on using ammonia and hydrogen	Power generation using 100% biomass Fuel conversion to ammonia and hydrogen
		CO_2 Reductions	CO_2 reductions through replacing turbines and other equipment; studies on introducing carbon dioxide capture, utilization, and storage (CCUS) technologies	Introduction of carbon dioxide capture, utilization, and storage (CCUS) technologies
Implementation of Next-generation Transmission and Distribution Networks			Establishment of a resilient and smart bulk power system to support the utilization of renewable energy as the major power source; increased sophistication of power supply and demand control Establishment and operation of an optimal distribution system, based on wider use of distributed resources, including EVs, and expansion of distributed grids	
Support for Customers' and the Region's Decarbonization	Promotion of Electrification		Electrification of air conditioning, hot water supply, and kitchen equipment, as well as of production processes in industrial fields Expanded use of EVs	Further promotion of electrification through the application of new technologies
	Zero Emission Support for Customers and the Region		Providing electricity rate plan options to comply with RE100, and various solution services, such as support for ZEHs and ZEBs Development of distributed renewable energy sources, and establishment of infrastructure to support the practical use of storage batteries and expanded introduction of renewable energy (utilization of VPP and DR), in collaboration with customers and local communities	Achievement of zero emissions in the region and management of regional energy, using distributed renewable energy sources, hydrogen, and other resources

Achievement of Carbon Neutrality

Promotion of Green Finance (ESG Bond Issuance)

●Issuance Overview, Status of Appropriation of Funds Procured and Environmental Improvement Effects (as of the end of March 2023)

Issuance Overview

Category	Green Bond (1st)	Transition Bonds (1st)
Date of Issuance	December 9, 2021	November 25, 2022
Total Amount Issued/ Period	10 billion yen/10 years	18.5 billion yen/ 5 years 15.3 billion yen/10 years 10.6 billion yen/20 years Total: 44.4 billion yen
Purpose of Funds	Spending on construction, installation, operation, and maintenance of renewable energy power stations and generation facilities, as well as related facilities	(1) Spending on zero-emission thermal power projects (2) Spending on transmission and distribution network projects
Target Projects	Renovation of existing hydroelectric power stations (targeting 12 power stations)	(1) Works to increase biomass fuel co-combustion for Nanao Ohta Thermal Power Station Unit 2 and Tsuruga Thermal Power Station Unit 2 (operation scheduled to begin in FY 2024 or later) (2) Strengthening of transmission and distribution networks

Status of Appropriation of Funds Procured and Environmental Improvement Effects of Target Facilities*1 (FY2022)

Amount Procured	10 billion yen	(1) 42.1 billion yen (2) 2.2 billion yen
Appropriated Amounts (Refinanced Amounts, Included in the Total*2)	FY 2021: 4.5 billion yen (1.9 billion yen) FY 2022: 2.6 billion yen (0 billion yen) Total: 7.1 billion yen (1.9 billion yen)	(1) 27.7 billion yen (17.6 billion yen) (2) 2.2 billion yen (2.2 billion yen) Total: 29.9 billion yen (18.8 billion yen)
Unappropriated Balances*3	2.9 billion yen	(1) 14.5 billion yen (2) Already appropriated
Installed Capacity	995 MW *4	(1) 210 MW *6
Electricity Generated	2,103,428 MWh/year	(1) 1,500,000 MWh/year (planned value) *6
Amount of CO_2 Emissions Reduced	997,130 t-CO_2 *5	(1) 1,000,000 t-CO_2 *7

The above bonds have undergone conformity assessment to relevant standards for issuance by DNV Business Assurance Japan K.K., a third-party evaluation organization. As of the end of June 2023, there have been no major changes in the progress of the projects or the appropriation plan.

1 Regarding the "strengthening of transmission and distribution networks," the funds were appropriated (refinanced) to a part of the 12.3 billion yen capital investment (in FY 2021) for the establishment of a smart, resilient bulk power system to support the utilization of renewable energy as the major power source, as well as for the maintenance and other purposes thereof, within our region.
(*Calculated by multiplying the total amount of capital investment in transmission and distribution facilities by the ratio of electricity generated from renewable energy sources relative to the total amount of electricity generated in our region)

*2 Refinanced amount of funds contributed by the fiscal year prior to issuance

*3 The unappropriated balances are to be saved in cash and deposits, and the appropriation of the green bond and the transition bond is planned to be completed by FY 2023 and FY 2024, respectively.

*4 For the power stations under renovation, the estimated installed capacity after the completion of the renovation was used.

*5 Estimation method: 2,103,428 [MWh] × 0.499 [kg-CO_2/kWh] (CO_2 emission intensity for FY 2022) × 0.95 (transmission loss) / 1,000 = 997,130 t-CO_2

*6 Biomass fuel is planned to be co-combusted at a rate of 15% for Nanao Ohta Thermal Power Station Unit 2 (700 MW) and Tsuruga Thermal Power Station Unit 2 (700 MW).

*7 Estimated value shown because operation is scheduled to begin in FY 2024 or later, based on the assumed reduction in coal consumption to generate electricity equivalent to that generated from biomass

Working with Local Communities toward a Sustainable Smart Society in 2050

We have set forth the future vision of the Group for the year 2050, with a determination to contribute to the resolution of social issues concerning global warming, sustainable regional development, and the realization of a smart society, by developing businesses that transcend the framework of our existing electricity business. We aim to be a leading problem-solving company that proactively addresses issues faced by the region, in cooperation with local governments and enterprises.

Future Vision for 2050

Connect, Support, and Deliver —
Working with Local Communities toward a Sustainable Smart Society

1. Creating a Society Friendly to People and the Environment with Decarbonization of Energy
2. Bringing Vibrant Communities to the Next Generation
3. Bringing Peace of Mind to Everyday Life through Connected Networks
4. Bringing Comfort to People's Lives with Digital Technologies

Initiatives toward 2050

We promote the following initiatives toward the realization of our future vision.

1 Creating a Society Friendly to People and the Environment with Decarbonization of Energy

We will take on the challenge of **realizing carbon neutrality by 2050** through the following efforts: **decarbonization of power sources** by utilizing renewable energy as the major power source and other measures; **increased sophistication of transmission and distribution networks** to support the utilization of renewable energy as the major power source; **promotion of electrification** of lifestyles, mobility, etc.; and **support for customers and the region to achieve zero emissions** through the popularization of renewable energy and storage batteries, net zero energy houses/buildings, and other means.

2 Bringing Vibrant Communities to the Next Generation

We will contribute to the **creation of sustainable vibrant communities** through the following efforts: **support for new work styles, and moving and child-rearing,** taking advantage of our favorable access to Japan's three largest metropolitan regions and rich living environments; **local consumption of locally produced energy** by utilizing the region's rich natural resources; and **development of smart communities** by utilizing distributed resources.

We will support **safe and secure communities** through efforts including: **building next-generation electric power systems** to support the 4 Ds (decarbonization, decentralization, digitalization, and depopulation) and resilience improvement; providing **support for the efficient operation of regional infrastructure** that combines advanced communications networks and digital technologies such as big data, AI, and IoT; and providing **safe and secure services for everyday life and health.**

We will contribute to **comfortable lifestyles with the use of digital** technologies through the following efforts: **building a digital platform to enable one-stop services** with electricity plus additional services to help improve customers' lives; supporting **P2P trading of electricity** with blockchain technologies; and implementing **regional energy management** with integrated management of distributed resources.

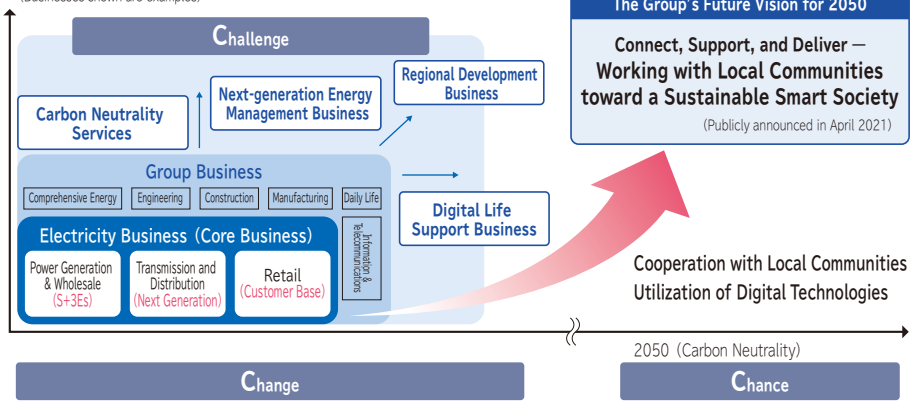
3 Bringing Peace of Mind to Everyday Life through Connected Networks

4 Bringing Comfort to People's Lives with Digital Technologies

Concept of Growth toward Realization of the Future Vision for 2050

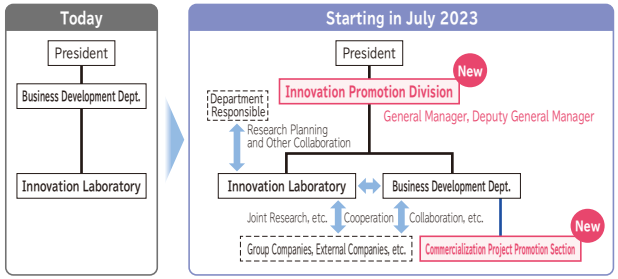
While keeping the electricity business as the core of our operations, we strive to develop business areas on a group-wide basis transcending the boundaries of our electricity business, and continue to take on challenges with the goal of realizing the Group's future vision for 2050, from the perspective of providing even greater value and services to our customers and the region.

●Concept Example of New Business Domain Expansion
(Businesses shown are examples)



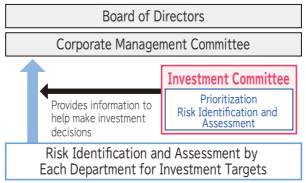
Development of a Structure toward Expanding into New Business Domains

With the aim of promoting expansion into new business domains under management leadership, we have set up the Innovation Promotion Division headed by a director, as well as the Commercialization Project Promotion Section in the Business Development Department.



Establishment of Investment Committee

In order to prioritize investment targets and to make efficient investment decisions, we have established an Investment Committee, which performs risk assessments and other relevant operations to support not only the Hokuriku Electric Power Company but also Group companies in making investment decisions.



Thorough Compliance

The Hokuriku Electric Power Company and the Hokuriku Electric Power Transmission & Distribution Company strive to strengthen initiatives for the proper management of information and to raise awareness of compliance among executives and employees.

Strengthening Compliance

In relation to the reported issue of customer data access by some major electric power companies, there was no evidence of unauthorized access by the Hokuriku Electric Power Company to non-public information pertaining to customers of power producers and suppliers (PPSs); however, in light of the following findings of inappropriate handling of some customer information, we will draw up and implement specific measures for both proactive prevention and recurrence-prevention.

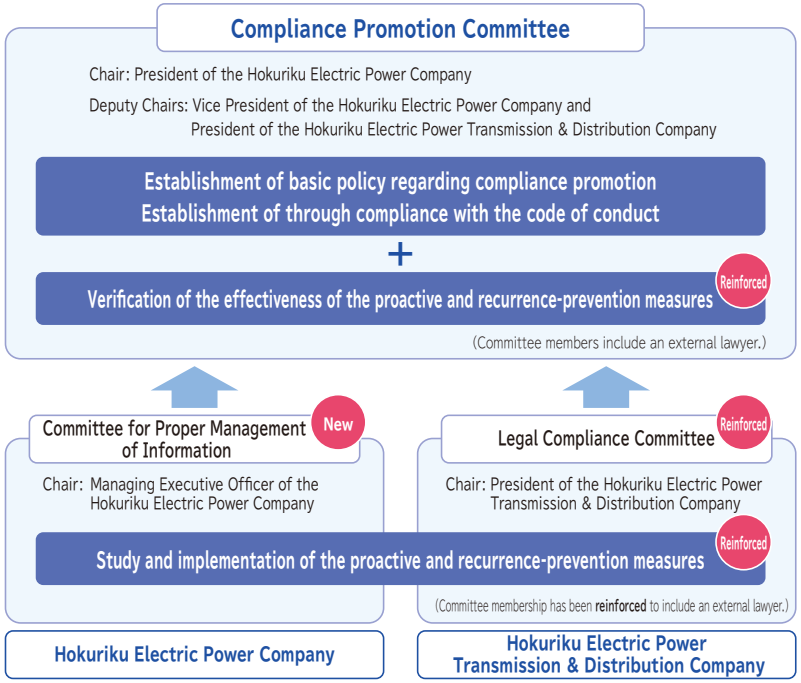
- The Hokuriku Electric Power Transmission & Distribution Company's FIT electricity transmission and distribution purchase information, for which contracts were signed and managed by the company, was mixed in with Hokuriku Electric Power Company's customer information and displayed, due to a flaw in the system.
- An employee of the Hokuriku Electric Power Company accessed the renewable energy business management system operated by the Ministry of Economy, Trade and Industry, using a login ID and password that should be used only by the Hokuriku Electric Power Transmission & Distribution Company.

●Proactive and Recurrence-prevention Measures

System Improvements	● Physical separation of sales and distribution systems ● Strengthening of information security (blocking access to external systems, properly managing IDs and passwords)
Deepening of Conduct Regulations and Legal Compliance	● Further education and changing mindsets – Providing company-wide written notice in the name of the President of matters to keep in mind regarding conduct regulations – Issuing written messages in the name of the president, asking directors and employees to reevaluate their behavior and act accordingly – Revising the code of conduct pertaining to personal information, as well as conduct regulations, and ensuring company-wide awareness anew – Providing company-wide education on a per-managerial-level basis to promote understanding of conduct regulations ● Establishment of internal rules and thorough familiarization therewith
Improvement of Internal and External Supervision Systems	● Strengthening of the framework with a greater focus on the three lines of defense* and reinforcement of the verification details and the supervisory functions for each line of defense ● Periodic review of the effectiveness of measures by the Compliance Promotion Committee (including third parties) ● Periodic check of logs for access to external systems ● Continuous internal inspection to monitor the status of compliance with relevant laws and other rules related to the conduct regulations, and the status of implementation of measures taken to ensure the compliance

* The three lines of defense: An approach of implementing internal control, wherein roles in risk management are assigned separately to the first line (responsible departments and offices), the second line (compliance promotion department), and the third line (internal inspection department)

●Promotion Structure for Proactive and Recurrence-prevention Measures



Interview with an External Director

Director (External)

Akiko Uno

PROFILE

External director at the Hokuriku Electric Power Company (current position) since June 2022
Formerly an audit & supervisory board member at Shiseido Co., Ltd., with specialized knowledge and experience gained through a career in sales, marketing, risk management, and more.

Q. What was the reason for accepting the position of external director at Hokuriku Electric Power Company, and what did you hope to achieve upon assuming the position?

A. The Hokuriku Electric Power Company has a long history of supporting life and production in the Hokuriku region and is an indispensable company for the region. I accepted the position because I thought I might be able to help the company add further value as a comprehensive energy company. The background for this was my experience of living in Toyama during my youth as a junior and senior high school student, and my desire to show my gratitude to the Hokuriku region.

What I hope to achieve is to stimulate discussion on the company's mid-to-long-term management strategies, and to drive the promotion of the roadmap for these strategies, so that the company will be able to continue to supply electricity for our children and grandchildren in the future.

Q. After a year in this position, how do you feel about the effectiveness of the Hokuriku Electric Power Company's board of directors, and are there any issues or room for improvement?

A. I recognize, in particular, that the past year has seen very difficult business conditions due to the high price of fuel. Amid such circumstances, I feel that the board of directors was effective in that various opinions, including those of external directors who are experts in their respective fields, were exchanged and discussed, and the executive members were able to act flexibly through delegation of the necessary authority.

On the other hand, it seems to me that during the past year we have not been able to spend enough time discussing mid-to-long-term strategies. But I believe that discussing the feasibility and long-term roadmap of the Hokuriku Electric Power Group's new mid-term business plan, announced in April, will further improve the effectiveness of the board of directors.

In addition, it is very important to work toward achieving carbon neutrality by 2050, which is the responsibility of people today, owed to future generations. I believe that it is our task going forward to discuss this subject thoroughly, incorporating long-term issues and perspectives. I think it would be great if we could form a pattern of discussion where we can look for room to brush up, drive further, and work to achieve the plan. I think it is necessary to strengthen Hokuriku Electric Power Company's particular strengths, such as by renovating hydroelectric facilities, and to continue working steadily by building up even small things, until we can achieve tangible results.

Q. What do you think is your role as an external director?

A. The Corporate Governance Code requires "offensive governance" from external directors, and I understand that my role is to help with this. However, electric power companies have an important corporate social responsibility to strike a balance between a stable supply of electricity, including price aspects, and CO_2 reductions looking into the future. Given this, I would like to offer new perspectives that will help the executive side conduct proactive management, including investments for the future, with a particular focus on my business experience working with consumers and my perspective as a female director. In some cases, what is taken for granted in a company can be considered unusual in society, so I would also like to serve as an external eye to help Hokuriku Electric Power Company avoid such a situation.

Unfortunately, Japan ranks low compared to much of the world on the Gender Gap Index. The Hokuriku region has a high rating in education in Japan, but ranks low in the economic field, especially in the ratio of female managers. I would also like to play a mentoring role to promote women's participation and advancement, in one of the leading companies in this region.

Q. What kind of change do you want to bring to the Hokuriku Electric Power Company based on your own experience?

A. The Hokuriku region has a high female employment rate and there are many excellent people, but I understand that hiring women is inherently difficult for the Hokuriku Electric Power Company due to the nature of the electric power industry. I have an impression that the company is making broad efforts regarding diversity, and I hope that they continue to support women and eventually have female internal directors. In my own experience, balancing work and family broadened my outlook and helped me to streamline my work, so I would like to help the Hokuriku Electric Power Company to have more role models of this kind. I very much hope that this leading company in the region will change to create workplaces where both men and women can be at their best when they work, and especially female and younger employees can be fairly valued for their abilities and take on important roles. I believe that this will make the company more attractive and will pave the way for it to become a new energy company in the future.

Investment in Human Resources

The Group believes that human resources are the driving force to enhance corporate value, and are irreplaceable assets. In order to achieve the Hokuriku Electric Power Group's philosophy, "building an affluent, lively Hokuriku through power and intelligence," we are actively investing in human capital to ensure sustainable growth together with the Hokuriku region, even in dramatically changing business environments.

Creating a Pleasant Workplace

With the aim of realizing work-life balance, we are working to create pleasant workplaces where each and every employee can maximize their performance to the fullest extent of their potential.

Efforts toward Achieving Work-life Balance

●Assisting Employees in Balancing Work with Family Care

To build a work environment where employees can easily balance their work with childcare and nursing care, we offer leave systems for childcare and nursing care, exceeding the statutory requirements. We have also established a system to support employees to allow them to work without anxiety, such as by holding seminars on returning to work after childcare leave, and seminars on maintaining a balance between work and child-rearing or nursing care.

Message from the President on Efforts to Support Male Participation in Childcare

With the goal of achieving 100% child-care leave take-up rate in FY 2023 for male employees whose spouses have given birth, we are working to facilitate the use of child-care leave through various measures, including sending out a message from the president, making part of the child-care leave period paid, and holding seminars for male employees on child-care leave. As a result, the take-up rate has been maintained at 100% since October 1, 2022, when the system of taking child-care leave at the time of childbirth was established.

Platinum Kurumin symbol

Our support system for balancing work and childcare has been highly evaluated, and we have consecutively acquired Platinum Kurumin certification, a certification for companies that provide support for child-rearing, from the Ministry of Health, Labour and Welfare since 2019.

●Cultivation of Ikuboss ("Supportive Bosses")

Our top- and middle-level managers have declared their intentions to be ikuboss ("supportive bosses") who strive to support the people who work under them in achieving work-life balance, and who also aim to enrich both work and private life for themselves, in order to create comfortable work environments. In FY2022, we held an ikuboss cultivation seminar for these managers to further deepen understanding and raise awareness of the basic knowledge of ikuboss and management methods applicable in workplaces.

●Workplace Culture Allowing Employees to Take Leave Easily

We believe that a fulfilling personal life leads to a fulfilling professional life, so we strive to foster a workplace culture where people feel free to ask for leave, by periodically reminding all employees of the policy encouraging them to take leave.

The average paid annual leave* taken in FY 2022 was 21.5 days per employee.

* Including leisure leave (five days granted annually, with no restrictions on purpose of use)

Promotion of Diverse Work Styles

●Diverse Work Systems

We have established diverse work systems to allow for a variety of work styles, as part of our efforts to create pleasant workplaces where each and every employee can maximize their performance to the fullest extent of their potential.

Typical Work Systems	
	● Flextime work system (no core hours) ● Paid leave by the hour
	● Set minimum times between end and start of work days (11 hours or more)
	● Early-start work hours ● Shorter working hours

●Introduction of Professional Positions

We have begun hiring employees for "professional" positions who work mainly at branches or other front-line offices/facilities in areas desired by the individual, and who build their careers while enhancing their expertise in specific fields. Through this approach, we aim to secure and foster employees who can play active roles by building relationships of trust with local customers and other stakeholders at our front-line offices, or who will perform the work necessary to fulfill our social mission of ensuring a stable supply of electricity in the region, while at the same time responding to the diversified values of people in terms of work styles.

●Promotion of Telecommuting

We recognize that telecommuting offers a variety of advantages, including not only as a BCP measure, but also as a means of enabling a diverse workforce, retaining excellent human resources, achieving better work-life balance, and more.

In addition to revising the system whenever necessary to facilitate its use by employees, we also improve the communication environment, through measures such as allowing employees to connect the computers they use at the company to their home networks, to create the same type of work environment as at the company.

Web Meeting with Telecommuting Employees

Prevention of Work-related Accidents and Active Promotion of Health-conscious Management

We strive to create a safe and healthy work environment, through efforts that help improve the mental and physical health and vitality of our employees, in addition to thorough safety management aimed at preventing work-related accidents.

Prevention of Work-related Accidents

Based on our belief that health and safety take priority over all else, we have established a health and safety management policy, and we promote company-wide efforts to prevent work-related accidents.

To ensure the safety of everyone involved in our operations, our employees and contracted companies work together for thorough compliance with basic rules and other requirements.

●Health and Safety Management Policy Priority Measures for FY 2023

1. Measures to Prevent Basic Work-related Accidents	● Prevention of work-related accidents by sharing case studies ● Promotion of measures to prevent work-related accidents depending on the season
2. Measures to Prevent Work-related Accidents Involving Our Employees	● Promotion of education and training to raise safety awareness and improve hazard prediction skills ● Identification and revision of unclear rules ● Appropriate work instructions and safety guidance by supervisors and/or other relevant individuals
3. Measures to Prevent Work-related Accidents Involving Contracted Companies	● Efforts to ensure thorough compliance with rules

Promotion of Health-conscious Management

We promote health-conscious management based on the belief that employees working actively and in good mental and physical health will bring about sustainable improvement of corporate value, through the creation of new value and increased productivity.

Medical managers and health nurses visit all offices and facilities to provide attentive health guidance and mental health counseling for each employee.

We also carry out various health promotion measures such as seminars on women's health and company-wide walking events, in which many of our employees have participated.

●External Evaluation of Our Health-conscious Management

In the Certified Health and Productivity Management Organization Recognition Program established by the Ministry of Economy, Trade and Industry, we received higher ratings than the industry average in all criteria, and were certified as a Health and Productivity Management Organization 2023 (White 500) among the top 500 organizations in Japan. (Ranked 189th nationwide)

●Results of Evaluation for Certified Health and Productivity Management Organization (Deviation Value among Responding Organizations)

Evaluation Item	Hokuriku Electric Power Company	Industry Average (Electric Power & Gas)
Overall Evaluation	62.8	56.3
Management Philosophy & Policy	63.4	54.2
Organizational Structure	64.4	57.8
Implementation of Systems & Measures	61.8	57.1
Evaluation & Improvement	61.7	56.8

Taken from the Feedback Sheet for the FY 2022 Survey on Health and Productivity Management

●Establishment of Health Charter

With the aim of fostering a corporate culture where employees and the company actively work together to promote good health, we established the Hokuriku Electric Power Company Health Charter in April 2023. We strive to promote understanding of the Health Charter by holding discussions on health promotion at all workplaces.

Hokuriku Electric Power Company Health Charter

At the Hokuriku Electric Power Company, we believe that each employee working cheerfully and actively in good mental and physical health will lead to sustainable improvement of corporate value, through the creation of new value and increased productivity, as well as to the realization of the Group's philosophy of "building an affluent, lively Hokuriku through power and intelligence." Based on this belief, we push ahead with our health promotion efforts as follows:

1. We shall promote health improvements based on the recognition that health is of irreplaceable importance.
2. We shall create a work environment where employees can make the fullest use of their abilities and strengths to take on challenges, while mutually respecting one another and feeling fulfillment and comfort in their work.
3. We shall contribute to the development of the region and society, by ensuring that our employees can work enthusiastically and play active roles with healthy minds and bodies.

Established on April 1, 2023

●Mental Health Measures

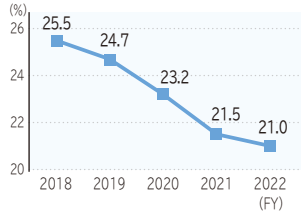
We are working to improve our employees' health literacy, through providing mental health education and health information. We are also working to prevent mental health disorders by following up on the results of stress checks with such measures as recommendations for consultations with medical managers and improvements to the workplace environment, as well as by setting up a "mental health concierge" counseling service.

●Measures to Promote Smoking Cessation and Prevent Passive Smoking

We have worked to promote smoking cessation and prevent passive smoking, by providing seminars, information, and programs to help stop smoking. As a result, fewer of our employees are smokers with each passing year.

In FY 2023, we established the Health Promotion Support Grant for employees who have made a non-smoking declaration and achieved it (both non-smokers and those who have successfully quit smoking), as part of our company-wide efforts to encourage employees to quit smoking and to prevent passive smoking.

●Percentage of Smoker Employees over Time



Promotion of Diversity, Equity, and Inclusion (DE&I), and Respect for Human Rights

With the aim of improving employee engagement and creating new value, we accept and respect individuals from diverse backgrounds in our organization, including both men and women, and both younger and more experienced people, and strive to create pleasant workplaces where employees can maximize their performance.

Promotion of Women's Empowerment

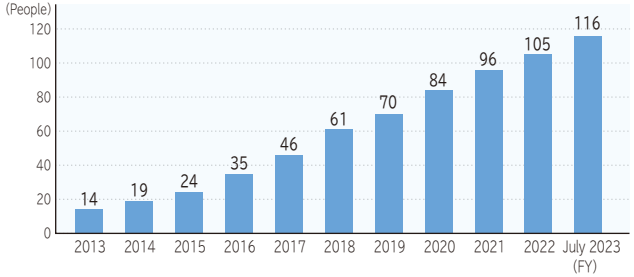
As a result of our efforts to promote opportunities for women in the workplace, such as expansion of work fields and appointments to positions of responsibility, we have been awarded the "L-Boshi" three-star certificate every year since 2017, based on the Act on Promotion of Women's Participation and Advancement in the Workplace.

L-Boshi Symbol

In order to further promote women' s active roles in the company, we have set a goal of having the percentage of female managers among all female employees match the percentage of male managers among all male employees. To this end, we are actively working on various efforts, including implementation of the mentor program to back the activities of female members of management, and the Shine! COSMOS Project, an inter-industry exchange meeting to share information with other local businesses, as well as the improvement of childcare support systems.

