# INTEGRATED REPORT

## The Hokuriku Electric Power Group

# 2024

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 2024 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

TOYAMA

ISHIKAWA

FUKUI

GIFU

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## 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)
- Proposal from the TNFD (Task Force on Climate-related Financial Disclosures)


Publication Date: September 2024
Scope of Report: Companies belonging to the Hokuriku Electric Power Group
Period Covered by Report: April 1, 2023 to March 31, 2024
(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*: 1,855,435 million yen (1,721,709 million yen)
Sales*: 808,238 million yen (738,836 million yen)
Ordinary Income*: 107,931 million yen (79,893 million yen)
Net Income*: 56,811 million yen (47,993 million yen)

* Consolidated figures for FY 2023 or as of March 31, 2024, are shown. Figures in parentheses are nonconsolidated figures.

### Major Shareholders (As of March 31, 2024)

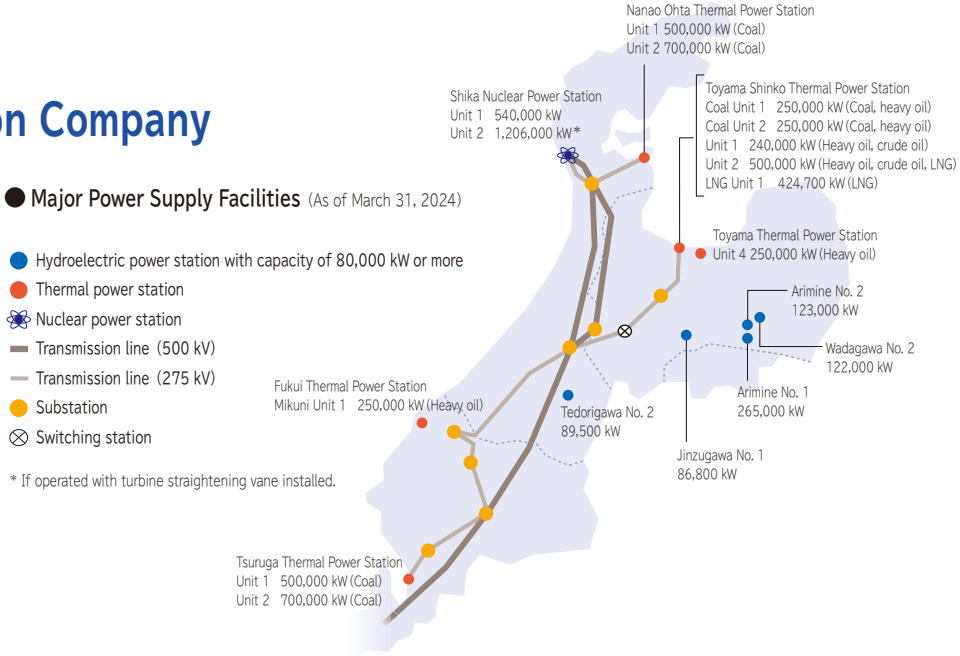
| Name | Number of Shares Held (thousands of shares) | Investment Ratio (%)* |
|---|---|---|
| The Master Trust Bank of Japan, Ltd. (Trust Account) | 23,424 | 11.2 |
| Toyama Prefecture | 11,270 | 5.4 |
| Hokuriku Electric Power Company Employee Stock Ownership | 8,466 | 4.1 |
| The Hokuriku Bank, Ltd. | 7,700 | 3.7 |
| Custody Bank of Japan, Ltd. (Trust Account) | 6,812 | 3.3 |
| QR Investment Co., Ltd., a QR2 Fund Limited Liability Investment Partnership Unlimited Liability Partner | 6,100 | 2.9 |
| 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, 2024)




* If operated with turbine straightening vane installed.

### Overview (As of FY 2023 or March 31, 2024)

| | | | |
|---|---|---|---|
| Hokuriku Electric Power Company | Power-generating Facilities | Number of Power Stations | Capacity |
| | Hydro power | 131 | 1,940 MW |
| | Thermal power | 5 | 4,565 MW |
| | Nuclear power | 1 | 1,746 MW*1 |
| | Photovoltaic | 4 | 4 MW |
| | Total | 141 | 8,255 MW |
| | Total Electricity Sales Volume | Retail | Wholesale |
| | | 24,217 GWh | 3,788 GWh |
| | Total*2 | 28,004 GWh | |
| Hokuriku Electric Power Transmission & Distribution Company | Transmission Facilities | Overhead | Underground |
| | Total Length of Transmission Lines | 3,196 km | 165 km |
| | Transformation Facilities | Number of Substations | Capacity |
| | | 260 | 32,747 MVA |
| | Distribution Facilities | Overhead | Underground |
| | Total Length of Distribution Lines | 42,054 km | 1,590 km |
| | Power-generating Facilities | Number of Power Stations | Capacity |
| | Thermal power | 1 | 288 kW |

*1 Estimation based on the assumption that Shika Nuclear Power Station 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.

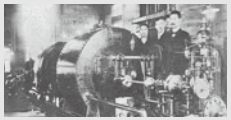
As a company established with the backing of the regional community, including industrial and economic circles, we have developed alongside the Hokuriku region by ensuring a stable supply of low-cost, high-quality energy, keeping coexistence and co-prosperity with the region in mind as our fundamental 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

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.