Female Engineer at Work

●Number of Female Managers over Time



Promotion of Active Participation by Employees with Disabilities

We promote the employment of people with disabilities. In 2020, we established the Hokuriku Electric Power With Smile Company, a special affiliate company, which handles office support services, such as document digitization and interoffice mail collection and delivery. In addition, we actively hire people with disabilities through accepting students from local special-needs schools for on-site training and other programs.

As of June 2023, a total of approximately 100 people with disabilities work for the Hokuriku Electric Power Company and the Hokuriku Electric Power With Smile Company. We will continue to expand employment of people with disabilities. (2.42% of our employees have disabilities as of June 2023.)

Interoffice Mail Collection and Delivery by Employees of the Hokuriku Electric Power With Smile Company

Promotion of Veteran Employees' Participation

We strive to create an environment where veteran employees can work with peace of mind, maintaining high motivation, and leveraging the experience, expertise, and skills they have developed over the course of their careers.

●Special Mission Employee System

In order to create an environment where veteran employees are motivated to play active roles, we have established a "special mission employee" system in which veteran employees undertake the execution and approval of specific tasks and provide advice and guidance, taking advantage of their expertise cultivated from experience and learning over many years.

●Post-retirement Reemployment System

We have established a post-retirement reemployment system, in which all employees who wish to continue working after the age of 60 can remain employed until the age of 65, as well as providing further options to continue working even beyond 65. Many people in their 60s work at various workplaces as our employees. (412 employees are working beyond the statutory retirement age, as of the end of FY 2022.)

TOPIC Human Resources Bank for Retired Hokuriku Electric Power Group Employees

In order to further enable experienced and motivated seniors to play active roles, we established the Human Resources Bank for Retired Hokuriku Electric Power Group Employees in FY 2023, as a framework for allowing veteran employees to more flexibly choose work styles, with extended work opportunities throughout the Group.

Employment of Diverse Human Resources

●Employment of New Graduates

We regularly hire new graduates, to secure the human resources needed to take on the challenges of decarbonization and business domain expansions, as well as to ensure a stable supply of electricity.

We also work to hire "digital human resources" and "frontier human resources"* to strengthen our efforts to promote digital transformation and expand our business domains.

* Human resources for business domain expansions and creation of new services, such as the expansion of carbon neutrality services.

●Mid-career Employment

Since FY 2013, we have set target numbers for hiring mid-career professionals with experience working in different industries or with advanced skills or qualifications. We have hired more than 160 individuals so far. They play active parts in various departments.

Efforts to Respect Human Rights

Starting in 1995, we have annually held a Human Rights Enlightenment Promotion Committee meeting, including information sharing among group companies, for the purpose of promoting a higher awareness of respect for human rights and creating a corporate culture with an open atmosphere, free of discrimination.

Each year, we host a lecture on human rights by an outside lecturer, for our top- and middle-level managers, on topics such as harassment, DE&I, and sexual minorities. In FY 2022, we invited Yumiko Nagoh, Project Manager of the University of Tokyo Institute for Open Innovation, to give a presentation on the subject of "Business Management and Diversity Promotion."

During Japan's Human Rights Week (December 4–10), we hold events to further deepen understanding of DE&I, such as sending out a message from the company president and providing an e-learning program for all employees.

●Past Human Rights Lecture Topics

FY	Theme
2020	Prevention of Harassment: To Create a Pleasant Workplace
2021	Diversity Management and LGBTQ People
2022	Business Management and Diversity Promotion

Lecture on Human Rights

Establishment of a Framework to Prevent Harassment

In addition to providing policies on harassment in our work rules and code of conduct, we have also created an anti-harassment manual to prevent harassment and maintain (and improve) a healthy work environment.

In addition, we have established harassment counseling offices both internally and externally. The internal harassment counselors are trained to respond appropriately to the issues concerned. This allows employees to seek advice with peace of mind.

External Evaluation

Our efforts to create a pleasant workplace and promote DE&I have been highly evaluated by external organizations.

Creating a Pleasant Workplace

- "Platinum Kurumin" by the Ministry of Health, Labour and Welfare (Certified annually since 2019)
- "Health and Productivity Management Organization 2023 (White 500)" by the Ministry of Economy, Trade, and Industry (Certified in 2023)
- "Toyama Prefecture Childbearing Model Company" by Toyama Prefecture (Awarded in 2017)
- "Fukui Prefecture Child Rearing Model Company" by Fukui Prefecture (Certified in 2017)
- "Employee-first Company" by Fukui Prefecture (Certified in 2022)
- "Child-rearing Family Support Company" by Fukui City (Certified in 2020)

DE&I Promotion

- "L-Boshi Three-star" by the Ministry of Health, Labour and Welfare (Certified annually since 2017)
- "Ishikawa Gender Equality Promotion Company Women's Participation and Advancement Acceleration Class" by Ishikawa Prefecture (Certified annually since 2021)
- "Fukui Women's Participation and Advancement Promotion Company Plus+" by Fukui Prefecture (Certified annually since 2016)
- Award of Excellence in the "Working Women Empowerment Awards" by the Japan Productivity Center (Awarded in 2017)

Development of Human Resources

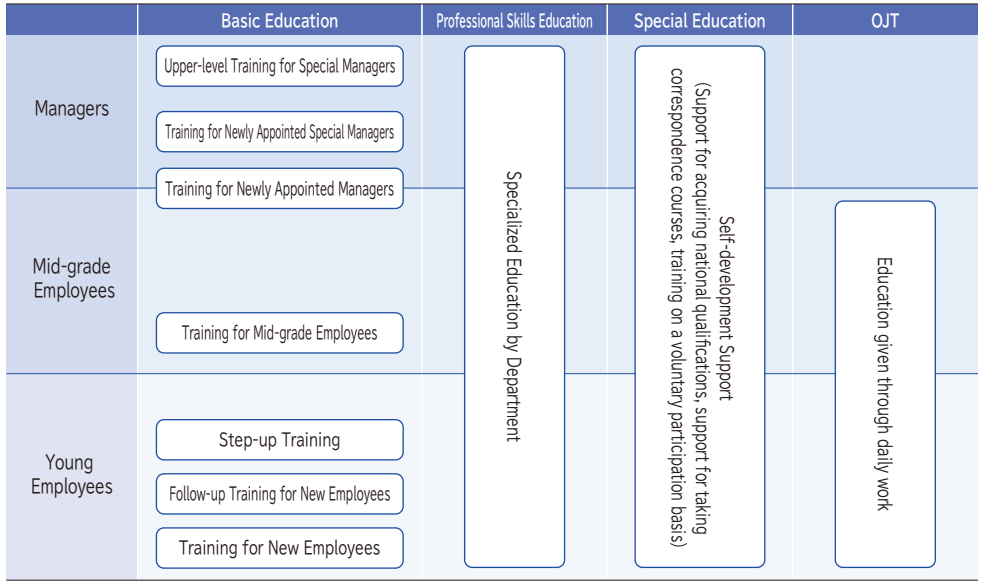
In order for the Group to continue to develop, it is essential that each employee grows and plays an active role. To this end, we are working to support the autonomous career development of our employees.

Employee Education

As part of our efforts to develop human resources, we provide basic education aimed at acquiring knowledge, business skills, and other abilities required at each career level, as well as professional skills training to acquire the specialized knowledge, skills, and other competencies required by each department.

Basic education is provided for each level of employees: new employee training after joining the company, aimed at acquiring the knowledge and skills necessary for working adults and employees of the Hokuriku Electric Power Company; training for young and mid-grade employees to develop problem-solving skills; and training for managers to develop the ability to lead and train their staff, and other necessary skills.

●Educational System



●Monetary Gifts for Qualification Acquisition and Grants for Correspondence Courses

We strive to improve employees' work performance and promote their motivation for self-development by offering congratulatory monetary gifts when they acquire national qualifications, subsidizing the expense of taking correspondence courses, and providing other incentives.

●Education & Training Center

Located high on the western face of the Kureha Hills in Toyama City, commanding a panoramic view of the Imizu Plain, Toyama Bay, and the Noto Peninsula, our Education & Training Center features various training equipment and facilities, including seminar rooms, thermal power operation training simulators, and power transmission and distribution training equipment. The Center also features overnight accommodation rooms, a cafeteria, and other amenities, to make training courses more comfortable and convenient.

Education & Training Center

Employees at the Education & Training Center

●"Hokuriku Electric Power Company Business College" Executive Development Program

We provide a business learning program called the "Hokuriku Electric Power Company Business College" Executive Development Program, designed to develop top management executives who can respond to changes in the business environment and plan and execute strategic management from a broad perspective.

This program offers an opportunity to learn about management strategy, organization management, accounting, and other advanced knowledge required of executives, from lecturers specializing in their respective fields, as well as to mutually learn from other executive candidates from different industries.

(In FY 2022, 51 prospective executives, including 29 from the Hokuriku Electric Power Group, attended the program for a total of 14 days.)

Lecture by a Graduate School Professor

Participant Discussion

Developing Human Resources and Passing on Skills through Daily Work

In addition to basic education and professional skills training, we also focus on employee development through on-the-job training (OJT) for handing down technologies and skills and other purposes, as well as motivating employees toward competency improvement and autonomous career development through annual personnel evaluation interviews and other means.

●Mentoring System

We have introduced a mentoring system: when a new employee is assigned to a workplace or transferred for the first time, or on other similar occasions, a more experienced coworker will act as a mentor to provide guidance and advice to the new team member on a one-on-one basis. This system is intended to help young employees resolve their worries and concerns, and support their independence and growth.

●On-site Technical Skill Holder (Technical Master) Certification System

With the aim of promoting the improvement and succession of on-site technical skills, we have introduced a system to certify employees who have excellent on-site technical skills as "Technical Masters."

As part of our efforts to improve the system, we also introduced the "Prime Technical Master" certification in FY 2022, to recognize Technical Masters who have exceptionally superior on-site technical skills and serve as models for others to follow.

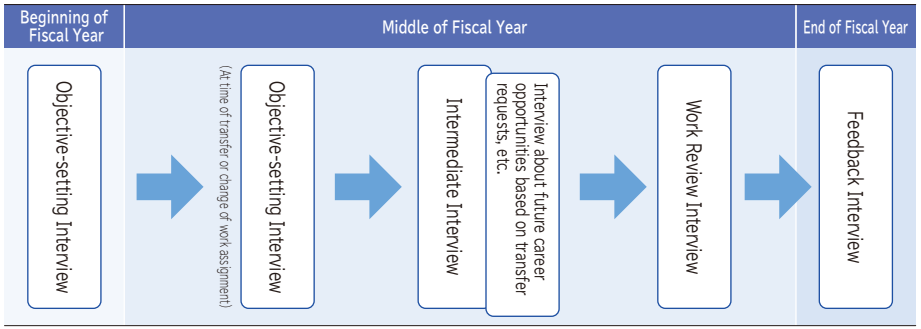
●**Number of Technical Masters by Department** (as of the end of March 2023)

Hydro power	Thermal power	Nuclear power	Civil and Architectural Engineering	Power System Management	Distribution
3	12	8	1	12	13

Technical Masters at Work

●Human Resource Development through Personnel Evaluation Interviews and Other Means

Employees are interviewed by their supervisors at least four times a year, such as when setting their work objectives, when submitting a request for transfer, and when receiving feedback on the results of performance and competency appraisals. This allows each employee to closely communicate with their supervisor, as well as motivating them toward competency improvement and autonomous career development through the process.



We also conduct periodic 360-degree multi-rater assessments by supervisors, peers, and subordinates, targeting managers, mid-level employees, and other key employees, with the aim of encouraging self-awareness and growth in employees.

Support for Employee Career Development

●Provision of Career Maps

We provide information to all employees in the form of "career maps" to help them develop their careers autonomously.

Career maps clearly show the work of each department and the knowledge and skills required, and provide guidelines for career development and self-development.

●Job Posting System

We have introduced a job posting system to make the organization more active by bringing out the ambition and autonomy of our employees, as well as to support autonomous career development.

We use this system to assign personnel through job postings, mainly for projects related to new businesses and new management issues.

Power Generation

Maximizing the Supply-Demand Balance on the Major Premise of Stable Supply, and Promoting Steady Efforts toward the Decarbonization of Power Sources

Representative Director & Executive Vice President
General Manager of Community Relations & Development Division
General Manager of Innovation Promotion Division
Seisho Shiotani

Even as the worldwide energy environment grows more chaotic due to the Russian invasion of Ukraine, our top priority in the Power Generation Division remains ensuring a stable supply. However, decarbonization remains a major trend, including the carbon neutrality by 2050; as the Hokuriku region's energy supplier, we must continue moving forward with efforts toward decarbonization of power sources.

Nuclear power serves as a vital and precious power source to contribute to stable supply, decarbonization, and improved financial balance, and the early restart of Shika Nuclear Power Station is indispensable for the company. At the March 2023 review meeting, we were able to obtain understanding from the Nuclear Regulation Authority based on our explanation that the fault at the site is not active, and we consider this a major step forward in the review process. Examinations of faults around the site, seismic motion, tsunamis, and other factors affecting Shika Unit 2 are ongoing. We will continue to take appropriate measures in future examinations, and aim to resume operations as soon as possible, with the understanding of the local community as a major prerequisite.

Also , in order to ensure stable supply and maximize the supply-demand balance even amid the ongoing threats and risks to energy security caused by the unstable international environment, we have adjusted the timing of inspections for the thermal power facilities that serve as power sources with reserve capacity, and are working on efficient maintenance management, as well as utilizing AI for improved power generation efficiency and early detection of problems. In addition, we shall strengthen our response to the risk of fluctuations in fuel prices and wholesale electricity market prices, and move forward with efforts such as using AI to optimize control of supply and demand.

Regarding our efforts toward decarbonization, the Group has set a challenging goal such as increasing its renewable energy development amount by 1 million kW or higher (3.0 billion kWh/year or higher) compared to FY 2018 by the early 2030s, and we are working together as one group to promote the development of renewable energy sources both domestically and internationally. We have one of the highest proportion of hydroelectric power generation in Japan, taking advantage of the Hokuriku region's abundant water resources. We not only aim to achieve renewable energy source development targets, but also consistently work to reduce the carbon emissions of our thermal power sources. These efforts will lead us to achieve our goal of carbon-neutrality.

The Need for Nuclear Power

Given the country's low energy self-sufficiency rate, the proper energy mix is important for Japan, built on stable supply, environmental suitability, and economic efficiency, with the major premise that safety should come first. From the standpoints of ensuring a stable supply, achieving carbon neutrality, and economic efficiency, nuclear power is an important power source that should continue to be utilized, with safety as the top priority.

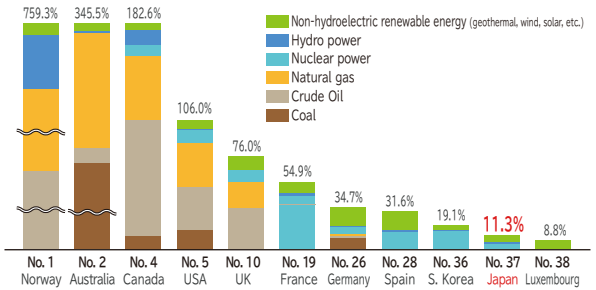
Advantages of Nuclear Power

❶ Energy Self-sufficiency Rate

Japan relies on other countries for the bulk of its energy resources, with an energy self-sufficiency rate of only 11% (data from FY 2020).

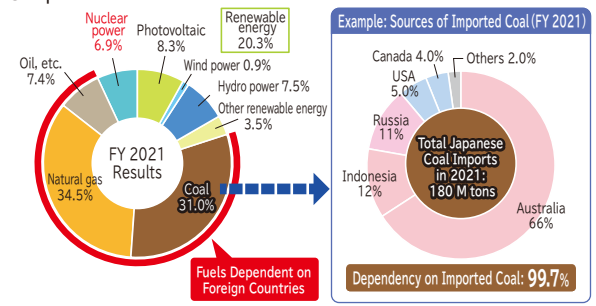
Japan's power generation mix also largely uses fossil fuels dependent on foreign countries as power sources, creating potential geopolitical risks related to fuel procurement. Nuclear power represents a "quasi-domestic" energy source, because small amounts of a readily stockpiled fuel can be used to generate large amounts of power.

● Energy Self-Sufficiency Comparison of Major Countries (2020)



Source: 2020 estimates from the IEA World Energy Balances 2021; Japan data from the Agency for Natural Resources and Energy's finalized FY 2020 *General Energy Statistics*. (Rankings shown are among the 38 OECD countries.)

● Japan's Power Generation Mix (FY 2021)

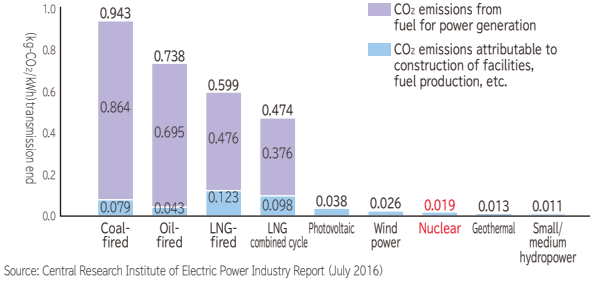


Source: Compiled from the Agency for Natural Resources and Energy's *General Energy Statistics*

❷ CO_2 Emissions by Sources

Much like renewable energy sources like solar and wind power, nuclear power is a power source that does not emit CO_2 when generating electricity; it will play a vital role in achieving carbon-neutrality by 2050.

● CO_2 Emissions per kWh by Sources

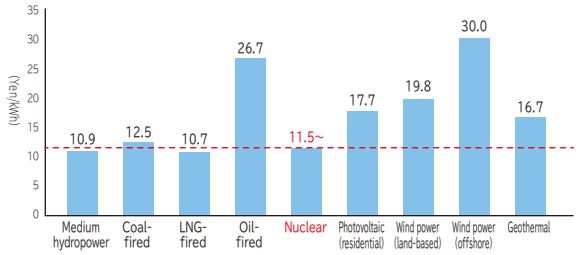


Source: Central Research Institute of Electric Power Industry Report (July 2016)

❸ Power Generation Cost by Sources

The cost of nuclear power measures up favorably to other power generation sources, even if additional costs such as accident risk costs and policy costs are included.

● Power Generation Cost by Sources (2020 Model Plants)



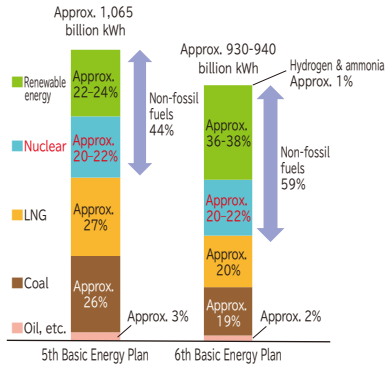
Source: Created based on the Sep. 2021 *Report on Power Generation Cost Verification for the Basic Policy Subcommittee*, by the Power Generation Cost Verification Working Group

Nuclear Power Policy (Sixth Strategic Energy Plan)

Energy Mix (S+3Es)

Electric utilities have a social mission to ensure a stable supply of low-cost, high-quality electricity. The optimal energy mix, based on "S+3Es," is of importance for a supply of electricity that supports daily life and industry, to simultaneously achieve stable supply, economic efficiency, and environmental suitability, while putting the highest priority on safety. Japan's energy mix for FY 2030 was presented in the Sixth Strategic Energy Plan, which was approved by the Cabinet in October 2021, and nuclear power was set at around 20–22% of the generation mix, as it was in the previous plan. Additionally, nuclear power is a "quasi-domestic" energy source that is considered a valuable base-load power source contributing to the stability of the energy supply-demand structure in the long term, on the major premise of ensuring safety, due to its excellent supply stability and efficiency, the minimal fluctuations in its operating costs, and the lack of greenhouse gases emitted during operation.

Additionally, the Basic Policy for the Realization of GX, approved by the Cabinet in February 2023, clearly states that nuclear power "contribute[s] to national energy security and [is] highly effective for decarbonization," and that it "will be used to [its] maximum potential."



Source: Compiled in-house, based on the Sixth Strategic Energy Plan

Efforts toward Early Restart of Shika Nuclear Power Station

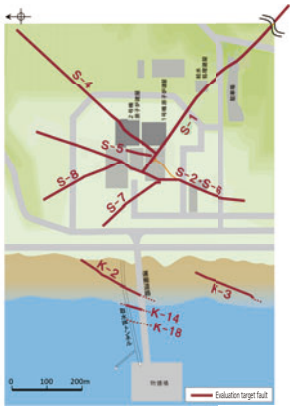
State of Responses to Reviews on Conformity to the New Regulatory Requirements

Shika Nuclear Power Station is a crucial power source from various perspectives, including stable supply, decarbonization, and improved income and expenditures. It is currently undergoing review by the Nuclear Regulation Authority (NRA) to confirm compliance with new regulatory standards, toward an early restart of the power station.

At the March 2023 review meeting, we were able to obtain understanding from the NRA based on our assessment that the faults at the Shika Nuclear Power Station site are not active. In assessing fault activity at the site, we performed assessments based on thorough investigations, including collecting data using the crossing vein method for all faults, in addition to the conventional covering bed method. These results are important to the safety of the community, and represent a major step toward restarting the power station. In addition, in July of 2023, we finalized our evaluation of the faults in the area surrounding the site (within a 5 km radius).

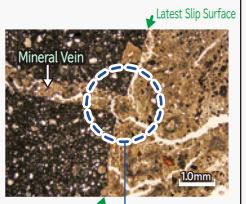
We will continue to examine the faults around the site (beyond a 5 km radius), in parallel with our work on a broad range of other examinations, such as earthquake ground motion and tsunamis.

Evaluation of Activity of Faults at the Site

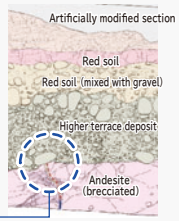


- We explained that the ten evaluation target faults in the land and coastal areas, selected from among the faults at the site, have been inactive for the past 120,000–130,000 years, through evaluation using the crossing vein method and other methods, and gained the NRA's understanding.

Crossing Vein Method	Covering Bed Method
No displacement or deformation was observed in the mineral veins that formed at least 6–9 million years ago and are distributed across the latest slip surfaces of the faults.	No displacement or deformation was observed on the strata that were deposited at least 120,000–130,000 years ago covering the faults.
The fault is not active	The fault is not active



Example for S-7



Example for S-1

At the March review meeting, we were able to obtain the Nuclear Regulation Authority (NRA)'s understanding regarding our evaluations.

Underway

Review of applications for permission to modify establishment of nuclear reactor
- Earthquake & tsunami review
- Plant review

Review of applications for approval of design and construction plans

Review of applications for approval of changes to safety regulations

Pre-use inspection

Reflecting the Latest Findings in Safety Measure Construction Based on Review Status

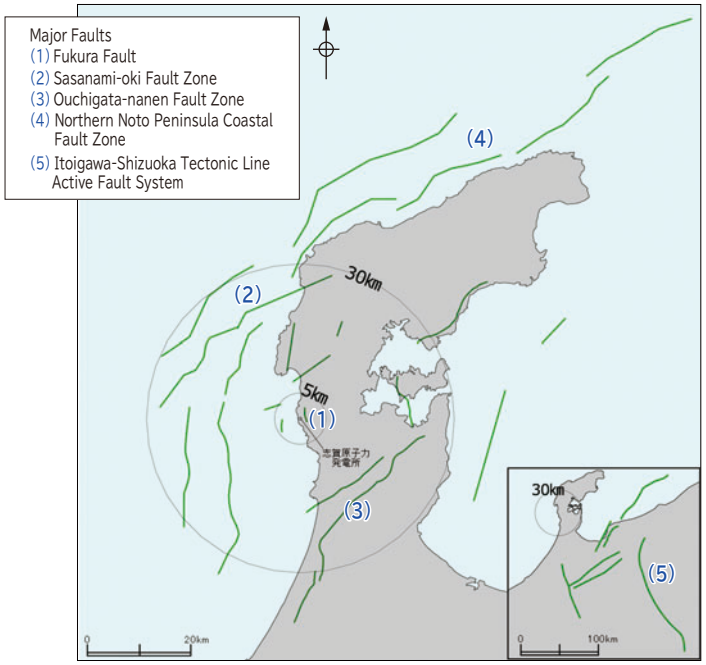
Implementation of safety measure works

Understanding from Shika Town and the rest of the community (Providing detailed yet accessible information on the status of Shika Nuclear Power Station, regardless of whether the power station has been restarted yet)

Restart

Evaluation of Activity of Faults in the Area Surrounding the Site

- We are evaluating the faults around the site that have the potential to cause earthquakes, as shown in the map below (green lines ——).



Reviews are underway. We will respond appropriately to future review meetings.

Steady Implementation of Safety Measures

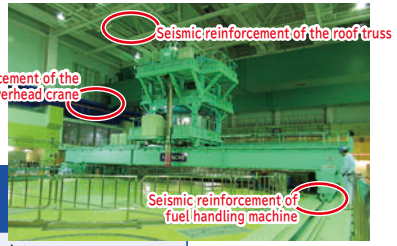
In order to further improve the safety of Shika Nuclear Power Station, we are proceeding with safety improvement works, including independent safety measures, taking account of the review statuses and results for other companies and other factors. Alongside the steady implementation of the safety improvement works, we continue to take appropriate actions in relation to reviews on conformity to the regulatory requirements, with the goal of an early restart of Shika Nuclear Power Station.

● Overview of safety improvement works

Seawall

(2) Preparing for Tsunamis

Flood prevention for premises/buildings
(Establishment of seawall and installation of watertight doors)



Seismic Reinforcement inside the Reactor Building

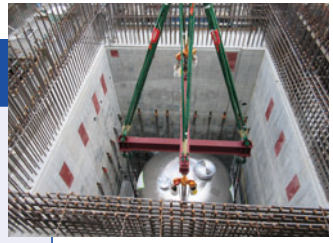
(1) Preparing for Earthquakes

Improvement of seismic resistance
(Seismic reinforcement by increasing the design's basic earthquake ground motion from 600 Gal to 1,000 Gal)

(5) Preventing dispersion of radioactive materials

Reduction of radioactive material emissions
(Installation of reactor containment vessel vent with filter, deployment of water discharging apparatuses, etc.)

Hydrogen explosion prevention
(Installation of mobile nitrogen supplying devices, etc.)



Reactor Containment Vessel Vent with Filter

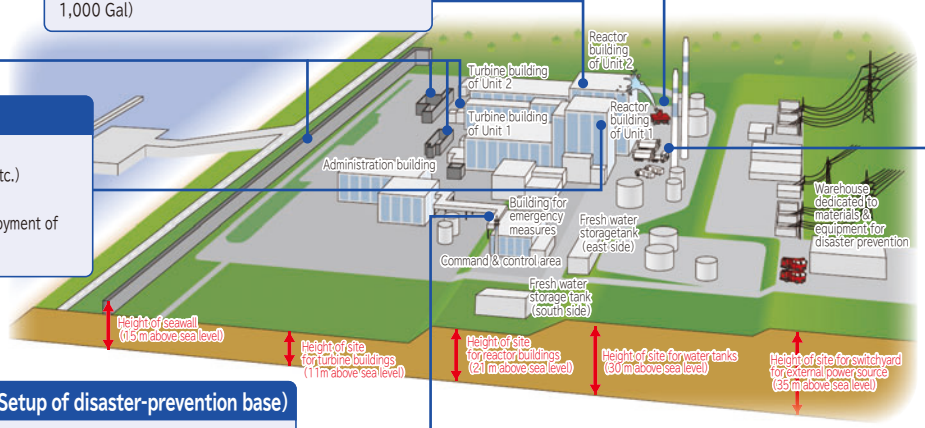
(4) Securing water and cooling the reactor

Diversification of water sources
(Installation of high-capacity fresh water tanks, use of Otsubogawa Dam, etc.)

Diversification of water injection (cooling) functions
(Installation of permanently installed alternative low-pressure pumps, deployment of mobile low-pressure water injection pumps, etc.)

High-capacity Fresh Water Tank

Mobile Low-pressure Water Injection Pumps



(3) Securing Power

Strengthening external power source

Redundancy and diversification of power sources
(Installation of underground light oil tanks for the emergency diesel generator, setting up permanently installed alternative AC power supply equipment, deployment of high-capacity power supply vehicles, etc.)

Permanently Installed Alternative AC Power Supply Equipment

(6) Other (Setup of disaster-prevention base)

Establishment of emergency response building and expanded emergency response center

Emergency Response Building and Expanded Emergency Response Center

(7) Measures for Other Disasters

Fire measures for inside buildings
(Occurrence prevention, improvement of detection and extinguishing functions, mitigation measures)

Flooding measures for inside buildings
(Flood prevention for critical equipment)

Provisions for natural phenomena
(Measures for volcanoes, tornadoes, and forest fires)

Firebreak for Measures for Forest Fires

Efforts to Maintain and Improve Technical Capabilities

● Training Using Operation Simulator

In order to improve our operational capabilities and our ability to respond to abnormalities, we use simulators to conduct training for ordinary plant operation, startup, and shutdown, as well as training for responding to abnormalities.

Unit 1 Simulator

Unit 2 Simulator

Training for Responding to Abnormalities

● Nuclear Disaster Prevention Training

Motivated by the accident at Fukushima Daiichi Nuclear Power Station, we continue to conduct drills to help maintain and improve our ability to prevent potential nuclear disaster events, so that we are ready to respond to natural disasters such as earthquakes or tsunamis that occur on an unprecedented scale.

In addition, we took part in a nuclear disaster prevention training program, conducted on November 23, 2022, by Ishikawa Prefecture, Shika Town, and other organizations; we confirmed the division of roles and coordination with the government and the local public authorities, and performed various drills.

Evacuation screening during disaster prevention training with Ishikawa Prefecture, Shika Town, and other organizations

Expanded emergency response center during disaster prevention training with Ishikawa Prefecture, Shika Town, and other organizations

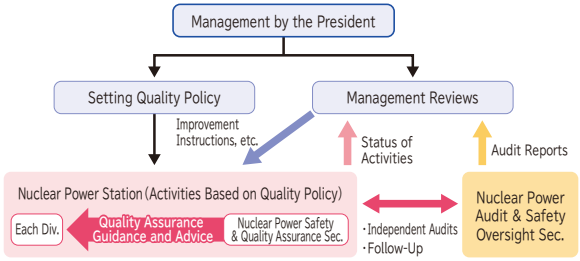
We also hold annual nuclear power operator disaster drills in collaboration with the Nuclear Regulation Agency; for the Shika Nuclear Power Station disaster drill conducted in FY 2022, we received the highest rating of A in all eleven indicators from the Nuclear Regulation Authority, for the fourth year in a row.
(Only the Shika Nuclear Power Station has received all-A ratings for four years in a row.)

Efforts to Foster a Culture of Safety and Thorough Quality Control

In order to further gain the trust of the community, there have been various efforts undertaken at Shika Nuclear Power Station to foster a culture of safety.

Major Efforts

- Implementing quality assurance activities based on the Quality Policy, which stipulates the establishment and permeation of a culture of safety and awareness of legal compliance.
- Management reviews conducted by the president based on the status of quality assurance activities by the Nuclear Power Division and audit reports by the Nuclear Power Audit and Safety Promotion Office, for ongoing changes and continuous improvements to the quality policy.
- The establishment of an archive area to pass on the lessons of failures with future generations, to ensure that the criticality accident shall not fade into obscurity; the dedication ceremony was held with the president in attendance.



Information Disclosure Efforts

● Nuclear Safety and Reliability Conference

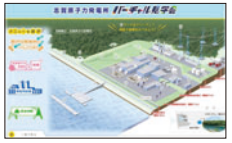
In 2011, we formed the "Nuclear Safety and Reliability Conference" (Chairman: Hiroto Ishida, Chairman of Komatsu University), an organization designed to gather and reflect multilateral opinions from external experts on our efforts related primarily to the operation and management of Shika Nuclear Power Station, and to share the progress of our activities for fostering safety culture.

● Information Disclosure

In the event of an accident, equipment trouble, or other issue at Shika Nuclear Power Station, we contact and/or submit reports to the national government, and related local governments, including Ishikawa Prefecture and Shika Town, in compliance with laws and ordinances, safety agreements, MOUs, or as otherwise determined, and promptly disclose any such contact and/or reports.

Efforts to Gain Understanding Concerning the Safety of Shika Nuclear Power Station

In order to help bring a deeper understanding of Shika Nuclear Power Station's efforts and safety measures to as many people as possible, we provide information on the power station through various media, including a virtual tour on our website, our newsletter *Hamanasu Net* distributed to households in Shika Town, and the local cable TV program *Shika Nuclear Power Station News*.


Shika Nuclear Power Station Virtual Tour on our website

Hamanasu Net Newsletters

The cable TV program *Shika Nuclear Power Station News*

Efforts for Stable Operation and Efficient Maintenance and Operation Management of Thermal Power Stations

Efforts to Ensure Stable Operation of Thermal Power Stations

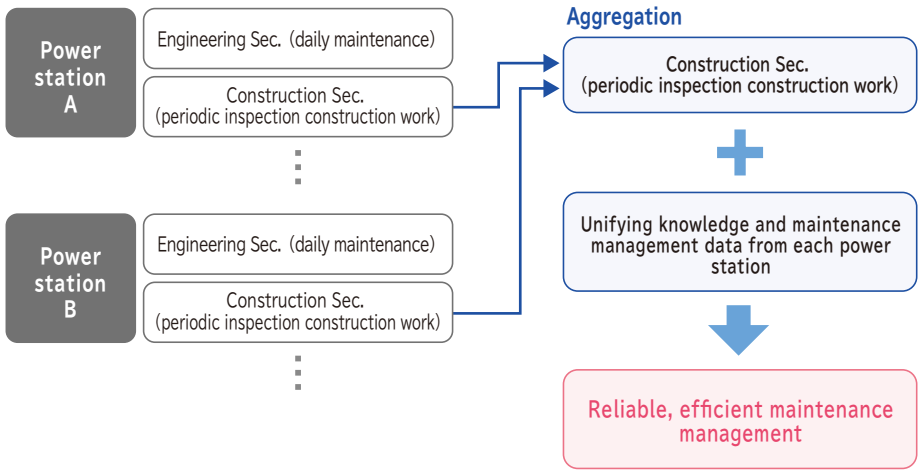
In preparation for the supply constraints caused by summer and winter demand, we strive to ensure supply capacity and reserve capacity for stable operation. By adjusting the timing of appropriate inspections and repairs of thermal power generation facilities, this reserve capacity can be used in a timely manner.

Additionally, for situations when sharp increases in demand cause supply constraints, we strive to secure supply capacity by operating thermal power stations with increased output.

Efforts for Efficient Maintenance Management of Thermal Power stations

We shall reduce maintenance costs and increase our cost-competitiveness by proactively transitioning our maintenance standards from TBM (time-based maintenance) to CBM (condition-based maintenance) and optimizing our inspection cycles based on factors such as aging and deterioration conditions.

In addition, some maintenance personnel formerly assigned to individual power stations have been stationed in a single location, to specialize in performing periodic inspection work. We provide reliable, efficient maintenance management through each power station' s plan development, combining their accumulated knowledge and construction experience.

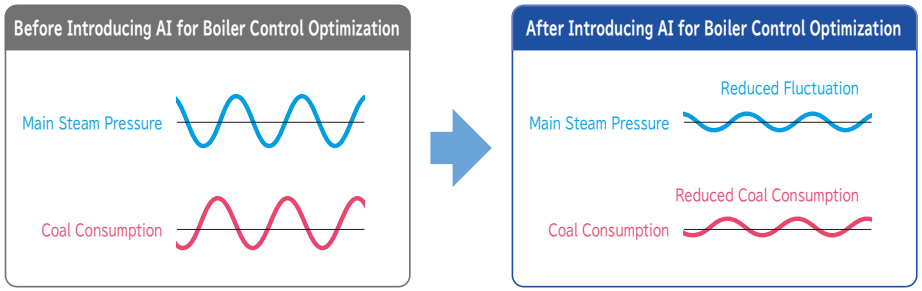


Efficiency Improvements and Early Detection of Problems with AI/IoT Technology

● AI for Boiler Control Optimization

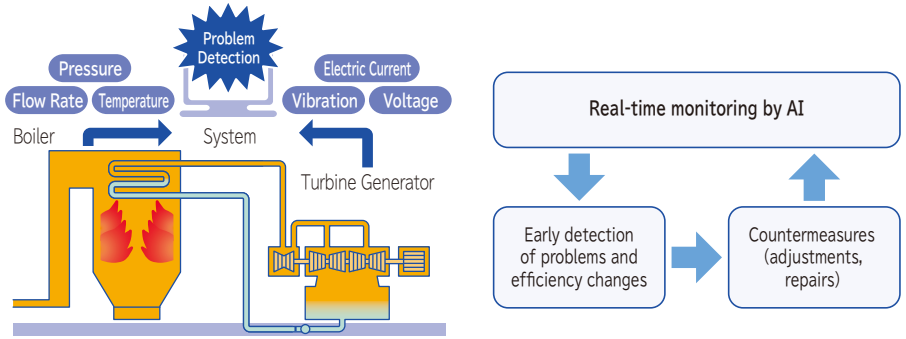
AI* for optimized boiler control has been introduced in Tsuruga Thermal Power Station Units 1 and 2 and Nanao Ohta Thermal Power Station Units 1 and 2. The optimization of fuel control helps reduce CO_2 emissions and fuel costs.

* Developed by an AI system manufacturer



● AI for Monitoring Operation Conditions

Collection and analysis of massive amounts of operating data enables detection of problems and efficiency changes before operators can notice them, which in turn makes it possible to respond promptly and solve problems quickly, and maintain high-efficiency operation.



Schematic Diagram of AI System for Early Problem Detection

Efforts to Maximize Supply-Demand Balance

We aim to maximize supply-demand balance, on the major premise of stable supply, through stable fuel procurement and optimized control of supply and demand.

Actions toward Stable and Economical Fuel Procurement

Coal	● Dispersion of risk through diversification of procurement sources, contract start dates, and contract terms ● Utilization of wider range of combustibles (medium-rank coal, etc.)
Heavy Oil	● Securing sufficient inventory before demand periods ● Diversification of suppliers ● Strengthening of collaboration with suppliers through electricity wholesale
LNG	● Close collaboration with suppliers based on long-term contracts

Addressing Risk of Fluctuation in Fuel Prices and Wholesale Electricity Market Prices

● Optimal Vessel Allocation and Generation Plans, and Controlling Supply and Demand

In addition to carrying out optimal fuel vessel allocation and power station operation plans based on fuel and wholesale electricity market price forecasts and facility operating conditions, we pursue the most economical operations possible through fine-tuned control of supply and demand and trading on the wholesale electricity market, based on weather conditions and current fuel inventory.

● Diversification of Power Source Procurement

We perform inter-seasonal swaps to stabilize our supply capacity through the year, by matching seasonal excesses and deficiencies with other suppliers, and swapping excess capacity.

● Utilization of Derivative Transactions

We shall utilize derivative transactions to lock in prices (stabilizing income and expenditures) in order to address the risk of fluctuations in fuel prices and wholesale electricity market prices.

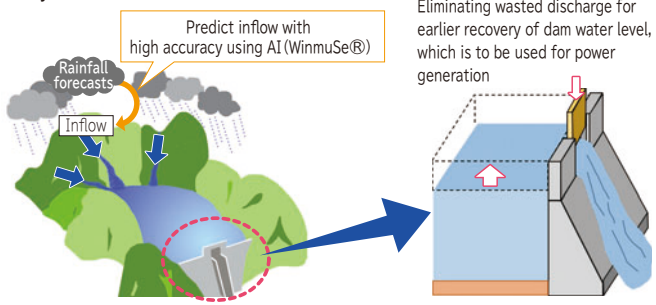
Optimizing Control of Supply and Demand with AI

● AI Dam Inflow Forecasts (Hydroelectric Power)

We are working to increase the amount of hydroelectric power generation by developing an AI system that predicts inflow into dams, and by optimizing power station operation. This system is currently in use at seven dams, increasing the amount of electricity generated by roughly 15 million kWh per year.*

* Equivalent to roughly 5,400 households' annual usage, based on an average household usage model of 230 kWh per month on a 30A Meter Rate Lighting B plan.

● System Overview

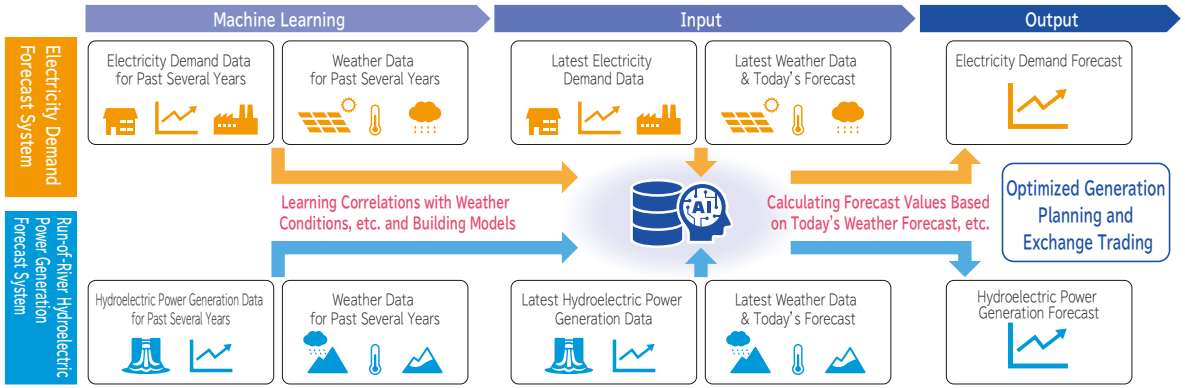


System to Predict Inflow to the Dam

Illustrative Example of Increasing Power Generation Amount

● AI to Improve Electricity Supply-Demand Forecast Accuracy

We shall work to improve the accuracy of our forecasts of power demand and amount of run-of-river hydroelectric power generation by utilizing AI, and maximize effective use of the Japan Electric Power Exchange, in order to reduce supply-and-demand-related costs through means such as reducing the amount of electricity purchased.



● AI for Vessel Allocation Optimization

In order to reduce coal procurement costs, we are working to develop an AI-based vessel allocation system that can build optimized vessel allocation plans based on a wide variety of constraints.

Expanding Renewable Energy to Achieve Carbon Neutrality by 2050

In order to achieve carbon neutrality by 2050, we work to develop power generation using renewable energy sources such as hydroelectric and wind power, and to increase biomass co-combustion ratios at coal-fired power stations, for an electric power generation mix that achieves decarbonization while being economical.

Our Carbon Neutrality Targets

- **Renewable energy development amount increased by 1 million kW or higher (3.0 billion kWh/year or higher)** by the early 2030s *1
- **50% or higher electricity generated from non-fossil-fuel sources** by FY 2030
- **50% or greater reduction in CO_2 emissions** by FY 2030 *2

*1 Compared to FY 2018
*2 Compared to FY 2013, based on retail electricity sales volume

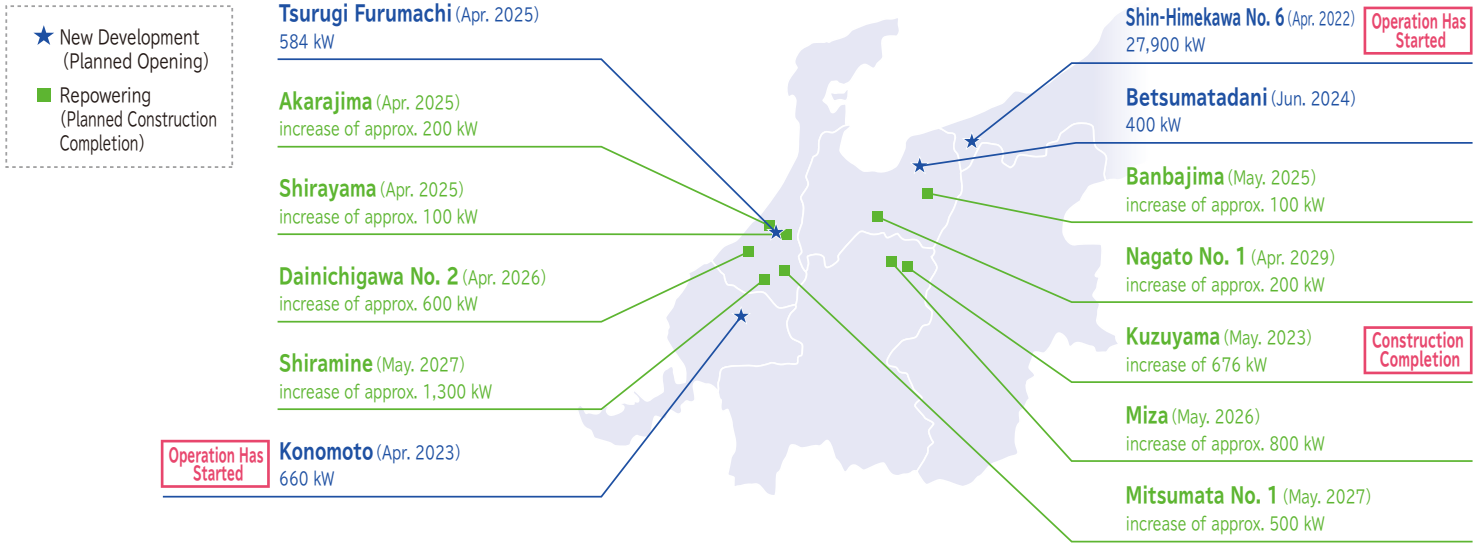
Participation in the GX League*

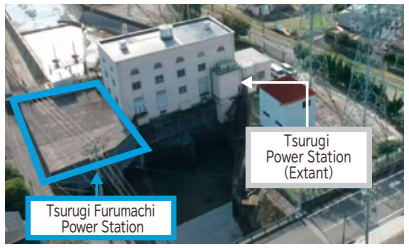
As a responsible energy provider, we have established the Hokuriku Electric Power Group Vision and Roadmap for 2050 (released in April 2022), and have taken on the challenge of achieving carbon neutrality by 2050, through decarbonization of power sources, increased sophistication of transmission and distribution networks, and support for customers' and the region's decarbonization. We have opted to participate in the GX League, which launches in FY 2023, because we believe in the GX League Basic Concept: "simultaneously achieve corporate growth, consumer happiness, and contributions to the global environment." Through our participation in the GX League, we aim to collaborate with other players taking on the challenge of GX, in order to achieve carbon neutrality by 2050.

* The GX League is a framework for companies to actively discuss the transformation of the overall economic and social system and create new markets accordingly, working toward GX together with the government, academia and financial institutes.

Efforts to Increase Hydroelectric Power Generation

To further utilize the abundant water resources of the Hokuriku region, we will work to increase the amount of hydroelectric power generated through the construction of new hydroelectric power stations and the repowering of existing power stations, in order to promote decarbonization of power sources.





Bird's-Eye View of Tsurugi Furumachi Power Station

Shin-Himekawa No. 6 Power Station

We actively promote various efforts, to achieve carbon neutrality inside and outside the Hokuriku region.

Promoting Offshore and Onshore Wind Power Generation Projects

❶ Feasibility Study on the Development of an Onshore Wind Power Generation Project in Asahi Town

A feasibility study is underway for onshore wind power development, including environmental assessments. (Output capacity: up to 30,000 kW)

❷ Participation in the Nyuzen Offshore Wind Power Generation Project

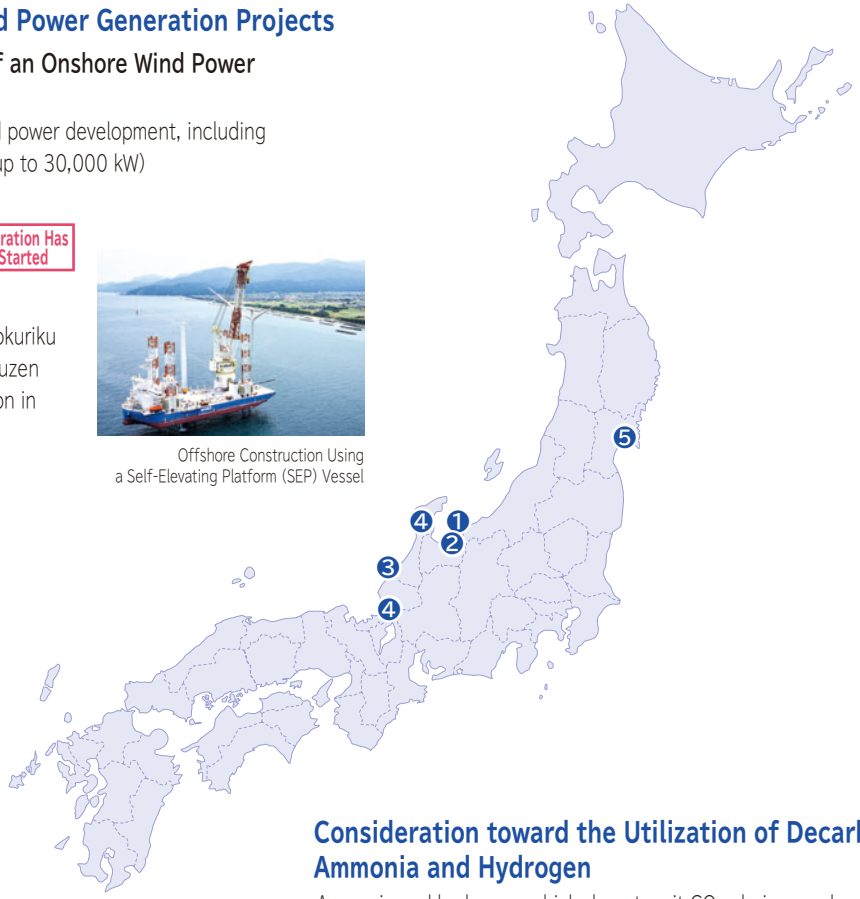
Operation Has Started

Working together with Venti Japan Inc. and JFE Engineering Corporation, we constructed the Hokuriku region' s first offshore wind power station in Nyuzen Town, Toyama Prefecture, and it began operation in September 2023. (Output capacity: 7,495 kW)

Offshore Construction Using a Self-Elevating Platform (SEP) Vessel

❸ Participation in the Awara Offshore Wind Power Generation Project

In collaboration with Chubu Electric Power Co., Inc. and OSCF Co., Ltd., we are considering an offshore wind power generation project off the coast of Awara City, Fukui Prefecture, and conducting a development feasibility study.
(Output capacity: up to 200,000 kW)



Participation in an Offshore Wind Power Project off the Coast of Taiwan (Overseas)

Operation Has Started

We, along with Mitsui OSK Lines and Toho Gas Co., Ltd., acquired a 25% stake in Formosa 1 International Investment Co., Ltd. stock, and we participated in a wind power generation project off the shore of Taiwan.
(Output capacity: 128,000 kW)

Promotion of Biomass Business

❹ Increasing Wood Biomass Co-Combustion Ratios at Coal-Fired Power Stations

In order to increase co-combustion ratios (15%) starting in FY 2024, power generation facility renovation work is in progress at Tsuruga Thermal Power Station Unit 2 and Nanao Ohta Thermal Power Station Unit 2. With the aim of increasing co-combustion ratios, we procure wood pellets (black pellets and white pellets) from North America and Southeast Asia, in addition to the wood chips from domestically produced materials that we currently use. Preparations are underway to receive wood pellets in a safe and stable manner.

Goals to Achieve by FY 2030		
	Electricity Generated from Biomass	1.5 billion kWh/year
	CO_2 Reductions	Approx. 1 million t-CO_2/year

❺ Participation in the Sendai Port Biomass-Fired Power Generation Project

We have been working in association with Sumitomo Corporation, Sumitomo Tohoku Corporation, and Prominet Power (a wholly owned subsidiary of Tokyo Gas Co., Ltd.) on a biomass-fired power generation project in Sendai City, with construction beginning in April 2022 toward a planned October 2025 start of operation. (Output capacity: 112,000 kW)

Consideration toward the Utilization of Decarbonization Technologies, Including Application of Ammonia and Hydrogen

Ammonia and hydrogen, which do not emit CO_2 during combustion, are expected to serve as some of the fuels that will contribute to achieving carbon neutrality by 2050. We will conduct studies on their use at thermal power stations.

A part of our efforts, we conducted the Feasibility Study on Establishing a Low-Carbon Fuel Ammonia Supply Chain from Australia to Japan in FY 2022, in collaboration with the Japan Organization for Metals and Energy Security; Marubeni Corporation; Kansai Electric Power Company; Tohoku Electric Power Co., Inc.; Hokkaido Electric Power Co., Inc.; and Woodside Energy Ltd.

The Feasibility Study on the Introduction of a Floating Ammonia Storage and Gasification Facility at Tsuruga Port was also adopted as a project to promote understanding of the increasing sophistication of energy and conversion, and we have begun this study in cooperation with Fukui Prefecture and Mitsui & Co.

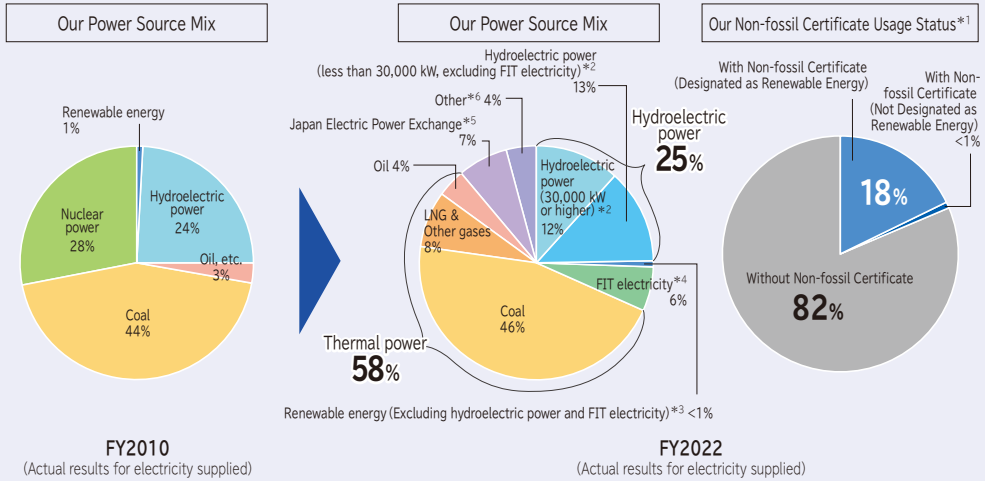
We will continue to investigate the utilization of ammonia and hydrogen.

Hokuriku Electric Power Company's Power Source Mix

Our power source mix is characterized by a higher ratio of hydroelectric power generation, capitalizing on the Hokuriku area's plentiful water resources; this ratio is 25%, the highest among former general electric power suppliers.

After the Great East Japan Earthquake, Shika Nuclear Power Station stopped operation; in its place, thermal power stations have been operating at high utilization rates since then. We steadily continue working toward restarting Shika Nuclear Power Station and the development of renewable energy sources in view of cost-effectiveness as ways to further diversify our generation resources.

● Power Source Mix Comparison (Component ratio relative to our retail power demand)



Note 1: Calculated and published based on the *Guidelines Concerning the Management of the Electricity Retail Business* (April 2023) from the Ministry of Economy, Trade and Industry.

Note 2: We offer some customers the option of 100% renewable energy or effectively 100% renewable energy; the percentage figures shown above were calculated based on the total amount of electric power sold (transmission side: 27,321 GWh), taking into account the amount of electricity sold through this option (726 GWh) and the amount sold using non-fossil certificates. (Actual results for FY 2022 (April 1, 2022 to March 31, 2023))

Note 3: Our CO_2 emission intensity (adjusted emission intensity) for FY 2022 is 0.499 (kg-CO_2/kWh).

Note 4: Total figures may not exactly equal values obtained by adding up the individual figures, which are rounded off.

*1 A non-fossil certificate is a tradable certificate of "non-fossil value" of electricity derived from non-fossil sources (e.g. renewable sources). The percentage of non-fossil certificates in use is calculated using non-fossil certificates for the calendar year (January to December 2022).

*2 The portion of electricity that does not use non-fossil certificates does not have value as renewable energy nor as zero-CO_2-emission power sources, and is treated as electricity with the national average levels of CO_2 emissions, including thermal power sources, etc.

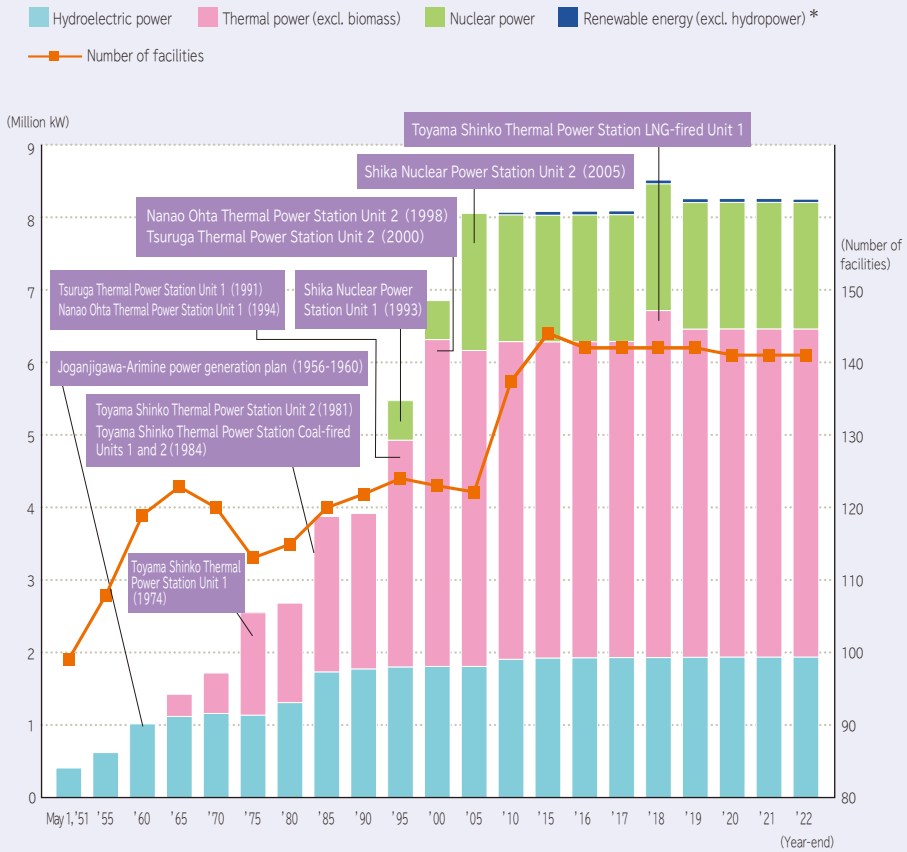
*3 "Renewable energy (Excluding hydroelectric power and FIT electricity)" refers to photovoltaics, wind power, and biomass (excluding FIT electricity).

*4 "FIT electricity" refers to electricity produced by hydroelectric power, photovoltaics, wind power, etc., and procured under the Feed-in Tariff Program for renewable energy. Part of the cost that we incur to procure this electricity is covered by surcharges collected from all electricity users, including non-customers of our company. CO_2 emissions from this electricity are calculated based on national average CO_2 emissions from all types of electricity, including those from thermal power generation. The total value of FIT electricity in FY 2022 amounted to 6%.

*5 This includes electricity obtained from hydroelectric power, thermal power, nuclear power, the FIT program, and renewable energy.

*6 Electricity procured from other electric utilities, and for which the generation resource is unknown, falls under "Other."

● Power Generation Facilities (Number of facilities and output capacity)



* Biomass capacity calculated based on the biomass co-combustion ratio target at coal-fired power stations (3%)

Power Transmission and Distribution

Fulfilling Our Responsibility to Provide a Stable Supply of Electricity, while Taking On the Challenges of Reform and Creation, and Contributing to the Development of the Hokuriku Region

Hokuriku Electric Power Transmission & Distribution Company
Representative Director & President
Kazuya Tanada

In order to fulfill our unchanging mission, to continue delivering a stable supply of electricity to our customers, the Power Transmission and Distribution Division performs a number of tasks, including controlling daily supply and demand, maintenance and construction works on equipment, enhancing resilience, and wheeling services.

The first regulatory period (FY 2023 through FY 2027) of Japan' s new wheeling charge system (the Revenue Cap System) has begun. The business environment surrounding power transmission and distribution has grown very challenging of late, with issues such as increasingly more renovation work due to aging power transmission and distribution facilities, concerns of future decline in area demand due to declining populations and progress in energy efficiency, and carbon neutrality (such as large-scale introduction of renewable energy sources). Nonetheless, we shall continue doing our utmost to implement all actions based on the seven priority measures outlined in the Mid-term Business Plan announced in April 2022, which are premised on the income forecast and business plans approved by the national government.

More specifically, we shall move forward with next-generation transmission and distribution networks toward the realization of carbon neutrality, on the major premise of ensuring a stable supply. We shall also stabilize and strengthen our financial base through extensive efficiency improvements, cost reductions, and more, with *kaizen*, transformation, and DX promotion at the core as we move into full-scale implementation. At the same time, we shall continue to put our customers first, as we deliver some of the finest service in Japan.

We are also taking the recent incidents of inappropriate handling of customer information very seriously, and we shall continue to work company-wide and take all possible measures to ensure not only that we comply with the regulations of conduct laid out by the Electricity Business Act, but that we manage all information properly and in accordance with all relevant laws and regulations, including the Act on the Protection of Personal Information.

We shall continue to maintain and deepen our unchanging core values of prioritizing safety, and fair, neutral, and transparent business practices. At the same time, we shall steadily address major changes worldwide, proactively adopt new ideas and innovations, and take on the challenges of reform and creation.

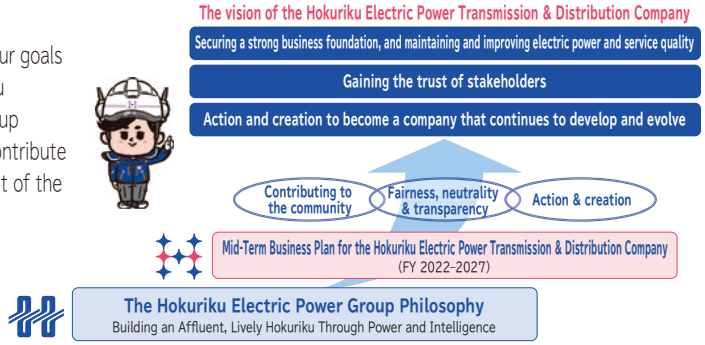
Mid-Term Business Plan for the Hokuriku Electric Power Transmission & Distribution Company

(FY 2022–2027) Publicly announced in April 2022

The Hokuriku Electric Power Transmission & Distribution Company will respond appropriately to changes in the business environment and the new wheeling charge system, based on the Mid-Term Business Plan,*1 and achieve stable business operations and sustainable growth toward our vision.

Our Vision

We shall achieve our goals under the Hokuriku Electric Power Group Philosophy, and contribute to the development of the Hokuriku region.



Priority Measures for the Hokuriku Electric Power Transmission & Distribution Company

We have established the seven priority measures below, based on changes in the business environment.

Through continuous, steady achievement of all initiatives based on the priority measures, we shall further strengthen the management base of the Hokuriku Electric Power Transmission & Distribution Company, for sustainable growth and development.

Priority Measures (Seven Pillars)

1. Continue and strengthen efforts to ensure a stable supply into the future
2. Promote implementation of next-generation transmission and distribution networks to contribute to carbon neutrality (large-scale introduction of renewable energy, etc.)
3. Stabilize and strengthen our financial base by increasing efficiency, lowering costs, enhancing Group strength, etc.
4. Improve customer service and quality of operations and services
5. Action in new domains and new businesses
6. Foster a corporate culture (human resource development) that prioritizes safety, with fair, neutral, and transparent business practices at its core
7. Action for DX and new technologies

Related to All Measures

Underpinning Each Measure

*1 Please see the website for more details of the Mid-Term Business Plan.

WEB https://www.rikuden.co.jp/nw_hoshin/attach/keieikeikaku.pdf

Business Plans for the Hokuriku Electric Power Transmission & Distribution Company

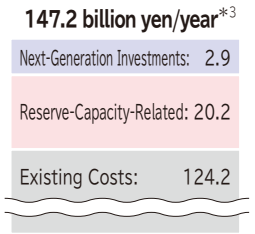
(FY 2023–2027)

With the introduction of the new wheeling charge system (revenue cap system), the Hokuriku Electric Power Transmission & Distribution Company has drawn up business plans for FY 2023–2027*2 based on the Mid-Term Business Plan shown to the left, and received approval in December 2022 for the forecast of income from wheeling income, etc. (hereafter "income forecast") with an eye on the costs involved in implementing the plan. We shall continue to steadily achieve the streamlining plan, target plan, and other items incorporated into our business plans.

Overview of Income Forecast

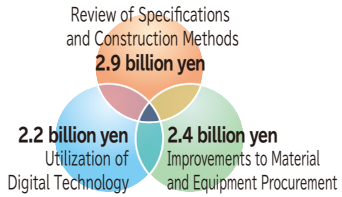
The income forecast for FY 2023–2027 is 147.2 billion yen/year,*3 reflecting reserve capacity costs to address the fluctuations in supply and demand that accompany factors such as the increased introduction of renewable energy, as well as investments necessary for next-generation networks.

*3 An application for approval of a change to the income forecast (148.1 billion yen/year) was filed in September 2023; it is currently under review by the national government.



Streamlining Plan

The income forecast incorporates efficiency gains of 7.5 billion yen/year, reflecting factors such as revised specifications and construction methods, utilization of digital technology, and improvements to material and equipment procurement.



Target Plan (Nineteen targets have been set in the seven areas below.)

Stable Supply	We steadily work on equipment arrangement and maintenance for stable supply.
Expanded Introduction of Renewable Energy	We make maximum use of the existing grid and work toward early interconnection and lowering the amount of curtailed renewable energy output, toward the expanded introduction of renewable energy.
Service Level Improvements	We strive to improve customer satisfaction through prompt response to power outages and the provision of various information.
Expansion	We work to strengthen disaster coordination and wide-area procurement and operation of electric power.
Digitalization	We work to improve service and strengthen security through digitalization.
Safety and Environmental Considerations	We promote thorough safety training with the goal of eliminating work-related accidents, and the introduction of EVs toward achieving carbon neutrality.
Next-Generation Transition	We work to steadily introduce next-generation smart meters and work on technological studies of distributed grids, to help bring about a next-generation society.

*2 Please see the Hokuriku Electric Power Transmission & Distribution Company website for specific details of business plans.

WEB Approved Dec. 2022 https://www.rikuden.co.jp/nw_hoshin/attach/jigyoukeikaku2023.pdf

WEB Pending approval as of Sep. 2023 https://www.rikuden.co.jp/nw_hoshin/attach/jigyoukeikaku202309.pdf

Efforts to Secure a Stable Supply in the Future

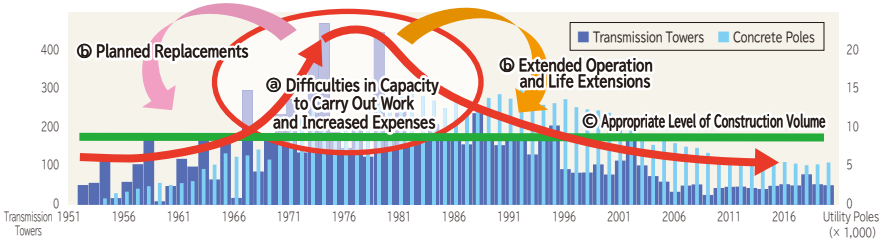
Securing a stable supply in the future is the single most important issue in the power transmission and distribution business, and we steadily promote efforts to achieve this goal.

Measures to Address Aging of Power Transmission and Distribution Facilities

We have established a long-term policy for highly aged facilities, in order to steadily and appropriately update the highly aged facilities that were constructed during and since the high-growth period of the Japanese economy (particularly the 1970s), and to ensure a stable supply in the future.

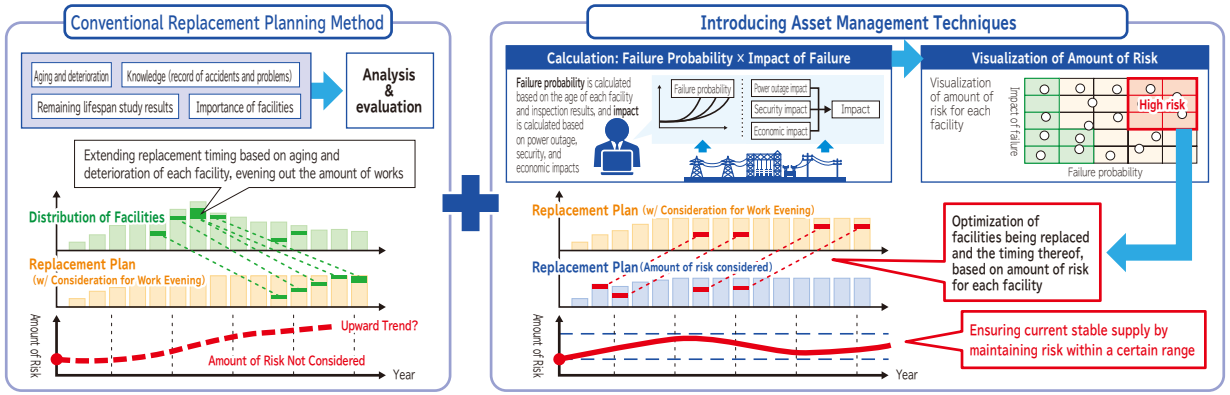
The Need for Long-Term Measures to Address Aging

If facilities are renovated based on facility age distribution, the "spike" due to the number of facilities built during the high-growth period of the Japanese economy (particularly the 1970s) would lead to a sudden increase in construction volume, thus overwhelming our capacity to carry out work, in turn leading to increased replacement costs (see ⓐ). For this reason, we assess the conditions of facilities and determine which should be kept for extended operation, with planned maintenance based on conditions (see ⓑ). This helps even out the amount of works, enabling steady and continuous replacement work with appropriate timing from a long-term perspective, while both maintaining a stable supply and controlling costs (see ⓒ).



Developing Replacement Plans Utilizing Asset Management Techniques

In addition to the conventional replacement planning method, we shall optimize the facilities being replaced and the timing thereof, in order to maintain a level of risk, calculated based on failure probability and the impact for each facility, within a certain range.



Efforts to Secure Work Execution Capability

In order to maintain and enhance our work execution capability, efforts continue to secure and develop human resources for transmission and distribution works, as well as to share videos and other media to expand and improve the public image of the industry.

PR activities through YouTube videos

Teaching Material for Technical High Schools

Efforts to Improve Productivity

The introduction of the indirect hot-line work technique*1 has improved productivity through increased worker safety and reduced workloads.

*1 A work technique that uses an insulated pole ("hot stick").

Introduction of Indirect Hot-Line Work Technique for Installing or Removing Protective Conduits for Construction work*2

*2 Covers temporarily attached to distribution lines to ensure safety at work sites (by preventing electric shocks and facility accidents).

When installing or removing protective conduits for construction work, it was previously necessary to wear protective gear for the work, and work had to be stopped in the event of rain. Introducing the indirect hot-line work technique eliminated the need to wear protective gear and made it possible to continue work even when it rains, reducing workloads and improving work efficiency.

Conventional work

Work using the indirect hot-line work technique

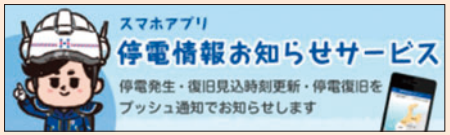
Efforts for Improving Resilience

In order to promptly and appropriately respond to increasingly large-scale natural disasters, we shall steadily implement measures to improve our resilience, such as strengthening our internal systems and further enhancing our collaboration with local governments and other relevant organizations.

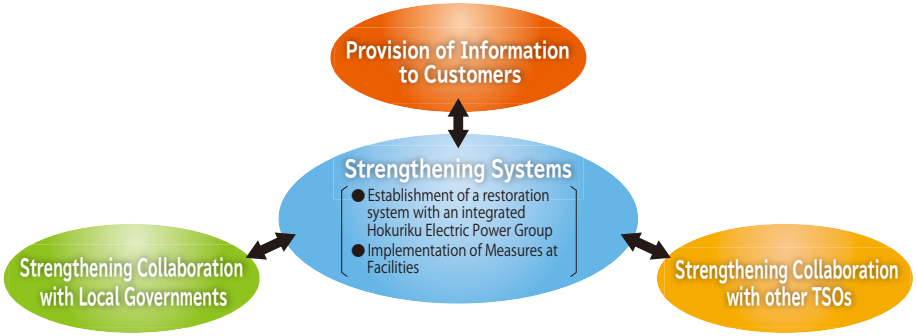
Improving Responses to Inquiries and Promptly and Accurately Providing Information

(See p. 44 for details)

- Improving the call center capacity through involvement with the Aomori Kadaru Contact Center
- Chat-based support service for inquiries about power outages, as well as about power transmission and distribution facilities such as poles and wires
- Prompt and accurate provision of information via a power outage information notification app, our website, and social media



Power outage information notification service (smartphone app)



Strengthening of Equipment and Restoration Systems

- Proactively cutting down trees to prevent power outages due to tree contact or fallen trees
- Raising buildings and cable ducts to prevent flood damage to electrical stations

Example of snow damage in FY 2022

Raised building

Holding joint drills with other transmission system operators (TSOs), and organizations related to local governments and the Self-Defense Forces

- Holding recovery support drills with other TSOs
- Dispatching employees to assist other TSOs coping with disasters
- Participation in drills organized by local governments, and implementation of joint drills (with Self-Defense Forces and other relevant organizations)

Joint road obstacle elimination drill with local government and the Self-Defense Forces

Strengthening Collaboration with Local Governments

- We have signed disaster cooperation agreements with all 52 municipalities in the region (fully complete as of May 2023) and are strengthening our collaboration with related organizations
- Strengthening collaboration with local governments in light of FY 2022 snow damage (eliminating road obstacles, proactively cutting down trees, dispatching liaison personnel, responding to isolated villages, etc.)

●Strengthening of Collaboration with Relevant Organizations (as of September 30, 2023)

Material, Equipment, and Personnel Transportation	Japan Ground Self-Defense Force, 8th Regional Coast Guard Headquarters Japan Maritime Self-Defense Force, 9th Regional Coast Guard Headquarters
Traffic Prioritization of Vehicles, etc.	NEXCO Central
Provision of Relief Supplies, Parking, etc.	AEON Co., Ltd., Heiwado Co., Ltd.
Sharing Information on Facility Damage, etc.	NTT West Corporation

Aiming to expand disaster cooperation agreements with telecommunications carriers and other relevant organizations

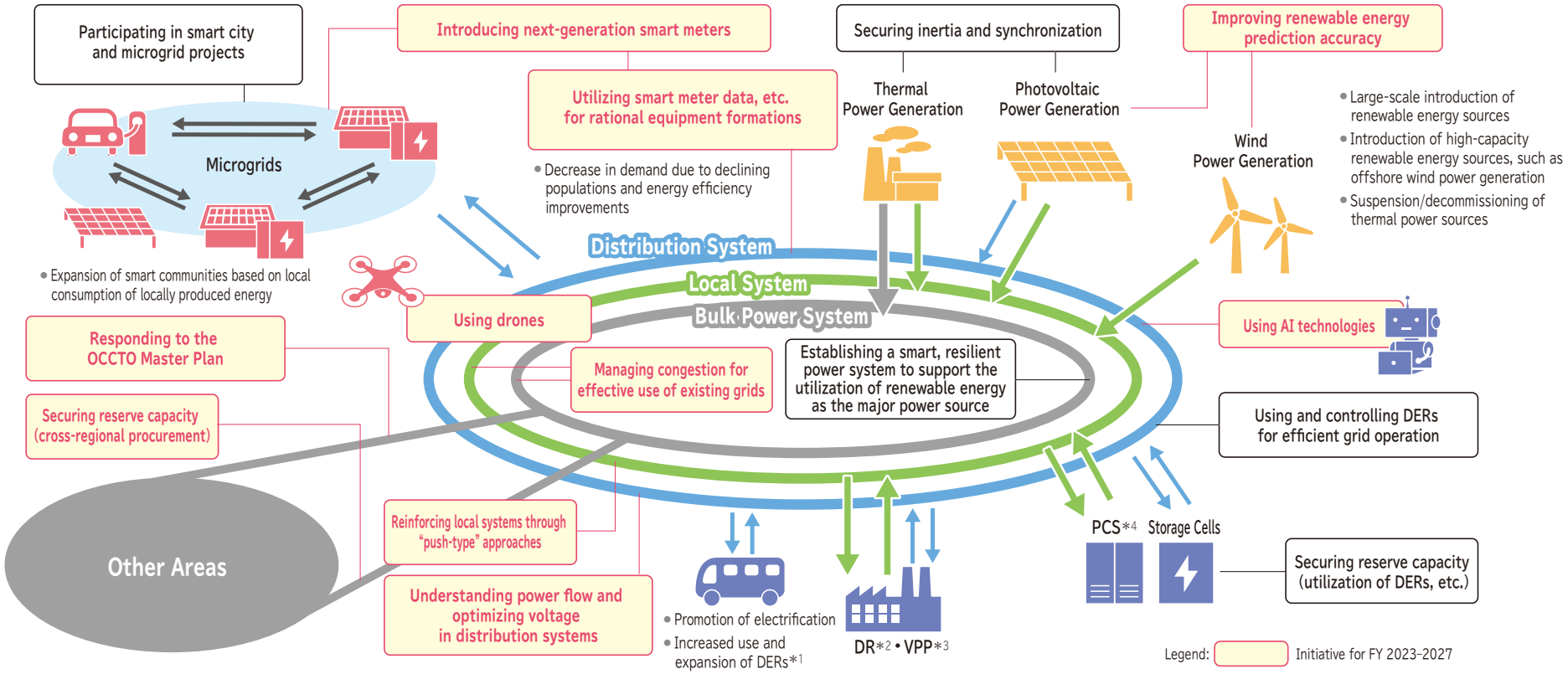
Efforts to Implement Next-generation Transmission and Distribution Networks to Help Achieve Carbon Neutrality

We promote the implementation of next-generation transmission and distribution networks to contribute to the realization of carbon neutrality, facilitating large-scale introduction of renewable energy sources and more.

Efforts to Implement Next-generation Transmission and Distribution Networks Ahead of 2050

With the aim of resolving social issues concerning global warming, sustainable regional development, and the realization of a smart society, we strive to contribute to the achievement of carbon neutrality by 2050 through the implementation of next-generation transmission and distribution networks, which will serve as infrastructure for large-scale introduction of renewable energy sources.

To this end, we will make maximum effective use of existing grids by improving the prediction accuracy of renewable energy output, managing congestion in transmission and transformation facilities, optimizing distribution system voltage, and other measures, while promoting rational equipment formations by strengthening bulk power system based on the master plan, reinforcing local systems through "push-type" approaches, and utilizing smart meters and other devices.



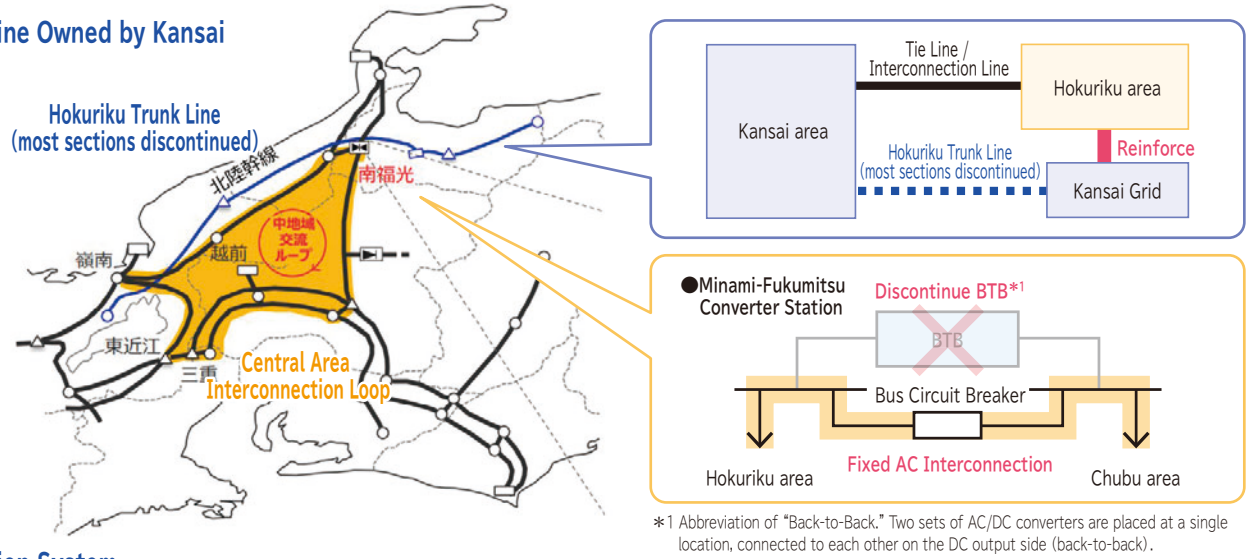
*1 Abbreviation of "Distributed Energy Resources."
*2 Abbreviation of "Demand Response." Energy resources are controlled based on the status of power supply, and consumption patterns are changed.
*3 Abbreviation of "Virtual Power Plant." Remote/integrated control of energy resources (such as storage batteries, electric vehicles, and electric power generators) at factories, houses, and other facilities, which enable demand and supply adjustment, provides functionality as though constituting a single power station.
*4 Abbreviation of "Power Conditioning System." A system to convert direct current to alternating current to enable electricity generated by photovoltaic power generation, or other sources, to be used at home or in factories.

Integration and Discontinuation of the Hokuriku Trunk Line Owned by Kansai Transmission and Distribution

As part of our efforts for the effective utilization of facilities through collaboration among power transmission and distribution companies, we have decided to discontinue (rather than replace facilities for) most sections of the Hokuriku trunk line owned by Kansai Transmission and Distribution, which have aged, and will proceed with the necessary works for connection to the grid of the Hokuriku Electric Power Transmission & Distribution Company.

Reinforcement of Cross-regional Interconnection among the Three Central Area Companies

In order to improve supply reliability and increase total operation capacity, we will streamline the facilities at the Minami-Fukumitsu Frequency Converter Station with the timing of facility updates, and proceed with the necessary works to form a fixed AC interconnection (loop) involving the Chubu and Kansai areas.

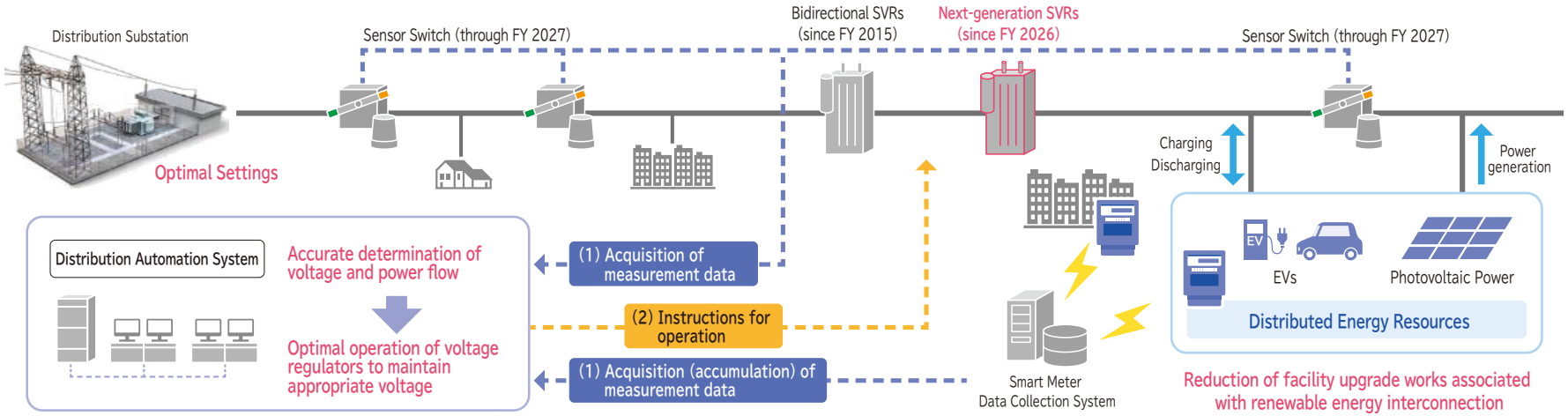


*1 Abbreviation of "Back-to-Back." Two sets of AC/DC converters are placed at a single location, connected to each other on the DC output side (back-to-back).

Efforts toward Increased Sophistication of the Distribution System

We have placed sensor switches on distribution lines to accurately determine voltage and power flow, and maintain appropriate voltage through optimal operation of voltage regulators, as part of our efforts to improve the quality of electricity and optimize the equipment formation.

In order to resolve the three-phase voltage imbalance arising from the spread and expanded use of electric vehicles, we are working to develop and introduce next-generation SVRs*2 for controlling voltage at high speed for each separate phase.



*2 Abbreviation of "Step Voltage Regulator." A type of automatic voltage regulator.

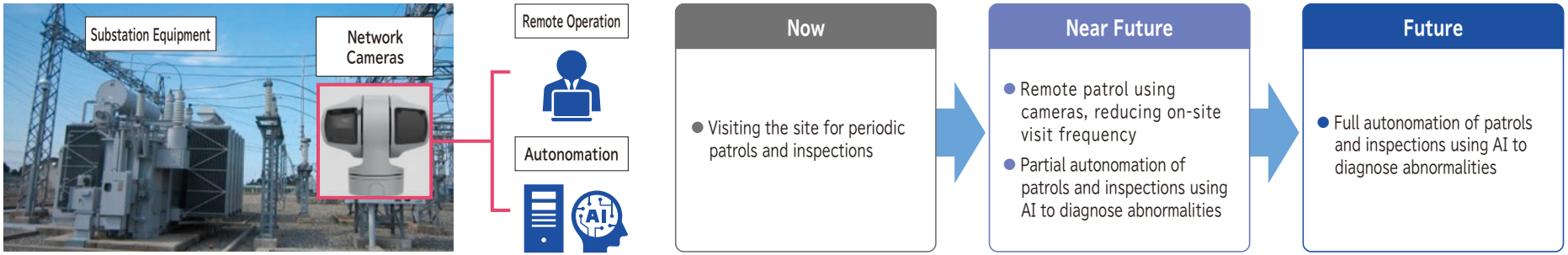
Efforts to Improve Efficiency, Reduce Costs, and Enhance the Group's Collective Strength

We will stabilize and strengthen our financial base by thoroughly improving efficiency, reducing costs, and more. We also aim to enhance the Group's comprehensive strength and sustainable growth by expanding collaboration across companies of the Group.

Improvement of Patrol and Inspection Efficiency Using Digital Technology at Substations (Introduction of Remote Maintenance System)

Our transformation division is working to introduce a remote maintenance system using digital technology to improve the patrol and inspection efficiency. We are working to reduce the frequency of on-site visits by installing network cameras at our substations, and establishing a system to enable remote monitoring of equipment status.

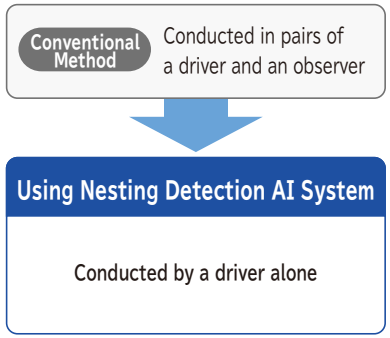
We also aim to autonomate*1 patrols, inspections, and other periodic operations by introducing AI to diagnose equipment abnormalities based on images from network cameras.



*1 Autonomation (*jidoka*)," a word derived from the Toyota Production System, refers to a feature to let machines judge quality.

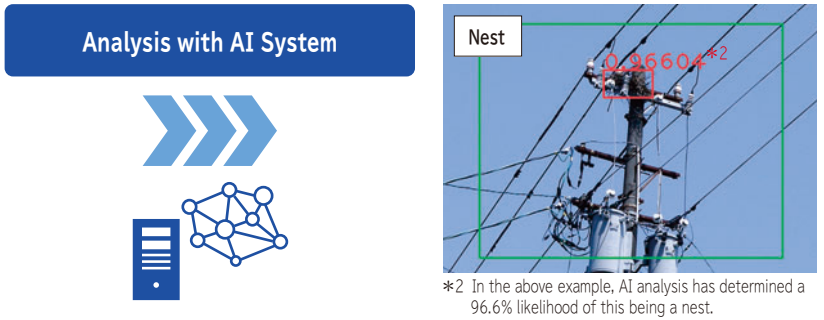
Bird Nest Patrol Using Nesting Detection AI System

Wild birds, such as crows, sometimes nest on utility poles from early spring to early summer each year. Because their nests can cause power outages, we conduct patrols for these as part of our efforts to prevent power outages. Our bird nest patrols, which previously were conducted in pairs of a driver and an observer, now can be conducted by a driver alone by using images captured by vehicle-mounted cameras and a nest detection AI system, thus improving efficiency.



●Image capture with vehicle-mounted cameras

●Analysis with nesting detection AI system



*2 In the above example, AI analysis has determined a 96.6% likelihood of this being a nest.

Efforts to Improve the Quality of Operations and Services

For all customers, each and every employee continues working on a customer-first basis, to deliver industry-leading service.

Efforts toward Prompt and Improved Response in the Event of a Power Outage

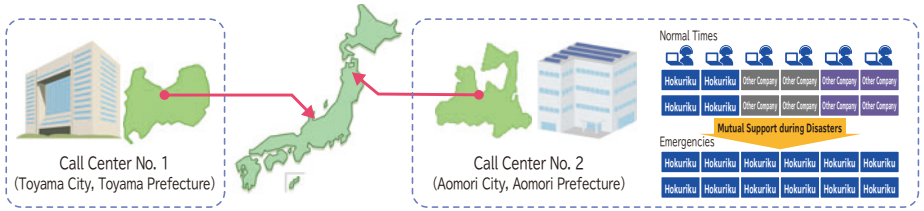
We are working to respond quickly to forced outages caused by typhoons, snow damage, and other events.

Strengthening of Call Center Functions in the Event of an Emergency (Multiple Call Centers)

In July 2023, we were involved in the Aomori Kadaru Contact Center, a cooperative call center of five transmission system operators (Hokkaido, Chubu, Kansai, Chugoku, and Kyushu), as our second call center, for the purpose of ensuring continuity of telephone reception operations in the event of an emergency.

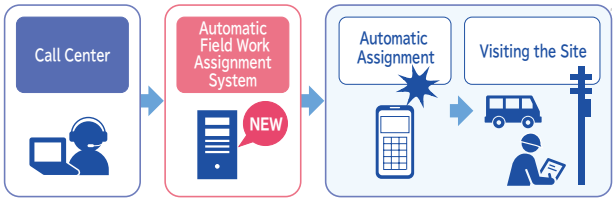
Support System in the Event of an Emergency

The Aomori Kadaru Contact Center works to provide peace of mind by ensuring connectivity, even in the event of large-scale power outages due to natural disasters such as typhoons, snow damage, or earthquakes, through mutual support by each company when telephone inquiries increase in each company' s service area or when a company' s area is affected by a disaster.



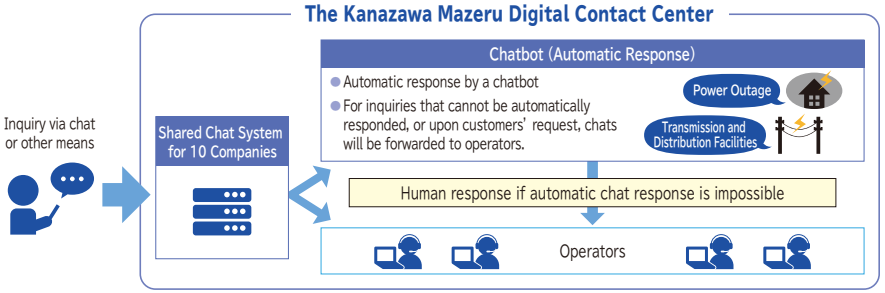
Prompt Response in the Event of Power Outages, and Other Problems

A message received at the call center regarding an electrical failure or other issue is automatically sent to the mobile device of the field engineer at the relevant location. The field engineer reads the message sent to their device and heads out to the site to perform the necessary work. The engineer also enters a report into the device at the start and end of the job, allowing for centralized management and review of the status of engineers in different locations. This has enabled us to respond quickly.



Diversification of Contact Channels for Inquiries (Addition of Chat-based Response)

Chat-based support service was added for inquiries about power outages, as well as about power transmission and distribution facilities such as poles and wires. This chat-based support can use illustrations and videos by providing links to relevant web pages, making explanations easier for customers to understand. This service is operated by the Kanazawa Mazeru Digital Contact Center, which is jointly managed by ten transmission system operators. A chatbot is used to automatically receive customer inquiries 24 hours a day, ensuring that answers can be provided even in the event of a disaster.



Provision of Power Outage Information

Our power outage information notification service (smartphone app) sends out push notifications when a power outage occurs or has ended in pre-registered areas, or when there is a notification from the Hokuriku Electric Power Transmission & Distribution Company.

Power outage information notification service (smartphone app)

Sales / New Business

Aiming to Achieve Sustainable Growth of the Hokuriku Electric Power Group by Meeting the Needs of Our Customers and the Region, Including Carbon Neutrality, and by Working to Expand Our Business Domains

Managing Executive Officer
General Manager of Marketing & Sales Division
Deputy General Manager of Innovation Promotion Division
Takahide Cho

Aiming at the expansion of new business domains for sustainable growth, one of the three pillars of the Hokuriku Electric Power Group' s new mid-term business plan announced in April 2023 in light of changes in the environment surrounding the electric power industry, we will promote initiatives that contribute to the promotion of energy business including carbon neutrality services, and the expansion of new business domains transcending the framework of the energy business.

For the promotion of carbon neutrality services, we offer renewable-energy-oriented electricity rate plans to more closely meet customers' needs, as well as selling carbon-neutral LNG as a comprehensive energy business company. With regard to photovoltaic power purchase agreements (PPAs) for corporate customers, we promote off-site development in addition to on-site PPAs, and going forward, we will work on development targeting not only the Hokuriku region but also the entire country of Japan, in order to contribute to the achievement of the renewable energy development target (increase by 1 million kW or higher during the early 2030s).

We will also work to create new added-value services to meet customer needs, such as the combination of EasyCute (EcoCute lease service for households) with a demand response service — the first service of its kind in Japan — as well as upgrading and expanding existing service content.

In terms of expansion into new business fields, we have worked on various new businesses and business domain expansions, such as strengthening our information and communications business, participating in gas supply and hydroelectric power generation businesses in Kanazawa, and being involved in overseas projects and wind power generation projects.

In July 2023, we established the Innovation Promotion Division, and also set up the Commercialization Project Promotion Section in the Business Development Department, to enhance our system for promoting new businesses and accelerate our efforts to expand our business fields.

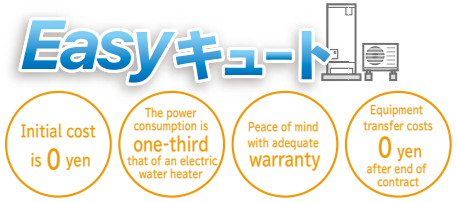
We will continue to work together with Group companies to take on the challenges of entering new business fields, with a focus on carbon neutrality services, next-generation energy management, regional development, and digital life support businesses.

Promotion of New Added-value Services and Other Efforts Aimed at Carbon Neutrality

We will create new added value that meets customers' needs, including the development of services in response to the growing need for carbon neutrality in society, thus promoting the expansion of our business fields and ensuring the sustainable growth of the Group.

Promotion of Electrification and High-efficiency Equipment

In December 2022, EasyCute, a new lease service for EcoCute hardware, was added to the Easy Series lineup, a lineup of services that can be used with an initial cost of 0 yen. In September 2023, a generation and storage plan, which provides a set of photovoltaic power equipment and a storage battery, was added as an upgrade plan for Easy Solar. We will continue to upgrade and expand our lineup of services with energy-saving equipment and other products.



Photovoltaic Power Purchase Agreement Service

This service allows customers to use 100% renewable energy electricity, with no initial costs for the installation of photovoltaic power equipment.

●For Household Customers

In July 2021, we began offering Easy Solar services for existing detached houses in the Hokuriku region. Since then, we have worked to diversify our services, such as expanding the types of roofing materials and supported regions (to cover areas with heavy snowfall), and have collaborated with local homebuilders to provide services for newly built detached houses.

For Newly Built Houses
Easyソーラー with ハウスメーカー
Partnerships with more than **140** local homebuilders

For Existing Houses
Easyソーラー
PV electricity available with an initial cost of **0** yen

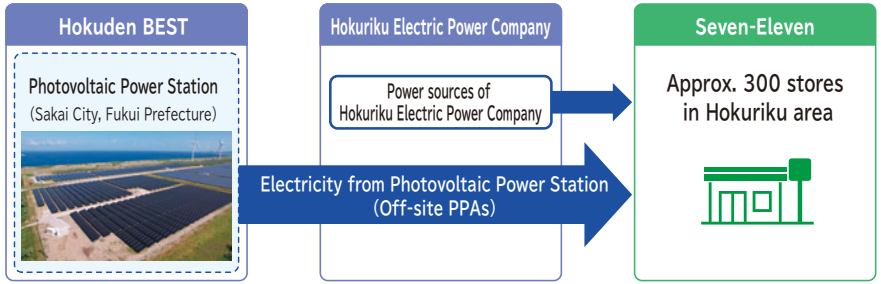
●For Corporate Customers

While we have offered our power purchase agreement (PPA) service mainly on an on-site basis (on-site PPAs), we are expanding this service to include off-site PPAs. Going forward, we will supply renewable energy electricity, generated by photovoltaic facilities not only in the Hokuriku region but throughout Japan, to our customers in Hokuriku.

●Main Sales Cases

On-site PPAs	● Operation has commenced for 49 projects (28.9 MW) (as of the end of September 2023)
Off-site PPAs	● Hoku-Hoku Solar Park (3 MW) started supply in September 2023, based on a partnership agreement with the Hokuriku Bank, Ltd. ● Supply for approximately 300 7-Eleven stores in the Hokuriku region (6 MW) began in June 2022

●Off-site PPA Service for Seven-Eleven Japan Co., Ltd.



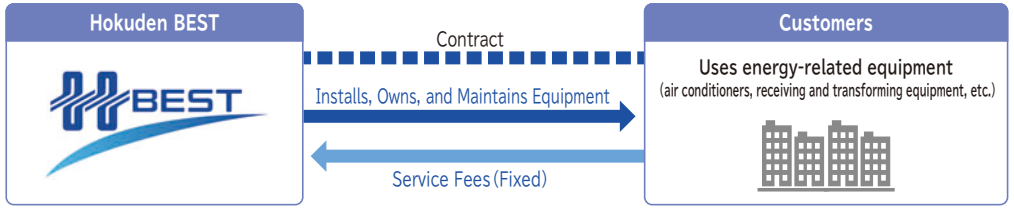
Signing Ceremony with the Hokuriku Bank, Ltd. for the Partnership Agreement on the Promotion of Carbon Neutrality Initiatives (October 2022)

Hoku-Hoku Solar Park (Started supply in September 2023)

Asset Outsourcing Service for Energy-Related Equipment

We provide a service for customers to use energy-related equipment, such as air conditioners, owned by the Group. This service includes equipment inspections and other maintenance work. With fixed-fee payments, customers can use the equipment with peace of mind for a long period of time. By using highly energy-efficient equipment, this service helps facilities meet the needs of a decarbonized society.

● Overview of Our Asset Outsourcing Service for Energy-Related Equipment



Example Case

We provide asset outsourcing services for the air conditioning and power receiving and transforming equipment at Maroot, a building adjoining JR Toyama Station, managed by the Toyama Terminal Building Company.

Maroot

Air Conditioning Equipment (Heat Pump Chiller)

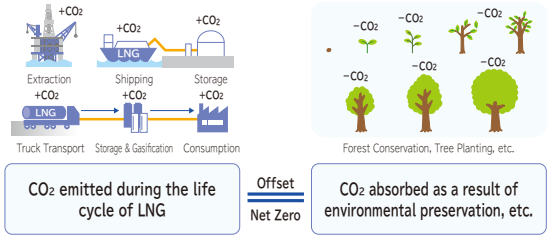
Sales of Carbon-neutral LNG*

Hokuriku Lnes, one of the companies in the Group, sells carbon-neutral LNG to customers using CO_2 credits.

We will continue to help our customers in the Hokuriku region reduce their CO_2 emissions, by selling not only LNG, which is a low-carbon fuel, but also carbon-neutral LNG.

As of the end of July 2023, three companies (a city gas operator and manufacturers) have utilized this service.

● Concept of Carbon-neutral LNG



* Carbon-neutral LNG uses CO_2 credits to offset the greenhouse gas emissions generated in the process from natural gas extraction to consumption, reducing net CO_2 emissions to zero.

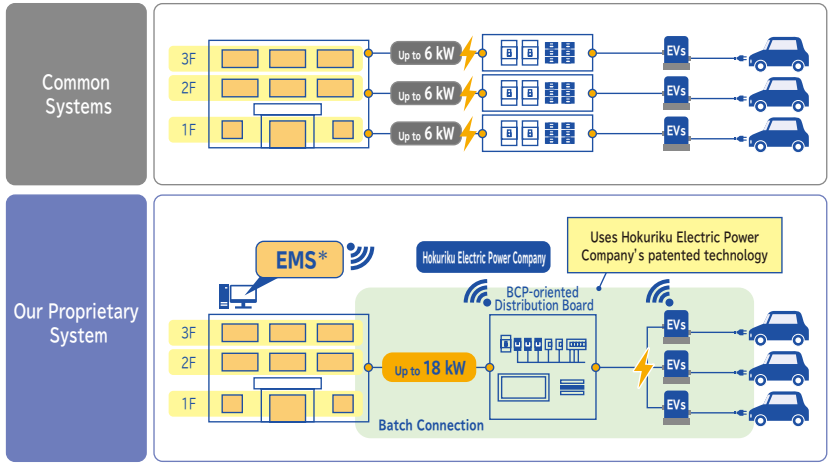
EV Introduction Support Service

● Comprehensive Service to Introduce EVs

For local governments and corporate customers, we offer a fixed monthly fee service, which provides EVs, charging and discharging device, a smartphone app for vehicle management, and energy management utilizing EVs.

This service, the first of its kind in Japan, utilizes our proprietary system for energy management to help strengthen BCP functions using EVs, and enables long-time uninterrupted power supply using only multiple EVs in the event of a power outage.

● Long-time Power Supply with Multiple EV Charging and Discharging Device (Patented)



Common Systems	• The power from a single EV can only be used by a limited number of devices. • Circuits must be interrupted each time an EV is replaced due to low battery level.
Our Proprietary System	• Combining multiple EVs enables the use of a lot of devices. • When an EV' s battery level becomes low, uninterruptible power supply is possible by replacing the EV without causing a power outage.

* Abbreviation of "Energy Management System." It provides communication functionality for remote control of the charging and discharging of EVs.

Renewable-energy-oriented Electricity Rate Plans

●For Corporate Customers

To meet the increasingly diverse and sophisticated decarbonization needs of our corporate customers, we offer a range of rate plan options for the electricity they need to run their businesses, including a plan to reduce CO_2 emissions, a plan to supply 100% renewable-energy-sourced electricity, and a plan aimed at local consumption of locally produced renewable energy.

Customer Needs	Plan Name	Overview
Reduction of CO_2 emissions	かがやき GREEN	• Delivers **effectively renewable-energy-sourced electricity** by adding environmental value to electricity generated from a mixture of thermal, renewable, and other energy sources.
Renewable-energy-sourced electricity	かがやき GREEN ピュア	• Delivers **genuinely renewable-energy-sourced electricity** by adding environmental value to electricity generated from renewable energy sources such as hydroelectric, photovoltaic, and wind power.
RE100-compliant	かがやき GREEN RE100	• Delivers **RE100-compliant renewable-energy-sourced electricity** by adding environmental value with traceability to specify the power stations.
Electricity with "additionality"	創エネ GREEN	• Delivers **supplemental renewable-energy-sourced electricity** by adding environmental value to electricity generated from **newly developed and other renewable energy sources.**
Renewable-energy-sourced electricity, generated locally	ふるさと GREEN	• Delivers **renewable-energy-sourced electricity produced locally for local consumption**, by adding environmental value to electricity generated from **renewable energy sources in specified areas.**

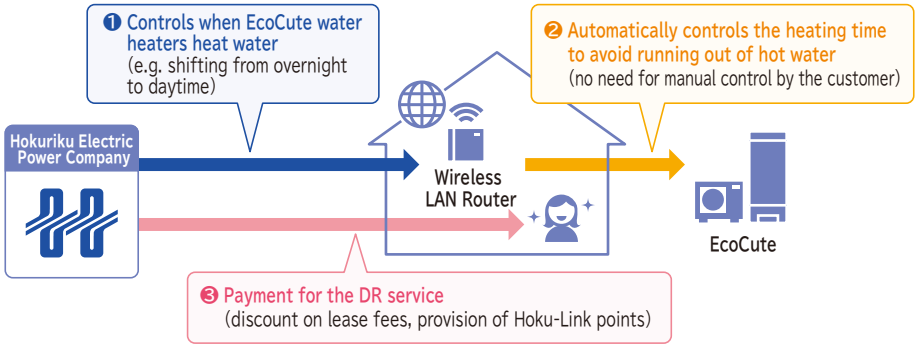
●For Household Customers

For household customers, we offer the Aqua ECO Plan, a 100% hydroelectric power plan. We are also working to promote and expand the use of electric vehicles and other eco-friendly vehicles by offering the Environmental & Eco-Car Discount, an optional electricity rate discount for customers who own electric vehicles or other eco-friendly vehicles and who have signed up for the Aqua ECO Plan.

Expansion of Demand Response Services

●DR Utilizing EasyCute

We utilize EcoCute remote-control technology to adjust the demand for electricity. This service combines EasyCute (EcoCute lease service) and demand response (DR), and is the first service of its kind in Japan.



●DR Utilizing an App

We started offering a DR service to help members save energy in a more enjoyable "gamified" way, by utilizing the Hoku-Link app membership service. (December 2022)

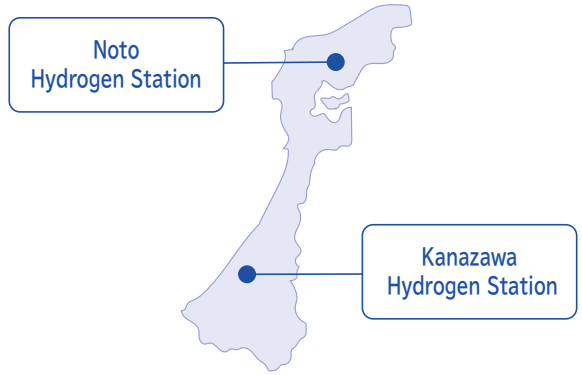
Last winter, we requested energy savings 13 times, with a maximum of 30,000 people participating per occasion, saving a maximum of approximately 28 MWh (over 3 hours) of electricity. As in last winter, we held a similar energy-saving event this summer as well.

Efforts toward Decarbonization and Local Consumption of Locally Produced Energy in Collaboration with Local Governments

Start of Hydrogen Station Operations in Ishikawa Prefecture

The Hokuriku Electric Power Company was selected* as the commissioned operator of the Noto and Kanazawa Hydrogen Stations, and began operations in April 2023.

* As a result of the bidding for the commissioned operation of hydrogen stations implemented as part of the project of Noto Smart Drive Project Council, a general incorporated association.

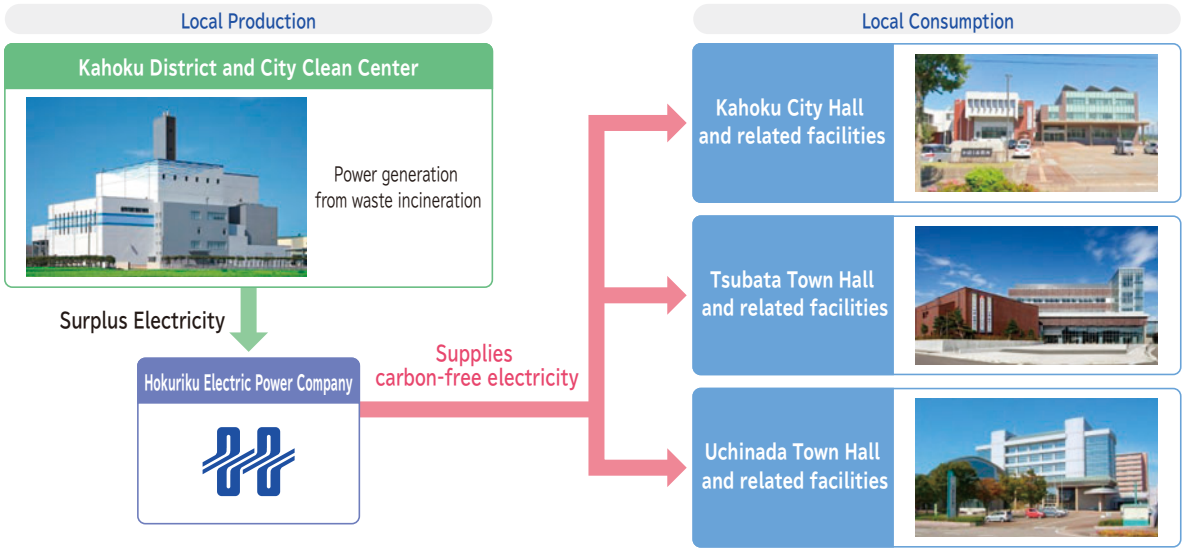


Hydrogen is produced from water at the stations, through electrolysis.
(Use of electrolysis powered by renewable-energy-sourced electricity supplied by the Hokuriku Electric Power Company.)

Utilization of Surplus Electricity from Waste-to-energy Power Generation, Post-FIT Electricity, and Other Sources

We utilize carbon-free surplus electricity generated at waste disposal facilities of municipalities and other organizations, as well as post-FIT electricity from local customers, for use at public facilities and other locations.

●Local Production for Local Consumption Scheme with Kahoku District and City



Active Involvement in Local Energy Projects

We invest in local energy companies together with local municipalities and other interested parties. We actively address the issues and needs of local communities, as well as being involved in regional energy-related projects, in order to promote local consumption of locally produced energy, and regional revitalization.

氷見ふるさとエネルギー　なんとエナジー　加賀ふるさとでんき

Kanazawa Energy Co., Ltd. Starts Business Operations

In April 2022, Kanazawa Energy Co., Ltd. (of which we are the largest shareholder) took over the gas and power generation businesses from Kanazawa City, and started operations.

EGK KANAZAWA ENERGY

Working with Local Communities to Resolve Issues

We actively address the issues and needs of local communities, in order to create business opportunities and to contribute to the development of the region.

Provision of the "Yui-Net" Community ICT App

Digital Life Support Business

We provide introduction support and management services for Yui-Net,*1 a community ICT app aiming to resolve issues faced by local governments and autonomous regional organizations, in Ishikawa and Fukui Prefectures. With the goal of realizing smart cities, we are working to promote use of the app so that it can be used by all residents of each community for a variety of purposes, including disaster prevention and regional economic revitalization.

*1 Yui-Net: A smartphone app that can be used not only for digital circulars and to send out information from local governments and service providers, but also as a safety confirmation system in the event of a disaster. Developed by CPU Inc., Kanazawa, Ishikawa.

●Content Provided by the Group via Yui-Net

Municipality Disaster Prevention Email Linking Service (from Apr. 2023)
Can also serve as a substitute for emergency radio systems
➡ Operation began in April 2023 in Hakui City (joint development)

Power Outage Information Notification Service (since Oct. 2021)
Users can check the occurrence and estimated end times of power outages for each neighborhood, on the Web.

Automatic Bear Detection AI and Reporting System (linkage under discussion)
The app links with our AI-based automatic bear detection system to provide information on bear sightings.

Construction of Komatsu Station Eastern Area Compound Building

Regional Development Business

As an initiative to improve electricity resilience and create local vibrancy, we planned the construction of this building, and established the Komatsu Station East Compound Building Utilization Promotion Council, consisting of local stakeholders, in September 2022.

Recently, the decision to construct this building was made following the establishment of a region-wide framework for the sustainable operation of the building, and the satisfaction of other conditions. Scheduled to be completed in 2025.

Architectural Rendering of Komatsu Station Eastern Area Compound Building

Establishment of Actibase Fukui Co., Ltd.: a New Company to Promote Tourism and Regional Development

Regional Development Business

Actibase Fukui Co., Ltd. was established in the Mikuni Minato area of Sakai City, Fukui Prefecture, in October 2022 (scheduled to begin operations in January 2024) to renovate old folk houses into hotels and restaurants and to operate them, as a way to revitalize the area through tourism. The Hokuriku Electric Power Company will supply 100% hydroelectric power to these folk-house-based hotels, as well as utilizing our equipment and technologies to help maintain and improve townscapes and more.

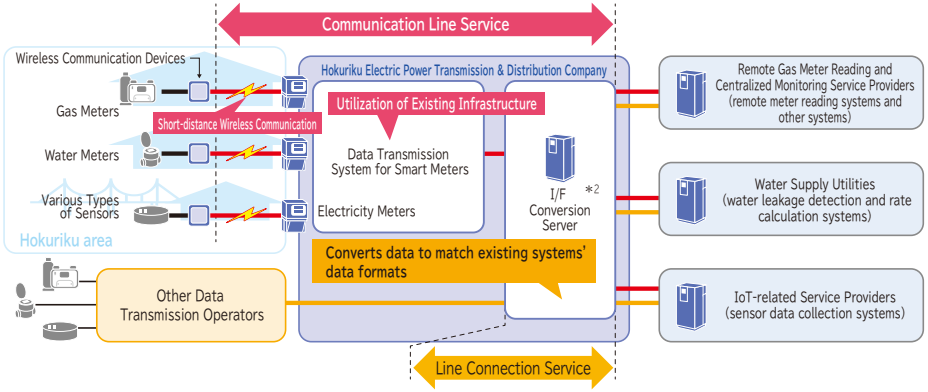
Actibase ふくい

Architectural Rendering of a Restaurant and a Hotel Renovated from Old Folk Houses

IoT Communication Line Services

In April of 2020, the Hokuriku Electric Power Transmission & Distribution Company began providing communication line services for IoT (communication line service and line connection service) using the data transmission networks for smart meters.

Through these services, we aim to promote the introduction of IoT for gas, water, and various other services in the Hokuriku region, in order to further improve the convenience for the people in the region.



*2 I/F Conversion Server: Processing equipment to convert the interfaces (connection methods) between the data transmission system and operators' systems

Group-wide Efforts toward Expanding into New Business Domains

While keeping the electricity business as the core of our operations, we strive to develop business areas transcending the boundaries of our electricity business, and continue to take on challenges to realize the Group's future vision.

Emori Infotech Co., Ltd.: Establishment of Microsoft Base Fukui

Digital Life Support Business

In September 2022, Emori Infotech Co., Ltd. and Microsoft Japan opened Microsoft Base Fukui in Emori Infotech's Maruoka Office, for the purpose of sharing information for the promotion of digital transformation. We are currently working on a digital talent development project.

Disseminating carefully Selected know-how: **Fukui × Digital Transformation = Happiness**

Contribution to increased happiness of our customers, from Fukui Prefecture, known as Japan's happiest prefecture, by developing digital talent and solving business issues, transcending regional and organizational boundaries **under the theme of "engagement (connection)"**

Microsoft Base Fukui Office Space

Symposium on Happiness in Fukui at the Opening Event

First in Fukui Prefecture 22nd in Japan

Management Support to the Power Distribution Retail Company Sun-eee in Cambodia

Overseas Business

Hokuriku Electric Power Transmission & Distribution Company dispatched staff to Sun-eee, a power distribution retail company in Cambodia, to survey their actual equipment status, challenges they face, and other matters, as well as to exchange opinions with local engineers. (The Hokuriku Electric Power Transmission & Distribution Company invested in Sun-eee in March 2022.)

In addition, in order to help the company grow, we regularly discuss management strategies, ways to address challenges, and other issues, with the local CEO, as well as with Greenway Grid Global Pte. Ltd. (their largest shareholder) , and other stakeholders.

We will continue to support the company's development, as part of our efforts to expand operations in Southeast Asia.

Branch of Sun-eee

Hokuriku Electrical Construction Co.,Ltd.: Leasing business at Rooftop Photovoltaic Power Equipment in Indonesia

Overseas Business
Carbon Neutrality Business

In order to enter the rooftop photovoltaic power equipment leasing business in the Republic of Indonesia, Hokuriku Electrical Construction Co.,Ltd. established a new company after signing a joint venture agreement with a partner company in December 2022. This is the first overseas expansion and first joint venture for Hokuriku Electrical Construction Co.,Ltd.

Joint Venture Agreement Signing Ceremony

Left: President Ono of AAI
Center: President Yano of Hokuriku Electrical Construction Co.,Ltd.
Right: President Ananda Setiyo Ivannanto of PT Awina Sinergi International

●Outline of the Company Established

Company Name	PT. Awina Rikudenko Solar Engineering Indonesia (ARISE)
Investment Ratio	● Hokuriku Electrical Construction Co.,Ltd. = 70% ● AAI = 15% ● PT Awina Sinergi International (local company) = 15%

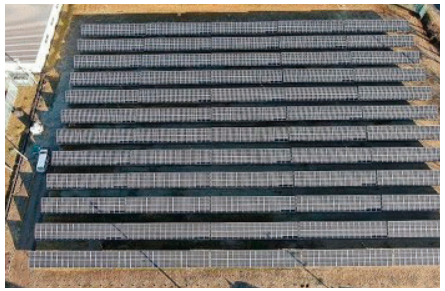
Hokuriku Electric Co.,Ltd.: Development of a Mini Smart Grid Model

Next-generation Energy Management Business

Hokuriku Electric Co.,Ltd. has built a photovoltaic power generation facility on the company's premises in order to help realize a decarbonized society, conduct research and development for future business expansion, and contribute to the region.

An agreement was entered into with the nearest neighborhood association, to provide a portion of the electricity generated by the photovoltaic panels to residents in the neighborhood, in the event of power outages due to disasters or other reasons.

Going forward, the company will utilize this facility to develop a mini smart grid model, and then utilize it for research and development of the company's electrical products, such as transformers and voltage regulators.


Photovoltaic Power Generation Facility Built (1,024 kW)

Efforts Related to Environmental, Social, and Corporate Governance Issues

The Group is working toward achieving carbon neutrality by 2050 and realizing a sustainable smart society. We will continue to work to help bring about a sustainable society (achieving SDGs), by further deepening our focus on ESG factors in our management.

The Group's Main Efforts Related to ESG Issues

Environment

Taking on Challenges toward Carbon Neutrality by 2050

- Utilizing renewable energy as the major power source (Increase by 1 million kW or higher [3.0 billion kWh/year or higher] during the early 2030s)
- Early restart and safe and stable operation of Shika Nuclear Power Station
- Increase in biomass fuel co-combustion for coal-fired power generation, and other measures
- Implementation of next-generation transmission and distribution networks to support the utilization of renewable energy as the major power source
- Support for customers' and the region's decarbonization, including the expansion of carbon neutrality services

Active Efforts toward Environmental Conservation

Social

Ensuring a Stable Supply of Electricity

- Planned updates of facilities and resilience improvements

Realizing a Sustainable Smart Society

- Provision of services to contribute to solving regional issues

Coexisting with the Local Community

- Contribution to the local community and support for education and sports

Creation of Workplaces Full of Vitality, Where Individuals and Organizations Can Reach Their Maximum Potential

- Efforts toward work-life balance and promotion of health-conscious management
- Promotion of diversity, equity, and inclusion
- Efforts to improve productivity

Governance

Maintaining the Corporate Governance System

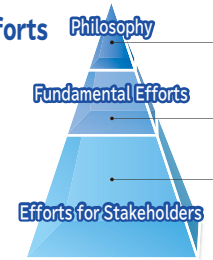
Strengthening of Efforts to Support Our Business Foundation

- Further deepening of our safety culture, and ensuring and strengthening compliance

Sharing ESG-related Information

Related SDGs

The Group's CSR Efforts



Philosophy

On the basis of the stable supply of low-cost, high-quality, clean electricity and ensured compliance, with top priority placed on safety, we shall appropriately and sincerely continue to live up to the expectations of, and requests from, our stakeholders, including customers, employees, communities, shareholders, investors, and business partners, with the aim of being an organization trusted and chosen.

Guidelines for Action

- Building a Culture of Safety
- Thorough Compliance
- Active Efforts toward Environmental Conservation
- Providing Low-cost, High-quality Products and Services
- Coexisting with the Local Community
- Establishing a Pleasant Work Environment with Respect for Human Rights
- Promoting Transparent Business Activities
- Promoting Fair Transactions

Compliance with TCFD Recommendations

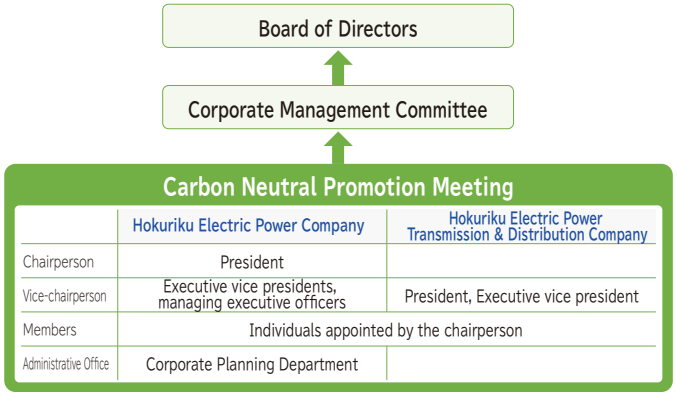
As a socially responsible energy company, we conduct our business operations with an emphasis on environmental, social, and governance factors, and support the aims of the TCFD recommendations on analyzing climate-related risks and opportunities to business activities, and promoting information disclosure. While continuing to disclose information in line with TCFD recommendations, we work to appropriately handle the risks and opportunities to our business brought about by climate change, through efforts such as promoting the decarbonization of power sources and electrification of everything, in order to contribute to the sustainable development of society.

Governance

The organization's governance around climate-related risks and opportunities

- We regularly convene meetings, including the Carbon Neutral Promotion Meeting, chaired by the company president, to assess and manage climate-related risks and opportunities, metrics, and other factors.
- The results of discussions at the Carbon Neutral Promotion Meeting and other meetings are reported to the board of directors.

● Organization



TCFD: The Task Force on Climate-related Financial Disclosures

Established in December of 2015 by the Financial Stability Board (FSB). In June of 2017, the TCFD released voluntary recommendations. They encourage companies to disclose climate-related risks and opportunities necessary for investors to make investment decisions.

Strategy

▶ P11-14, 17, 27-51, 56

The impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

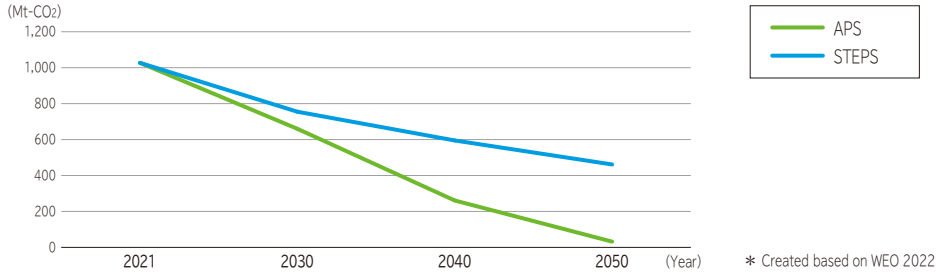
- In order to recognize risks and opportunities related to climate change, we refer to climate scenarios presented by the IEA and other relevant organizations, and consider multiple scenarios, including a 2°C or lower scenario, for the environments surrounding us.
- As a socially responsible energy provider, the Group will continue to strive to achieve carbon neutrality by 2050 through various efforts, such as decarbonizing power sources by utilizing renewable energy as the major power source and by other means, and the promotion of electrification of lifestyles, mobility, and everything else.

Reference Scenarios

Scenario		Social Conditions Assumed
IEA *1	WEO 2022 Announced Pledges Scenario (APS)	● Virtually zero CO_2 emissions in Japan by 2050* ● Electrification rate increases toward 2050 * In Japan, this is considered consistent with the 1.5°C target.
	WEO2022 Stated Policies Scenario (STEPS)	● Japan's CO_2 emissions gradually decrease and the electrification rate gradually increases toward 2050.
IPCC *2	Sixth Assessment Report SSP5-8.5 Scenario	● As global warming progresses, the frequency and intensity of heavy rains, typhoons, and other abnormal weather conditions will increase.

*1 The International Energy Agency, which publishes the *World Energy Outlook (WEO)*. *2 The Intergovernmental Panel on Climate Change.

Estimated CO_2 Emissions in Japan*



* Created based on WEO 2022

Strategy ▶ P11-14, 17, 27-51, 56

The impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

Climate-related Risks and Opportunities Bold text indicates risks and opportunities with particularly significant impact.

Referring to IEA Scenarios	Transition Risks	Government Policies and Laws/Regulations	• **Tighter regulations toward carbon neutrality by 2050** (Fade-out of coal-fired power, carbon pricing [carbon levies, emissions trading])
		Technology	• Increased burden of grid congestion management and lack of reserve capacity due to large amount of renewable energy system interconnection and reduction of thermal power sources • Degradation of power quality and revision of grid formation and grid utilization rules due to expansion of renewable energy sources
		Market	• Decreases in electricity sales, declines in wholesale electricity market prices, and declines in the superiority of large-scale power sources due to expansion of renewable energy sources • Rises in fuel prices due to reduced investment in upstream development of fossil fuels
		Reputation	• Deteriorating perceptions of companies reluctant to address climate change (Financing becoming difficult, stock price declining)
	Opportunities	Resource Efficiency	• Improved performance of equipment due to technological innovations
		Energy Sources	• Government policies to promote carbon neutrality (including investments totaling roughly 150 trillion yen for public and private green transformation) • **Increased advantages of nuclear power generation and renewable energy** • Acceleration of discussions on the maximum use of nuclear power (pushing forward toward restarts, reexamining regulations for operating lifetimes, constructing/expanding/renovating facilities)
		Products and Services	• Increased demand for electricity due to progress in electrification and increased use of electric vehicles. Creation of new business models, such as energy management services with storage batteries and other equipment
		Market	• **Growing customer needs for renewable-energy-oriented electricity (RE100, joint development of renewable energy sources, power purchase agreements, etc.)** • Cost recovery through utilization of various markets (non-fossil value trading market, capacity market, etc.) • Establishment of a framework to ensure long-term fixed income for new power source investments (long-term decarbonized power source auctions)
Referring to IPCC Scenario	Physical Risks	Acute	• Power facility problems due to large-scale natural disasters such as typhoons becoming increasingly severe (Increase in preparatory and restoration costs)
		Chronic	• **Risk of water flow rate fluctuations due to precipitation fluctuations**
	Opportunities	Resilience	• Growing needs for disaster prevention and mitigation within society

Financial Impact of Climate-related Risks and Opportunities

Non-fossil certificate purchase cost	Cost fluctuations from changes in flow rates	Effects of nuclear power utilization and renewable energy development	Sales of carbon neutrality business
60 million yen per 100 million kWh	1.4 billion yen per percent	170 billion yen/year* (Effect of CO_2 reductions)	Approx. 15 billion yen (FY 2030)

* Calculated in-house based on the *World Energy Outlook 2022* (US$135/t-$CO_2$)

Transition Plan

- We have established a roadmap toward achieving carbon neutrality, and are working on various efforts toward this, such as decarbonization of power sources, implementation of next-generation transmission and distribution networks, and support for customers' and the region's decarbonization.

Roadmap toward Achieving Carbon Neutrality ▶ P17

Risk Management ▶ P11-14

How the organization identifies, assesses, and manages climate-related risks

- We appropriately handle management risks related to climate change. After grasping and evaluating risks as appropriate, we reflect them in various plans, including the business plan established for each fiscal year (decided at the board of directors' meeting). In addition, we establish organizations to discuss the issues and policies relating to such risks, as well as setting up company-wide cross-department committees and other equivalent units, on an as-needed basis.
- Climate-related risks are identified and assessed by the Carbon Neutral Promotion Meeting, and are reported to the board of directors, along with the management risks.

Metrics and Targets ▶ P17

The metrics and targets used to assess and manage relevant climate-related risks and opportunities

- We promote each measure based on the following targets.

Targets in the Hokuriku Electric Power Group's Roadmap toward Achieving Carbon Neutrality

Metric	Target	To be achieved by
Renewable energy development amount	Increase by 1 million kW or higher (3.0 billion kWh/year or higher) compared to FY 2018	The early 2030s
CO_2 emission reduction rate (based on retail electricity sales volume)	Decrease by 50% or higher compared to FY 2013	FY 2030
Ratio of Non-fossil Sources (based on electricity generated)	50% or higher	FY 2030

For results of supply chain greenhouse gas emissions, refer to "Data (Environmental, Social, and Governance-related Information)" ▶ P70

Material Balance

We work to quantitatively grasp the material and energy flow that accompanies our business activities, in order to make effective use of limited resources and minimize environmental burden.

Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company (FY 2022)

INPUT

Power Generation Fuels

Coal*1	6,422 kt
Heavy Oil	283 ML
Crude Oil	0 ML
LNG	383 kt
Gas Oil	6 ML
Wood Biomass*1	19 kt
Nuclear Fuel*2	0 kg-^{235}U

Water

Water for Power Generation*3	6,159 kilo m³

Materials

Limestone	94 kt
Ammonia	4 kt

Service Activities

Fuel for Company Vehicles Gasoline Diesel Fuel	 544 kL 273 kL
Kerosene Used	87 kL
Water Used	94 kilo m³
Paper Used	133 t

*1 Coal and wood biomass are weighed on a wet basis.
*2 For nuclear fuel, amount of uranium fuel consumed (calculated based on design value) equivalent to integrated value for reactor thermal power is shown.
*3 Water for power generation refers to water necessary for thermal and nuclear power stations.

Purchased Electricity 6.3 billion kWh

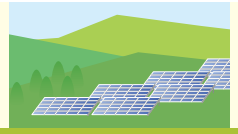
Wholesale 6.4 billion kWh

Power Stations

Thermal Power Stations
23.1 billion kWh

Nuclear Power Station
0 kWh

Hydroelectric Power Stations
6 billion kWh



Photovoltaic Power Stations
5 million kWh

Power Consumption at Power Stations ▲1.5 billion kWh

Power Transmission, Transformation, and Distribution Facilities

Transmission and Distribution Loss
Under calculation

Head Office Building & Other Offices

Electricity Consumption at Hokuriku Electric Power Company Offices, etc. (Included in electricity sales volume)
▲29 million kWh

Customers Electricity Sales Volume 26.3 billion kWh

OUTPUT

Atmospheric Emissions

● Greenhouse Gases

Supply Chain Greenhouse Gas Emissions		21.85 Mt-CO_2
Breakdown	CO_2 (Carbon dioxide) *1	21.81 Mt-CO_2
	SF_6 (Sulfur hexafluoride) *2	8 kt-CO_2
	HFCs (Hydrofluorocarbons) *2	1,261 t-CO_2
	PFCs (Perfluorocarbons)	None Handled
	N_2O (Dinitrogen monoxide)	30 kt-CO_2
	CH_4 (Methane)	455 t-CO_2

*1 Direct emissions and main indirect emissions were estimated based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain Ver. 2.4
*2 Annual values shown for SF_6 and HFCs.

● Other

SOx (Sulfur oxides)	6 kt
NOx (Nitrogen oxides)	5 kt

Waste & Byproducts

Coal Ash	697 kt
Gypsum	175 kt
Other	29 kt

Amount Recycled: 868 kt

Solid Radioactive Waste

Equivalent to 564 200-liter drums

Waste Water from Power Stations

2,706 kilo m³

Establishment of Our Environmental Management Plan and Efforts toward Achieving Goals

As a socially responsible energy provider, the Group has established the Hokuriku Electric Power Group Environmental Management Plan, a specific plan of action for appropriate approaches to various issues, including carbon neutrality by 2050.

We set up five pillars in the FY 2023 plan: decarbonization of power sources, implementation of next-generation transmission and distribution networks, support for customers' and the region's decarbonization, contribution to a sustainable environment, and proper action to reduce environmental risks and to build a recycling-oriented society; we steadily promote environmentally-conscious efforts in all of our operations.

WEB Hokuriku Electric Power Group Environmental Management Plan https://www.rikuden.co.jp/kanrikeikaku

Initiatives to Bring About a Decarbonized, Recycling-oriented Society

We are working to build a decarbonized, recycling-oriented society, through the promotion of introduction of electric vehicles, effective use of resources, environmental conservation activities, and other efforts, in addition to environmentally-conscious efforts in all of our operations.

Promotion of Introduction of Electric Vehicles

As part of our efforts to realize a decarbonized society, the Group is promoting the introduction of electric vehicles for company use, with the goal of achieving 100% use of electric vehicles*1 for 2WD passenger vehicles for company use by FY 2030.

The proportion of electric vehicles introduced by the Hokuriku Electric Power Company and the Hokuriku Electric Power Transmission & Distribution Company was 67% as of the end of FY 2022.

We also proactively support customers' adoption of EVs, by providing EV charging equipment installation services, EV-based energy management services, and more.

*1 Special-purpose vehicles, such as emergency vehicles and aerial work platforms, and other vehicles that are unreplaceable with electric vehicles are not to be included. Plug-in hybrid vehicles (PHVs) are to be included.

Company-owned Electric Vehicles

Active Promotion of the Three Rs

The Group is committed to reducing, reusing, and recycling waste generated through our business activities. We work to improve the proportion of waste recycled and promote the recycling of waste plastic items.

In FY 2022, the Group produced 922,000 tons of industrial waste, but through effective use efforts, 96.2% of that waste was recycled.

The amount of industrial waste from products using plastic generated by the Hokuriku Electric Power Company was 270 tons*2 in FY 2022.

*2 Amount of plastic waste based on the Act on Promotion of Resource Circulation for Plastics

Effective Use of Coal Ash

Coal ash (fly ash, clinker ash) is used effectively mainly as a raw material for cement (clay substitution). We also promote its effective use in fly ash concrete* (fly ash) and ground surface layer material (clinker ash).

In particular, fly ash concrete has excellent durability and is expected to extend the lifespan of structures. As part of our contributions to the region, we took the initiative to establish the Research Committee on the Promotion of Effective Utilization of Fly Ash Concrete in the Hokuriku District in January 2011, through a collaboration between industry, academia, and government, to promote the use of fly ash concrete, which had not yet become common in the Hokuriku region. It is now used in many public works projects, such as bridge piers, retaining walls, dams, and wave-dissipating blocks.

Example of Use in Public Works (Bridge Pier)

* Fly ash concrete: Concrete mixed with fly ash. Fly ash is a fine powder which is a combustion product of pulverized coal, collected by electrostatic precipitators in coal-fired power stations.

Confidential Document Recycling by a Group Company

Jessco Co., Ltd., one of the companies in the Group, has a comprehensive security system and equipment. They store the confidential documents they have received from customers and process these documents after their storage period using a crusher, to be recycled into toilet paper, copy paper, or other paper products, thus developing a regional recycling system. In FY 2022, the company recycled about 1,704 tons of paper.

Recycled Products

Efforts toward Environmental Conservation with Consideration for Biodiversity

We are working to bring about sustainable business activities, with proper concern for living things and the blessings of nature. We are also continuing our activities to maintain biodiversity, including forest conservation.

Appreciating the Blessings of Water, and Repaying the Favor to Forests

Since 2008, the Group has expanded forest conservation activities in five areas (Toyama, Niikawa, Kaga, Noto, and Fukui) of the three prefectures of the Hokuriku region, as a show of appreciation to the forests for watershed cultivation,* CO_2 absorption, and everything else they do for us. As of FY 2022, a total of about 9,800 people (including participants of activities hosted by local organizations) have taken part in planting some 5,000 trees and clearing underbrush.

Forest Conservation Activities

*Watershed cultivation: A characteristic of forests wherein trees, fallen leaves, and forest soil all serve to cause precipitation to effectively permeate into the ground; through long-term retention and downward flow, this helps prevent flooding and evens out water supply in rivers to prevent droughts.

Cleanup Activities near Our Offices, at Beaches, and Other Locations

We continuously engage in activities to clean the areas near our offices, beaches, and more, with the goals of contributing to the region and lifting employees' environmental awareness. In FY 2022, about 4,600 employees of the Group participated in cleanup activities, including ones hosted by local organizations.

Beach Cleanup

Cleanup around Our Office

Sharing Information at Events Such as Environmental Exhibitions

We exhibit at environmental exhibitions organized by local governments or environmental groups, to present the environmental efforts made by the Group. In FY 2022, we exhibited at 16 events. At the Ishikawa Zero Carbon Day event held in Kanazawa, we exhibited an environmental board game for children to learn about eco-friendly practices, a power-generating bicycle to enable guests to understand energy efficiency by comparing the pedaling force needed to light an LED lamp or an incandescent lightbulb, and a panel to explain the Group' s environmental measures.

Ishikawa Zero Carbon Day Event

Young Fish Releasing Events

With the aim of giving thanks to the blessings of rivers, and teaching the importance of environmental protection to children, who will lead the next generation, our Hydro Power Center organizes events involving children to release young sweetfish and Japanese fluvial sculpin, and clean up areas around rivers, in cooperation with local fishery cooperatives and other organizations.

Sweetfish Releasing Event

Protection of White Storks

In early April of 2023, pairs of white storks (a species designated for special protection by the national government) built nests on utility poles in Tsubata Town and Shika Town, Ishikawa Prefecture.

In response to requests for cooperation from these municipalities, we conducted works to bypass the distribution lines and took other necessary measures to prevent power outages and to protect these storks from electric shocks. We watched over these birds until the chicks left the nests.

Contribution to the Local Community

Cooperation with Local Governments toward Solving Regional Issues

By establishing comprehensive partnership agreements, we work together with local governments to promote initiatives to help solve regional issues, such as the expansion of renewable energy use. Going forward, we will continue to address the issues and needs of local communities, with the aim of contributing to the sustainable development of regional society, and creating business opportunities.

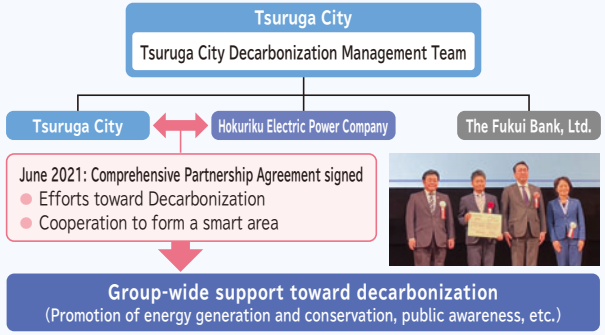
- Comprehensive partnership agreements:
  signed with 42 of the 52 municipalities in the Hokuriku area (as of September 30, 2023)

  Toyama Prefecture: 13 municipalities
  Ishikawa Prefecture: 17 municipalities
  Fukui Prefecture: 12 municipalities

Efforts toward Carbon Neutrality in Collaboration with Local Governments

- Joint Proposal to Be a Decarbonization Leading Area

As a result of a joint proposal with the Hokuriku Electric Power Company, Tsuruga City became the first municipality in the three prefectures of the Hokuriku region selected by the Ministry of the Environment as a Decarbonization Leading Area; the Ministry aims to select at least 100 areas across Japan.



Electrical Inspection of Important Cultural Properties

During Electricity Usage Safety Month (Aug. 1–31), the Group conducts electrical inspections of buildings designated as important cultural properties, including the Suganuma Gassho-style Village (a World Heritage site), in cooperation with relevant organizations and companies, such as the Electrical Engineering Contractors Cooperatives and the Electrical Safety Inspection Association, in order to protect cultural properties by preventing electrical accidents and to raise awareness of the safe use of electricity.

Electrical Inspection of Zasu Family Residence (Important Cultural Property of Japan)

Donation of Hoku-Link Points to Organizations and Universities

Our Hoku-Link membership service provides an option to allow members to use the points that they have earned based on their electricity payments, and through other means, to donate to organizations (Japanese Red Cross Society, OISCA, etc.) and universities in the Hokuriku region. Based on applications from members, we have donated a total of about 2,200,000 yen as of the end of FY 2022.

Working toward Removing Electric Poles

The Hokuriku Electric Power Transmission & Distribution Company takes part in the Promotion Council for the Removal of Utility Poles, a council made up of the Ministry of Land, Infrastructure, Transport and Tourism; local government bodies; and other organizations, to promote work to remove electric poles, for the purposes of preventing disasters, facilitating safer and more convenient traffic flow, forming landscapes, and promoting tourism. Since 1986, we have implemented approximately 217 km worth of electric pole removal in areas such as emergency routes, commercial districts, and historic districts requiring townscape conservation.

Townscape after Removing Electric Poles (By Awaraonsen Station)

Support for Education and Sports

Promoting and Supporting Regional Sports

We organize sports events and offer club-team-affiliated classes, as part of our efforts to help foster healthy children through sports.

We also strive to contribute to the promotion of sports in the Hokuriku region through our support for professional club teams, including Kataller Toyama and Fukui Eiheiji Blue Thunder.

Hokuriku Electric Power Friendship Cup Mini-Basketball Tournament

Visit Lessons and Facility Tours

In order to help students at junior high schools and high schools, who will lead the next generation, become familiar with energy and global environmental problems, we dispatch members of our staff to provide visit lessons at schools and hold tours of power stations and other facilities. We also hold scientific experiment workshops for children' s clubs to help encourage children' s interest in science.

In FY 2022, we held 226 visit lessons and 44 facility tours, with a total of 6,569 participants.

Visit Lesson (Minami-Echizen Town Yunoo Elementary School)

Operational Support for the Hokuriku Electric Power Company Educational Advancement Foundation

Since its establishment in 1981, the Hokuriku Electric Power Company Educational Advancement Foundation has donated educational equipment, such as computers, projectors, and partitioned desks with LED lighting, to high schools in our home region.

In addition, in order to help provide the next generation with a way to decide on dreams and goals for the future as high school students, we have held Genki Sosei Juku ("Enthusiasm Creation School") events since FY 2005, where we invite professionals from the region who work at the forefront of various industries. In FY 2022, about 650 students from seven schools participated.

Educational Equipment Presentation Ceremony (Ishikawa Prefectural Komatsu Meiho High School)

Industry-Academia Cooperation

The Group collaborates with local companies and universities to develop technologies for the stable supply of electricity, which we have pursued for years, and to conduct research on topics that contribute to the creation of new corporate value, such as solutions to local issues that transcend the boundaries of our conventional electric power business. In addition, in order to promote research on issues related to electric power system engineering, and to cultivate talent in power engineering, we set up a joint research course in advanced power system engineering at the University of Toyama, and provided lecturers for Courses for Next-Generation Super Engineers aimed at cultivating specialist engineers. Through these efforts, we provide opportunities for students to experience the appeal of working in electric power, and contribute to the development of human resources needed by the regional industry.

Facilities Coexisting with Local Communities

●Alice-Kan Shika Energy Museum: A PR Facility for Nuclear Power

This museum features easy-to-understand explanations of how nuclear power works, the need for nuclear power, the safety measures at Shika Nuclear Power Station, and more. We have also held classes to encourage children' s interest in electricity and energy, as well as providing seasonal handicraft workshops. (41,558 visitors in FY 2022)

Workshop at Alice-Kan Shika Energy Museum

●Hondanomori Hokuden Hall

We are involved in the management of the Hondanomori Hokuden Hall (Kanazawa, Ishikawa), taking over the former Ishikawa Kosei Nenkin Kaikan Hall, for the purpose of regional revitalization and the promotion of cultural and artistic activities.

We continue working to maintain the hall as a beloved local center for cultural and artistic activities.

Hondanomori Hokuden Hall Auditorium

Corporate Governance

Basic Way of Thinking for Corporate Governance*

The Group operates a comprehensive energy business centering on its competitive electricity business, and works toward coexistence and co-prosperity with the Hokuriku region, with the goal of being a company trusted and chosen by customers and all other stakeholders.

In order to make this goal a reality, achieving sustainable growth and evolution, with higher social trust through continuous efforts to increase the quality of our operations and services, we maintain internal control systems centered around our board of directors and audit & supervisory board, and strive to increase transparency through sharing information, IR activities, and more.

These are based on a resolution of our board of directors on the maintenance of a structure to ensure the propriety of our operations, as well as the Corporate Governance Code stipulated by the Tokyo Stock Exchange. We will continue these efforts to ensure the effectiveness of our corporate governance.

For more information on our fundamental policies related to corporate governance, as well as the status of our compliance with the Corporate Governance Code, please see the Corporate Governance Report on our website.

*Corporate Governance: A mechanism intended to prevent misconduct by a company, and to ensure and maintain proper business activities.

WEB Report on Corporate Governance https://www.rikuden.co.jp/management/governance.html

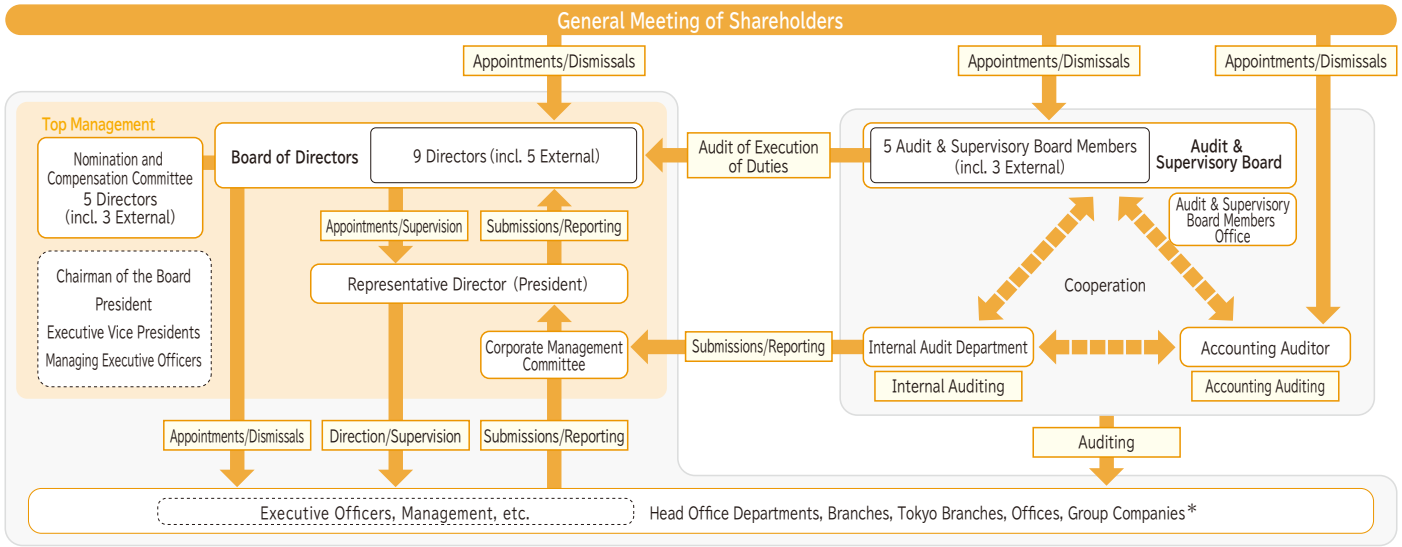
Corporate Governance System

Board of Directors

As a general rule, the board of directors meets once monthly, or as necessary. In addition to making decisions on important matters, including those provided by laws, regulations, and our articles of incorporation, and those that are important for management (matters to be brought up for discussion at the General Meeting of Shareholders, budgets and settlement of accounts, important business plans, etc.), the board also receives reports from directors on the status of their execution of duties, and supervises the directors' execution of duties. External directors provide surveillance, instruction, and advice for managerial judgment and decision-making processes, from various points of view. In addition, five audit & supervisory board members, three of whom are external members, are also present at meetings of the board of directors, and supervise the directors' execution of duties.

In order to build a management system capable of responding more quickly to changes in the business environment, the term of office for directors is one year; through this, we intend to allow even stricter supervision of our business operations by shareholders.

● Corporate Governance System



*Note Regarding the Group Companies: The governance system of the Hokuriku Electric Power Transmission & Distribution Company is structured to conform to the conduct regulations set forth by the national government.

Audit & Supervisory Board Members' Audits and Internal Audits

Our five audit & supervisory board members (including three external members, and a full-time corporate auditor with considerable knowledge of financial affairs and accounting) attend important meetings (such as meetings of the board of directors and corporate management committee meetings) to listen to the deliberations, carefully read important documents (such as documents for approval), hear from relevant parties, and perform other necessary tasks, for audits of directors' execution of duties, the maintenance and operation of internal control systems, etc. In addition, our auditors hold periodic meetings with directors, the internal audit department, and the accounting auditor to exchange opinions, in order to strengthen their auditing functions.

In addition, we have established an internal audit department, which works in cooperation with the audit & supervisory board members and accounting auditor to ensure the propriety of our operations.

External Directors and External Audit & Supervisory Board Members

In order to strengthen our business supervisory functions from an outside perspective, we appoint five external directors. External directors provide surveillance, instruction, and advice for managerial judgment and decision-making processes, from various points of view.

In addition, audits by our three external audit & supervisory board members provide surveillance, instruction, and advice through more objective and multifaced points of view, and we take their work seriously as we work to take proper measures in response.

All of our external directors and external audit & supervisory board members are designated as independent officers, as stipulated by the Tokyo Stock Exchange, and notifications are filed with the Tokyo Stock Exchange.

Analysis and Evaluation of the Effectiveness of the Board of Directors

Matters requiring a resolution of the board of directors undergo advance deliberation by the corporate management committee and sufficient advance explanation to external directors, before being brought up for discussion by the board of directors. In addition, after evaluation of the operation, etc. of the board of directors, the company issues a report to the board of directors at the end of each fiscal year, alongside which, as necessary, the operation of the board of directors is reviewed, including revisions to standards for bringing up matters for discussion and reporting.

We also engage in opinion exchanges with external directors and external audit & supervisory board members on the operation of the board of directors, among other efforts toward further improvements to the effectiveness of the board of directors.

Through these efforts, we believe that the effectiveness of our board of directors is satisfactory.

Policies and Procedures for Appointment and Dismissal of Key Management Personnel, and for Nomination of Candidates to Director and Audit & Supervisory Board Member Positions

Individuals are nominated to be key management personnel, or as candidates to serve as directors or audit & supervisory board members, based on their career backgrounds, as well as their excellent character, insight, and abilities.

For our external directors and external audit & supervisory board members, we nominate individuals who possess broad knowledge and experience, who are excellent in both character and insight, and who can make use of their outstanding experience and insight to provide surveillance, instruction, and advice on our management, from a more objective perspective.

In the event of dishonesty in the execution of the duties of a member of the key management personnel, or a serious violation of laws, ordinances, or our articles of incorporation, that individual shall be dismissed.

Candidates for director and audit & supervisory board member positions shall be decided at a meeting of the board of directors, after sufficient deliberation at a meeting of the Nomination and Compensation Committee consisting of at least three external directors, the chairman of the board, and the president.

Policy on the Balance, Size, and Other Aspects of the Board of Directors as a Whole

We strive to ensure diversity and appropriate size of the Board of Directors, with a well-balanced composition of knowledge, experience, and competence as a whole, by appointing executive directors with different areas of expertise and backgrounds, and more than one independent external director, within the 15-member limit on the number of directors as stipulated in our Articles of Incorporation.

Three of our current independent external directors have presidency experience at other companies.

Skills Possessed by the Directors

	Corporate Management	Finance/ Accounting	Governance/ Risk Management	Environment/ Engineering	Marketing/ Sales	International Business	Community Relations	Investment Policies
Yutaka Kanai	○		○	○		○	○	○
Koji Matsuda	○	○	○		○		○	○
Seisho Shiotani	○			○				○
Wataru Hirata	○	○	○			○		○
Tatsuo Kawada	○		○		○	○		○
Tateki Ataka	○	○	○			○	○	○
Akiko Uno			○		○	○		
Eishin Ihori	○	○	○			○	○	○
Yuko Yamashita					○	○		○

Executive Compensation

At the Hokuriku Electric Power Company, matters such as compensation for individual directors are determined based on an established policy, as outlined below:

As a basic policy, compensation for individual directors shall be determined by taking into consideration its function as an incentive for the sustainable growth of corporate value, and shall be at appropriate levels for their individual duties. Specifically, compensation for directors (except external directors) comprises base compensation on a monthly basis, performance-linked compensation, and bonuses to be paid at certain times each year, while compensation for external directors comprises only monthly base compensation in view of their duties.

The amount of monthly base compensation for each director is determined through comprehensive consideration, according to their position, in light of the level at other companies, as well as the business environment, performance, and other factors regarding the Company. The amounts of performance-linked compensation for each director (except external directors) are determined through comprehensive consideration, according to the consolidated ordinary income and individual performance. The bonus amounts for each director (except external directors) are determined according to their positions, in view of performance for each fiscal year and other factors, after a resolution of the general meeting of shareholders for each payment.

The amounts of base compensation and performance-linked compensation for individual directors are determined by the chairman of the board and the president having been entrusted by the board of directors, based on the discussion at a meeting of the Nomination and Compensation Committee consisting of at least three external directors, the chairman of the board, and the president. The amounts of bonuses for individual directors are determined for each payment by the chairman of the board and the president, having been entrusted by the board of directors, following a resolution of the general meeting of shareholders after deliberation at a meeting of the Nomination and Compensation Committee.

Compensation for our audit & supervisory board members comprises only monthly base compensation in view of their duties.

Base compensation for audit & supervisory board members is within the range of the total sum approved at the general meeting of shareholders, and determined through discussion among the audit & supervisory board members.

Internal Control

In accordance with the Companies Act, our board of directors has made a resolution on the maintenance of a structure to ensure the propriety of our operations (fundamental policies of the internal control system), stipulating basic systems such as compliance, risk management, and propriety in the operations of the Group. Based on this resolution, we work to maintain and operate systems to ensure propriety in our work.

Other Group companies have also decided upon fundamental policies based on each company' s current status, as part of our Group-wide efforts to ensure propriety in our work.

With regards to the Financial Instruments and Exchange Act internal control and reporting system*, our company rules stipulate systems and mechanisms to ensure the trustworthiness of Group financial reporting, and we operate them appropriately. Alongside this, we also evaluate the effectiveness of our internal control, and perform the necessary corrections and improvements. In June of 2023, we also submitted our internal control report to the prime minister, in which we judged our internal controls to be effective based on a self-appraisal.

*Internal Control and Reporting System: A system under which publicly listed companies must submit internal control reports related to financial reports to the prime minister, along with annual securities reports.

Directors and Audit & Supervisory Board Members of the Hokuriku Electric Power Company (As of June 28, 2023)

Directors

Representative Director & Chairman of the Board

Yutaka Kanai

Apr. 1977 : Joined Hokuriku Electric Power Company
Jun. 2005 : Became Manager
Jun. 2007 : Became Executive Officer
Jun. 2010 : Became Managing Director
Jun. 2013 : Became Representative Director & Vice President
Jun. 2015 : Became Representative Director & President
Jun. 2021 : Became Representative Director & Chairman of the Board (Current Position)

Representative Director & President

Koji Matsuda

Apr. 1985 : Joined Hokuriku Electric Power Company
Jun. 2016 : Became Executive Officer
Jun. 2019 : Became Director & Managing Executive Officer
Jun. 2021 : Became Representative Director & President (Current Position)

Representative Director & Executive Vice President
General Manager of Community Relations & Development Division
General Manager of Innovation Promotion Division

Seisho Shiotani

Apr. 1983 : Joined Hokuriku Electric Power Company
Jun. 2016 : Became Executive Officer
Jun. 2018 : Became Director & Managing Executive Officer
Jun. 2022 : Became Director & Executive Vice President
Jun. 2023 : Became Representative Director & Executive Vice President (Current Position)

Director & Executive Vice President

Wataru Hirata

Apr. 1986 : Joined Hokuriku Electric Power Company
Jun. 2018 : Became Executive Officer
Jun. 2020 : Became Director & Managing Executive Officer
Jun. 2023 : Became Director & Executive Vice President (Current Position)

Directors

Director (External)

Tatsuo Kawada

Mar. 1962: Joined Fukui Seiren Kako Co., Ltd.
Aug. 1981: Became Director at Seiren Co., Ltd.
Aug. 1985: Became Managing Director
Aug. 1987: Became Representative Director & President
Jun. 2003: Became Representative Director and President, and COO
May. 2005: Became Representative Director and Chair of KB Seiren, Ltd. (Current Position)
Oct. 2005: Became Representative Director and President, COO, and CEO of Seiren Co., Ltd.
Jun. 2008: Became Audit & Supervisory Board Member of the Hokuriku Electric Power Company
Mar. 2009: Became President of the Fukui Chamber of Commerce and Industry (Current Position)
Jun. 2011: Became Representative Director and Chair, President, COO, and CEO of Seiren Co., Ltd.
Jun. 2014: Became Representative Director and Chair, and CEO (Current Position)
Aug. 2014: Became Chair of Seiren U.S.A. Corporation (Current Position)
Jun. 2015: Became Director at the Hokuriku Electric Power Company (Current Position)

Director (External)

Tateki Ataka

Apr. 1973 : Joined the Hokkoku Bank, Ltd.
Jun. 1998 : Became Director
Jun. 2002 : Became Managing Director
Jun. 2004 : Became Senior Managing Director
Jun. 2006 : Became President
Nov. 2016 : Became President of the Kanazawa Chamber of Commerce and Industry (Current Position)
Jun. 2017 : Became Director at the Hokuriku Electric Power Company (Current Position)
Jun. 2020 : Became Senior Advisor to the Hokkoku Bank, Ltd. (Current Position)

Director (External)

Akiko Uno

Apr. 1983 : Joined Shiseido Co., Ltd.
Mar. 2019 : Became Audit & Supervisory Board Member
Jun. 2022 : Became Director at the Hokuriku Electric Power Company (Current Position)

Director (External)

Eishin Ihori

Apr. 1979 : Joined the Hokuriku Bank, Ltd.
Jun. 2009 : Became Director of the Hokuhoku Financial Group, Inc.
Jun. 2009 : Became Director of the Hokuriku Bank, Ltd.
Jun. 2010 : Became Managing Executive Officers
Jun. 2013 : Became President of the Hokuhoku Financial Group, Inc.
Jun. 2013 : Became President of the Hokuriku Bank, Ltd.
Jun. 2022 : Became Representative Director & Chairman of the Board (Current Position)
Nov. 2022 : Became President of the Toyama Chamber of Commerce and Industry (Current Position)
Jun. 2023 : Became Director at the Hokuriku Electric Power Company (Current Position)

Director (External)

Yuko Yamashita

Apr. 1997 : Became Assistant Professor at Hitotsubashi University Faculty of Commerce and Management
Apr. 2000 : Became Assistant Professor at Hitotsubashi University Graduate School of Commerce and Management
Sep. 2004: Became Visiting Research Fellow at Princeton University Department of Sociology
Apr. 2017 : Became Professor at Hitotsubashi University Graduate School of Commerce and Management
Apr. 2018 : Became Professor at Hitotsubashi University Faculty of Commerce and Management (Current Position)
Apr. 2018 : Became Professor at Hitotsubashi University Graduate School of Business Administration (Current Position)
Jun. 2023 : Became Director at the Hokuriku Electric Power Company (Current Position)

Audit & Supervisory Board Members

Audit & Supervisory Board Member of the Hokuriku Electric Power Company and
Audit & Supervisory Board Member of the Hokuriku Electric Power Transmission & Distribution Company

Akitaka Eda

Apr. 1985 : Joined Hokuriku Electric Power Company
Jun. 2018 : Became Executive Officer
Jun. 2020 : Became Audit & Supervisory Board Member (Current Position)
Jun. 2020 : Became Audit & Supervisory Board Member of the Hokuriku Electric Power Transmission & Distribution Company (Current Position)

Audit & Supervisory Board Member of the Hokuriku Electric Power Company and
Audit & Supervisory Board Member of the Hokuriku Electric Power Transmission & Distribution Company

Keiichi Hirose

Apr. 1987 : Joined Hokuriku Electric Power Company
Jun. 2021 : Became Executive Officer
Jun. 2022 : Became Audit & Supervisory Board Member (Current Position)
Jun. 2022 : Became Audit & Supervisory Board Member of the Hokuriku Electric Power Transmission & Distribution Company (Current Position)

Audit & Supervisory Board Member (External)

Toshihiko Hosokawa

Apr.1970 : Appointed as Public Prosecutor
Apr.1981 : Registered with Osaka Bar Association
Apr.1985 : Registered with Toyama Bar Association
Apr. 2000 : Became Professor at Kanazawa University Faculty of Law
Apr. 2004 : Became Professor at Kanazawa University Law School
Apr. 2004 : Re-registered with Toyama Bar Association (Current Position)
Jun. 2015 : Became Audit & Supervisory Board Member of the Hokuriku Electric Power Company (Current Position)

Audit & Supervisory Board Member (External)

Etsuko Akiba

Apr.1971 : Joined Japan Airlines
Jul.1989 : Joined Public Relations Department of the Foundation of Electric Power Companies
Apr.1996 : Joined Kanto Branch Public Relations Department of the Nippon Telegraph and Telephone Corporation
Jun.1999 : Became Director of the Nippon Association of Consumer Specialists
May. 2003: Became Chief Director of the Asca Energy Forum
Jan. 2010 : Became Member of the Japan Atomic Energy Commission
May. 2014: Reappointed as Chief Director of the Asca Energy Forum (Current Position)
Jun. 2015: Became Audit & Supervisory Board Member of the Hokuriku Electric Power Company (Current Position)

Audit & Supervisory Board Member (External)

Masahiro Hayashi

Apr. 1981: Joined the Fukui Bank, Ltd.
Jun. 2008 : Became Director
Jun. 2009 : Became Director and Statutory Executive Officer
Jun. 2010 : Became Director and Managing Executive Officer
Jun. 2014 : Became Director and Senior Managing Executive Officer
Jun. 2015 : Became Director, President and Representative Statutory Executive Officer
May. 2017 : Chairman of the Fukui Association of Corporate Executives (Current Position)
Jun. 2021 : Became Audit & Supervisory Board Member of the Hokuriku Electric Power Company (Current Position)
Jun. 2022 : Became Chair of the Board and Representative Executive Officer of the Fukui Bank, Ltd. (Current Position)

Directors and Audit & Supervisory Board Members of the Hokuriku Electric Power Transmission & Distribution Company (As of June 29, 2023)

Directors

Representative Director & President

Kazuya Tanada

Apr. 1985 : Joined Hokuriku Electric Power Company
Jun. 2018 : Became Executive Officer
Apr. 2020 : Became Director of the Hokuriku Electric Power Transmission & Distribution Company
Jun. 2020 : Became Representative Director & Executive Vice President
Jun. 2022 : Became Representative Director & President (Current Position)

Representative Director & Executive Vice President

Katsunori Tsukasaki

Apr. 1987 : Joined Hokuriku Electric Power Company
Apr. 2020 : Transferred on loan to Hokuriku Electric Power Transmission & Distribution Company
Became Executive Officer
Jun. 2020 : Became Director
Jun. 2022 : Became Representative Director & Executive Vice President (Current Position)

Director
General Manager of Corporate Planning Dept.

Shiro Sejima

Apr. 1988 : Joined Hokuriku Electric Power Company
Jun. 2021 : Became Director of the Hokuriku Electric Power Transmission & Distribution Company (Current Position)

Director
General Manager of Distribution Dept.

Shigeo Imamura

Apr. 1991 : Joined Hokuriku Electric Power Company
Apr. 2020 : Transferred on loan to Hokuriku Electric Power Transmission & Distribution Company
Jun. 2022 : Became Executive Officer
Jun. 2023 : Became Director (Current Position)

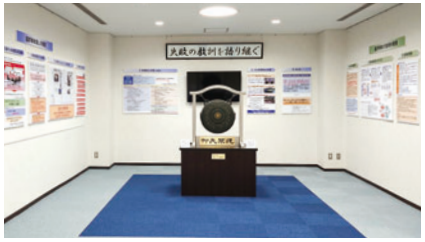
Corporate Culture for Ensuring Transparency and Safety

In 2007, it came to light that we had not properly handled some incidents regarding power generation facilities, including the criticality accident at Unit 1 of Shika Nuclear Power Station. Following this, we have worked company-wide to take measures to prevent any such issues from happening again.

In February of 2011, the examination committee composed of external experts evaluated our efforts toward the recurrence prevention, and concluded that the corporate culture for ensuring transparency and safety had been established. Even after this evaluation, every employee has continued and improved these never-ending efforts, taking to heart the importance of never flagging in our dedication to the corporate culture.

In FY 2023, we designated June 18, the day of the criticality accident, as the Day to Pledge Safety, Fairness and Integrity, and at the same time, we set up an archive area to pass on the lessons of failure, with a permanent exhibition of related materials.

We continue further deepening the culture that we have built, improving company-wide quality of services and operations, as we work to earn the community' s trust and provide sense of security.



Archive Area at Shika Nuclear Power Station

"Passing On the Lessons of Failure" Ceremony
(June 12, 2023, in the Archive Area at Shika Nuclear Power Station)

Deepening Our Safety Culture

Enlightenment on Prioritizing Safety, and Improving Safety Quality

● Discussions between Top-level Managers and Front-line Site Employees

We aim to share top-level managers' thoughts and passion for putting safety first with the company as a whole, as well as to increase mutual understanding within the company through frank discussion activities between top-level managers and employees.

● Sharing Case Studies of Failures to Prevent Reoccurrences

We share the lessons of failure cases within the company and facilitate improvement efforts in each department, with the goal of preventing similar accidents and problems through such conferences as "Electric Power Security Committee" and "Failure Cases Review Meetings."

Discussions between upper-level management and head office managers
(Electric Power Security Committee)

Promoting Compliance

In 2002, we established the Compliance Promotion Committee, with the company president serving as chair, and a code of conduct.

We have continued to improve our efforts over time. In order to further increase the effectiveness of our compliance promotion, in 2003, we established Whistle Hokuden, a point of contact for business ethics information; in 2007, we added an external third party (lawyer) point of contact for reports; and starting in 2010, Group companies' compliance violations can now also be reported.

We continue efforts to maintain our dedication to our corporate culture for ensuring transparency and safety, such as messages from the president on in-company TV broadcasts. In addition, we strive to ensure strict compliance through autonomous initiatives, such as compliance training for each layer of our company, including top- and middle-level managers and general employees, as well as group compliance discussions at each workplace.

Connecting with Stakeholders

Investor Relations Activities

In addition to briefing sessions on investor relations (IR) held by the president and other senior executives, we proactively provide information through shareholder visits to engage in dialogues, and through dedicated IR pages on our website.

Fair and Impartial Procurement Activities

We build good long-term relationships with our suppliers, who are our business partners, and we engage in procurement activities based on our Fundamental Policies for Procurement, as we work together toward the development of both parties.

● Fundamental Policies for Procurement

1	Compliance with Laws, Ordinances, and Social Norms
2	Highest Priority on Safety
3	Consideration for the Environment
4	Open Transactions
5	Fair and Impartial Procurement
6	Establishment of Mutual Trust (Partnerships)
7	Proper Management and Protection of Information
8	Contribution to the Local Community

Preparedness for Risks

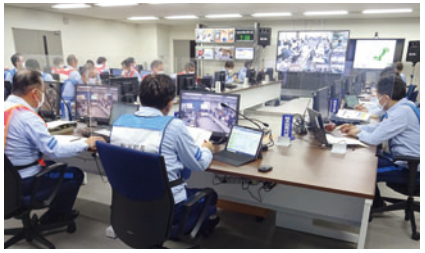
Crisis Management

We have established a system to prepare even in ordinary times for various critical situations that would, or may potentially, have a significant effect on our business, and we work to avoid, as much as possible, any effect on our stakeholders.

Establishment of Disaster Prevention Systems

We immediately declare Red Alert Status when a disaster is predicted to occur within the next few hours, or has already occurred, or when an earthquake rated 6 or above on the JMA Seismic Intensity Scale has occurred within the area we supply electricity to. The Hokuriku Electric Power Company and the Hokuriku Electric Power Transmission & Distribution Company then work together to address the disaster.

As a precaution for disasters, we have built a system of mutual cooperation to share disaster prevention information with local governments, the Self-Defense Forces, and other disaster-prevention-related organizations. In addition, we have also established a mutual support system in association with relevant organizations including other electric power companies, to provide mutual assistance, such as supply of electric power, personnel, materials, and transportation equipment.



Company-wide Disaster Prevention Training

Strengthening of Cooperation with Relevant Organizations

In order to facilitate smooth mutual cooperation, in the event of a disaster, with local governments and relevant external organizations (Ground and Maritime Self-Defense Forces, Regional Coast Guard Headquarters, Central Nippon Expressway Company, etc.), we have established an agreement on mutual cooperation in preparation for disasters, and strive to strengthen cooperation even in ordinary times through activities such as joint drills and liaison meetings.

Joint Drill with Japan Maritime Self-Defense Force Members

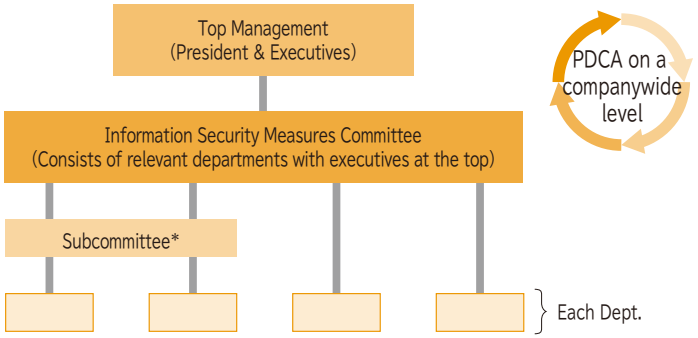
Information Security

With information security threats becoming increasingly serious, such as the growing number of international cyber-attacks on Japanese companies, we are working to enhance information security, as a critical infrastructure utility with social responsibility. In addition to cooperating with the national government and other electric power companies, we have set forth our basic policy on information security in our internal rules, and have established an in-house information security measures committee to promote information security measures under our top management.

Basic Policy on Information Security

(1) We shall establish a system to continuously maintain and improve our information security level.
(2) We shall enact protective measures to block attacks on information assets.
(3) We shall determine emergency measures in the event of an attack, and prepare for quick recovery and to prevent attacks from recurring.
(4) We shall raise awareness about information security among all employees.

● Information Security Structure



＊The subcommittee is composed of departments related to control systems and smart meter systems, and shares information

Financial and Business Information

Main Data for the Past Five Years (Consolidated)

Fiscal Year	2018	2019	2020	2021	2022
Operating Revenue (Million yen)	622,930	628,039	639,445	613,756	817,601
Operating Income (Million yen)	12,824	29,461	17,828	Δ16,415	Δ73,791
Ordinary Income (Million yen)	6,656	23,236	12,354	Δ17,641	Δ93,737
Net Income (Loss) Attributable to Owners of Parent (Million yen)	2,520	13,433	6,834	Δ6,762	Δ88,446
Return on Equity (%)	0.8	4.2	2.1	Δ2.0	Δ31.7
Return on Assets (%)	0.6	1.3	0.8	Δ0.7	Δ3.1
Net Income per Share (Yen)	12.07	64.34	32.73	Δ32.39	Δ423.69
Capital Investment (Million yen)	102,988	76,502	84,289	99,106	83,125
Total Assets (Million yen)	1,573,127	1,592,933	1,595,626	1,660,038	1,805,318
Net Assets (Million yen)	326,950	336,456	355,740	343,280	252,285
Capital-to-asset Ratio (%)	19.9	20.2	21.2	19.6	12.9
Outstanding Interest-bearing Debt (Million yen)	980,494	974,547	974,858	1,038,738	1,285,467
Net Assets per Share (Yen)	1,501.40	1,542.20	1,622.02	1,556.34	1,118.51
Cash Flows from Operating Activities (Million yen)	54,018	101,475	56,639	30,950	Δ97,045
Cash Flows from Investing Activities (Million yen)	Δ101,338	Δ75,141	Δ84,913	Δ111,044	Δ88,845
Cash Flows from Financing Activities (Million yen)	Δ9,912	Δ6,285	Δ3,300	52,785	245,752
Cash and Cash Equivalents at End of Period (Million yen)	142,934	163,019	132,310	105,002	164,863
Number of Employees	8,498	8,562	8,326	8,593	8,565

Note: Figures for FY 2021 reflect the finalization of the provisional accounting treatment.

Group Companies

(As of March 31, 2023)

Total Energy

- Hokuriku Electric Power Company
- Hokuriku Electric Power Transmission & Distribution Company
- The Nihonkai Power Generating Company, Inc.
- Hokuriku Lnes Co., Ltd.
- Kaga Furusato Denki Co., Ltd.
- Toyama Kyodo Jikahatsuden Co., Ltd.
- Kanazawa Energy Co., Ltd.
- Fukui City Gas Co., Ltd.
- Nanto Energy, Inc.
- Nyuzen Marine Wind LLC.
- Sendai-ko Biomass Power GK

Information & Telecommunications

- Hokuriku Telecommunication Network Co., Inc.
- Power and IT Company
- Hokuden Information System Service Company, Inc.
- Emori Infotech Management Co., Ltd.
- Emori Infotech Corporation Co., Ltd.
- Emori Infotech Co., Ltd.
- Japan Chemical Database Ltd.
- Emori IT & Logistics Systems Co., Ltd.
- ITS Corp.
- Brain Co., Ltd.
- Cable Television Toyama Inc.

Electricity & Engineering

- Hokuriku Plant Services Co., Ltd.
- Nihonkaikenko Corporation
- Hokuden Techno Service
- Hokuriku Electrical Construction Co., Ltd.
- Hokuriku Electric Power Biz Energy Solutions Co., Ltd.
- Hokuden Engineering Consultants Co., Ltd.
- Scairt Co., Ltd.
- Kanbara Equipment Engineering Co., Ltd.

Environment & Recycling

- Nihonkai Environmental Service Inc.

Daily Life, Offices, and Finance

- Hokuriku Electric Power Business Investment G.K.
- Hokuden Sangyo Co., Ltd.
- Hokuden Sangyo Komatsu Building G.K.
- Hokko Shoji Co., Ltd.
- Hokuriku Electric Power Living Service Co., Ltd.
- Hokuden Partner Service Inc.
- Hokuriku Electric Power With Smile Company
- FreDelish Co., Ltd.
- Fukuden Kogyo Co., Ltd.

Manufacturing

- Nihonkai Concrete Industries Co.
- Hokuriku Instrumentation Co., Inc.
- Hokuriku Electric Co., Ltd.

Overseas Electricity Business

- F3 Holding Company B.V.
- F3 O&M Company Ltd
- Formosa Seagull Power Investment Co., Ltd.
- Sun-eee Pte. Ltd.

and 10 other companies

Main Data for the Past Five Years (Non-consolidated)

Fiscal Year	2018	2019	2020	2021	2022
Operating Revenue (Million yen)	575,576	573,868	577,106	554,565	756,346
Operating Income (Million yen)	4,522	20,214	Δ6,463	Δ36,327	Δ83,169
Ordinary Income (Million yen)	2,447	15,707	Δ8,371	Δ31,739	Δ92,916
Net Income (Million yen)	2,411	10,294	Δ5,094	Δ12,828	Δ81,942
Ordinary Revenue / Loss (Million yen)	583,062	577,532	582,915	566,616	770,899
Electricity Sales (Retail)	477,440	453,412	440,559	426,049	532,520
Electricity Sales (Wholesale)	48,124	55,032	81,974	113,649	187,180
Other	57,497	69,087	60,380	26,917	51,198
Ordinary Expenses (Million yen)	580,614	561,825	591,286	598,356	863,816
Personnel Expenses	48,033	51,156	29,429	26,528	26,550
Fuel Expenses	124,485	109,837	90,899	169,262	395,373
Maintenance Expenses	64,414	60,053	32,318	36,353	31,549
Depreciation Expenses	68,330	47,828	28,872	29,953	30,657
Purchased Power Expenses	103,426	105,013	136,269	124,922	144,355
Interest Expenses	8,786	7,654	6,934	6,563	7,172
Taxes and Public Charges	30,457	31,440	13,170	13,058	14,945
Other	132,681	148,841	253,392	191,713	213,211
Return on Equity (%)	0.9	3.6	Δ1.8	Δ4.7	Δ36.5
Return on Assets (%)	0.2	1.0	Δ0.3	Δ1.7	Δ3.7
Net Income per Share (Yen)	11.55	49.31	Δ24.40	Δ61.45	Δ392.52
Dividend (Yen) per Share	–	10	15	10	–
Capital Investment (Million yen)	93,708	69,245	50,264	48,550	45,061
Total Assets (Million yen)	1,508,900	1,529,530	1,506,958	1,564,187	1,716,651
Net Assets (Million yen)	280,243	286,945	284,130	266,684	182,109
Capital-to-asset Ratio (%)	18.6	18.8	18.9	17.0	10.6
Outstanding Interest-bearing Debt (Million yen)	988,764	985,476	988,656	1,046,355	1,293,178
Net Assets per Share (Yen)	1,342.28	1,374.42	1,360.99	1,277.46	872.36
Number of Employees	5,278	5,325	2,801	2,761	2,700

Note: Company split up in 2020

Environment *1

*1 Results for the Hokuriku Electric Power Company and the Hokuriku Electric Power Transmission & Distribution Company

(1) Data Related to Power Generation

	Category		Unit	Results FY 2020	Results FY 2021	Results FY 2022
1	Fuel Consumption for Power Generation	Coal	kt	6,110	6,970	6,422
		Heavy Oil	ML	143	242	283
		Crude Oil	ML	10	14	0
		LNG	kt	509	433	383
		Gas Oil	ML	5	6	6
		Wood Biomass	kt	22	26	19
		Nuclear Fuel	kg-^{235}U	0	0	0
2	Electricity Generated (Generating End)	Thermal power	billion kWh	22.1	24.9	23.1
		Hydro power	billion kWh	6.2	6.2	6.0
		Nuclear power	billion kWh	0	0	0
		Photovoltaic	million kWh	5	5	5
3	Transmission and Distribution Loss Rate		%	4.4	4.4	Under calculation
4	Electricity Consumption at Hokuriku Electric Power Company Offices, etc.		million kWh	30	30	29
5	Electricity Sold to and Purchased from Other Utilities	Purchased	billion kWh	7.0	8.1	6.3
		Wholesale	billion kWh	6.6	8.1	6.4
6	Electricity Sales Volume		billion kWh	25.9	28.1	26.3
7	Thermal Power Generation Efficiency: Benchmark Index B of the Act on the Rational Use of Energy		%	40.5	41.0	40.9
8	Waste Water from Power Stations		Kilo m³	2,634	2,688	2,706

*2 Calculations were made based on the Law Concerning the Promotion of the Measures to Cope with Global Warming.
*3 For power generated at thermal power stations.
*4 Annual values shown for SF_6 and HFCs.
*5 Calculations were made based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain Ver. 2.4 (Ministry of the Environment and Ministry of Economy, Trade and Industry) and other information.
For the categories under Scope 3 not listed here, calculations were not made because they are irrelevant, or of very little relevance, to the business activities of the Hokuriku Electric Power Company or the Hokuriku Electric Power Transmission & Distribution Company.

(2) Data on Reduction of Greenhouse Gases and Other Pollutants

	Category		Unit	Results FY 2020	Results FY 2021	Results FY 2022
1	CO_2 Emissions *2 (based on retail electricity sales volume)	Basic	Mt-CO_2	12.17	13.47	12.79
		Adjusted	Mt-CO_2	12.07	13.58	13.11
2	CO_2 Emission Intensity *2 (based on retail electricity sales volume)	Basic	kg-CO_2/kWh	0.469	0.480	0.487
		Adjusted	kg-CO_2/kWh	0.465	0.484	0.499
3	SOx Emissions	Emissions	t	5,593	6,352	6,146
		Standard Unit *3	g/kWh	0.25	0.26	0.27
4	NOx Emissions	Emissions	t	4,668	5,402	5,109
		Standard Unit *3	g/kWh	0.21	0.22	0.22
5	SF_6 Emissions *4		t	0.3	0.6	0.3
6	SF_6 Gas Recovery Ratio during Inspection and Disposal		%	99	99	99
7	HFC Emissions *4		t	0.6	0.2	0.8
8	PFC Emissions		t	None Handled	None Handled	None Handled
9	N_2O Emissions		t	97	110	102
10	CH_4 Emissions		t	20	23	18
11	Fluorocarbon Consumption		t	0.8	0.7	0.5

●Supply Chain Greenhouse Gas Emissions *5

	Category	Unit	FY 2020	FY 2021	FY 2022
12	Scope 1 (Emissions from fuel combustion by the company itself)	Mt-CO_2	16.69	18.76	17.48
13	Scope 2 (Emissions from the use of electricity, heat, or steam)	Mt-CO_2	0.00008	0	0.00002
14	Scope 3 (Indirect emissions besides Scopes 1 and 2)	Mt-CO_2	5.02	5.83	4.37
	Category 1 (Purchased goods and services)	Mt-CO_2	0.2	0.21	0.2
	Category 2 (Capital goods)	Mt-CO_2	0.3	0.3	0.28
	Category 3 (Fuel and energy-related activities not included in Scope 1 or 2)	Mt-CO_2	4.36	5.12	3.69
	Category 4 (Transportation and delivery (upstream))	Mt-CO_2	0.0002	0.0002	0.0001
	Category 5 (Waste generated in operations)	Mt-CO_2	0.02	0.03	0.03
	Category 6 (Business travel)	Mt-CO_2	0.0007	0.0007	0.0007
	Category 7 (Employee commuting)	Mt-CO_2	0.002	0.002	0.002
	Category 11 (Use of products sold)	Mt-CO_2	0.13	0.15	0.17

(3) Other Data Related to Environmental Management and Waste Management

	Category		Unit	Results FY 2020	FY 2021	FY 2022
1	Production and Proportion Recycled of Industrial Waste and Byproducts	Amount Produced (Amount of Coal Ash Produced, Included in the Total)	kt	779 (591)	1028 (799)	901 (697)
		Percentage Recycled (Proportion Recycled of Coal Ash)	%	96.3 (96.7)	95.7 (95.5)	96.4 (96.2)
2	Office Waste Collected by the Hokuriku Electric Power Company	Used Helmets	pcs.	439	223	282
		Used Safety Shoes	pairs	813	959	739
		Used Safety Harnesses	sets	168	335	205
		Used Fluorescent Lamps	t	4.1	3.2	3.5
		Used Batteries	t	1.4	1.4	0.7
3	Green Purchasing Coverage		%	91	91	92
4	Number of Electric Vehicles Introduced*5 (Proportion of EVs among company vehicles)		vehicles (%)	206 (52.2)	218 (69.0)	210 (67.1)
5	Amount of Electricity Use at Offices over Time (Percentage, using the FY 2004 amount as 100)		%	81.3	80.8	77.4
6	Production of Solid Radioactive Waste (200-liter drum equivalent)		drums' worth	808	816	564

*5 Special-purpose vehicles, such as emergency vehicles and aerial work platforms, and other vehicles that cannot be replaced with electric vehicles (e.g. 4WD vehicles) are not included. Plug-in hybrid vehicles (PHVs) are included.

FY 2022 Breakdown of Production and Proportion Recycled of Industrial Waste and Byproducts

Product name	Amount Produced (t)	Percentage Recycled (%)	Main Use
Coal Ash	697,203	96.2	Raw material for cement
Gypsum	175,026	100.0	Raw material for cement
Heavy/Crude Oil Ash	1,027	100.0	Raw material for cement
Electric Wire Scrap, Iron Scrap	11,426	99.9	Metal stock
Waste Plastics	433	25.6	Plastic products
Decommissioned Concrete Poles	5,406	100.0	Roadbed material
Insulator Scrap	453	89.9	Land reclamation material, aggregate
Sludge	7,430	41.9	Raw material for cement
Construction & Demolition Waste	475	33.3	Land reclamation material, aggregate
Other	2,146	46.7	–
Total	901,024	96.4	–

FY 2022 Uses of Recycled Coal Ash

Uses		Proportion (%)
Cement Raw Material (Clay substitution)	Domestic	50.2
	Overseas	15.9
Cement (Other than clay substitution)		1.2
Land Reclamation Material		14.0
Recycled Base Course Material		5.8
Architecture		8.4
Soil Stabilization Material (Drainage material for grounds, rice fields, etc.)		2.3
Civil Engineering		1.5
Other		0.6

(4) Emissions and Transfers of Chemical Substances with Notifications Filed According to the PRTR Law*6

	Substance	No. of Facilities Submitting Notifications	Main Uses	FY 2022 Amount Handled (t)	Amount of Emissions (t)	Amount Transferred (t)
1	Asbestos	2	Heat insulating material	8.1	0	8.1
2	Ethylbenzene	1	Power generation fuels	1.1	1.1	0
3	Xylene	1	Power generation fuels	1.2	1.2	0
4	Toluene	4	Power generation fuels, paints	9.9	9.9	0
5	Methylnaphthalene	4	Power generation fuels, on-site boiler fuels	67.8	0.3	0

*6 PRTR Law: An abbreviated name for the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Law concerning Pollutant Release and Transfer Register/PRTR). The law stipulates the mechanisms by which businesses must track, collect, and publicize data regarding the amounts of harmful chemical substances they produce that are discharged into the environment in their course of their business activities.

Social *1

*1 Results for the Hokuriku Electric Power Company and the Hokuriku Electric Power Transmission & Distribution Company

(1) Data Related to Employees

	Category		Unit	Results		
				FY 2020	FY 2021	FY 2022
1	Number of Employees	Total	people	5,543	5,513	5,428
		Women (Proportion of women)	people (%)	898 (16.2)	891 (16.2)	880 (16.2)
2	Average Age		years old	42.2	42.3	42.4
3	Length of Service	Total	years	20.4	20.5	20.6
		Men	years	21.7	21.8	21.8
		Women	years	13.3	13.8	14.1
4	Number of Managers	Total	people	1,907	1,885	1,836
		Women (Proportion of women)	people (%)	84 (4.4)	96 (5.1)	105 (5.7)
5	Proportion of Employees with Disabilities		%	2.25	2.37*2	2.42*2
6	Number of Employees Hired (Including Mid-Career Hires)	Total	people	168	144	133
		Women (Proportion of women)	people (%)	20 (11.9)	18 (12.5)	14 (10.5)
7	Number of Employees Taking Nursing Care Leave		people	1	2	2
8	Usage Rate of Child-care Leave	Men*3	%	5 (94)	12 (81)	61 (97)
		Women	%	100	100	100
9	Number of Days of Paid Annual Leave Taken per Employee*4		days	20.8	20.8	21.5

*2 Including the Hokuriku Electric Power With Smile Company
*3 Figures in parentheses show data including employees who took leave for childcare purposes other than legally mandated childcare leave.
*4 Including leisure leave (five days granted annually, with no restrictions on purpose of use)

(2) Metrics Related to Local Society

	Category		Unit	Results		
				FY 2020	FY 2021	FY 2022
1	System Average Interruption Duration Index		minutes/ customer/year	22	17	26
2	System Average Interruption Frequency Index		times/ customer/year	0.14	0.12	0.16
3	Increased Amount of Buried Distribution Lines	Single Fiscal Year	km	2.08	4.55	4.79
		Total	km	208.58	213.13	217.92
4	Hoku-Link Membership		thousands of members	486	515	553
5	Visit Lessons and Facility Tours		sessions	68	199	270

Governance

(1) Data Related to Corporate Governance*1

	Category	Unit	Results		
			FY 2020	FY 2021	FY 2022
1	Number of Directors (Number of external directors included in the total)	people	11 (3)	9 (3)	9 (4)
2	Proportion of External Directors	%	27.2	33.3	44.4
3	Number of Board of Directors' Meetings Held (Average attendance rate)	sessions (%)	11 (99)	11 (98)	12 (98)
4	Term of Office of Directors	years	1	1	1
5	Number of Audit & Supervisory Board Members (Number of external audit & supervisory board members included in the total)	people	5 (3)	5 (3)	5 (3)
6	Number of Independent Officers (Proportion)	people (%)	6 (37.5)	6 (42.9)	7 (50.0)
7	Number of Female Directors and Audit & Supervisory Board Members (Proportion)	people (%)	1 (6.3)	1 (7.1)	2 (14.2)

*1 Results for the Hokuriku Electric Power Company

(2) Data Related to Occupational Safety*2

	Category	Unit	Results		
			FY 2020	FY 2021	FY 2022
1	Number of Employee Injuries *3	people	2	3	1
2	Rate of Lost-worktime Injuries *3 *4	–	0.18	0.27	0.09
3	Number of Contracted Worker Injuries *3	people	16	17	13
4	Number of Employee Fatalities	people	0	1	0
5	Number of Contracted Worker Fatalities	people	3	0	0

*2 Results for the Hokuriku Electric Power Company and the Hokuriku Electric Power Transmission & Distribution Company
*3 Work-related injury involving at least one day's absence from the workplace
*4 Rate of lost-worktime injuries = Number of work-related casualties ÷ Total actual hours worked ×1,000,000

WEB Report on Corporate Governance
https://www.rikuden.co.jp/management/governance.html

Environmental, Social, and Governance-related Policies, Guidelines, Plans, etc.

	Category	URL
1	CSR Philosophy and Guidelines for Action	https://www.rikuden.co.jp/csr/torikumi.html
2	Environmental Management Plan	https://www.rikuden.co.jp/kanrikeikaku/index.html
3	Action Plan for the Promotion of Women's Participation and Advancement in the Workplace	https://www.rikuden.co.jp/syokuba/diversity.html
4	Compliance Promotion	https://www.rikuden.co.jp/conp/
5	Fundamental Policies for Procurement	https://www.rikuden.co.jp/shizai/houshin.html
6	Disclosure Policy	https://www.rikuden.co.jp/management/disclosure.html

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