### 1899 Establishment of the Kyoto Electric Light Company Fukui Branch



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

28.0 billion kWh
2023

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

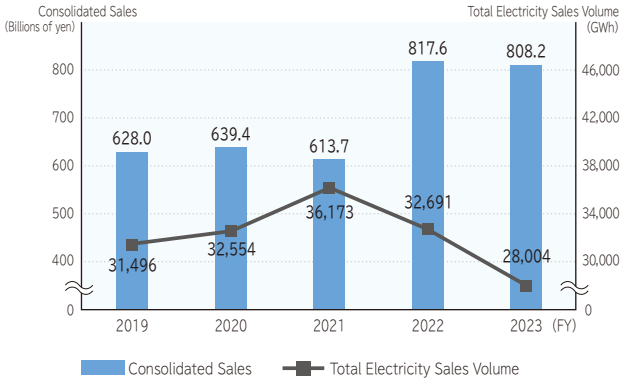
* Retail electricity sales in the Hokuriku area

## FY 2023 Financial Results (Consolidated)

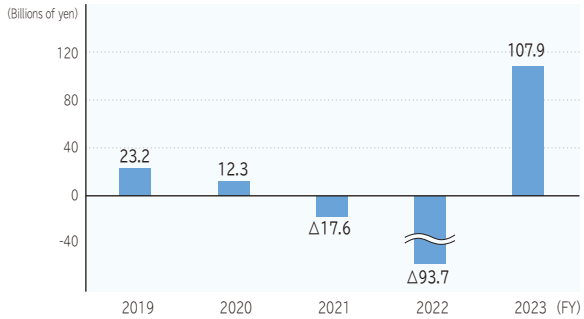
Sales (operating revenues) amounted to 808.2 billion yen, a reduction of 9.3 billion yen compared to the previous fiscal year mainly due to a decrease in total electricity sales, despite adjustments to retail and consignment rates; together with non-operating revenues, total ordinary revenues amounted to 816.2 billion yen, a reduction of 6.7 billion yen.

Despite lower total electricity sales, a reduction in hydroelectric power generation, and an increase in facility-related costs, ordinary income was 107.9 billion yen, compared to an ordinary loss of 93.7 billion yen in the previous fiscal year. This was due to increased revenue from fees, lower procurement costs resulting from falling market prices, and efficiency gains such as reductions in supply-and-demand-related procurement costs. Net income attributable to owners of the parent company was 56.8 billion yen, compared to a net attributable loss of 88.4 billion yen in the previous fiscal year.

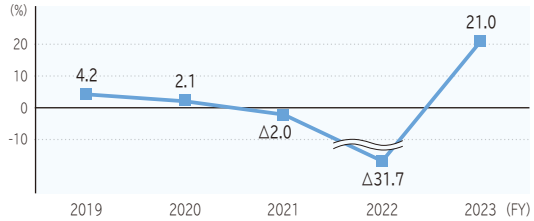
### Consolidated Sales and Total Electricity Sales




### Consolidated Ordinary Income

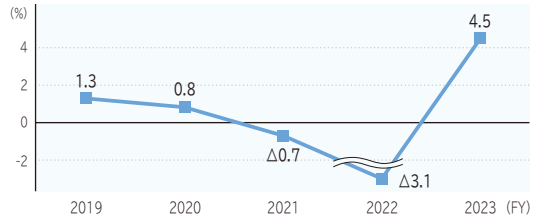



### Consolidated Return on Equity (ROE)



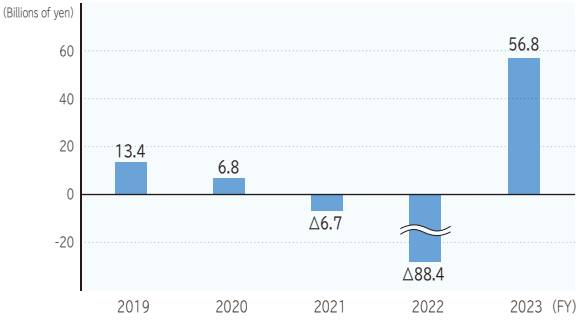

ROE = Profit (loss) attributable to owners of the parent/Average equity

### Consolidated Return on Assets (ROA)



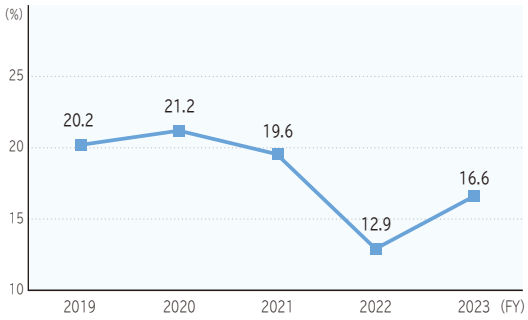

ROA = Operating income (loss) /Average total assets

### Consolidated Net Income



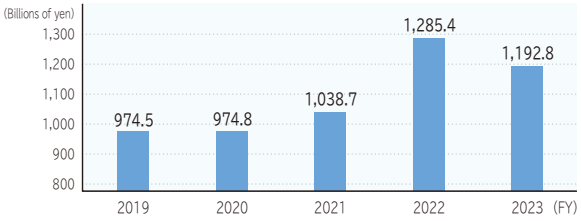

Net income (loss) attributable to owners of parent is shown

### Consolidated Equity Ratio




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

### Consolidated Outstanding Interest-bearing Debt



# Message from the President

**We will drive the three pillars of the New Mid-term Business Plan, further improve disaster response capabilities and regional BCPs in light of the earthquake, and work toward sustainable development and recovery together with the Hokuriku region through 3C (Change, Chance, Challenge).**

## Response to the 2024 Noto Peninsula Earthquake

The Noto Peninsula Earthquake, which hit on January 1, 2024, caused extensive damage in Noto and other parts of Ishikawa and Toyama prefectures. Firstly, we would like to express our deepest condolences to those who lost their lives in the quake, and our heartfelt sympathy to all those affected by the disaster.

The earthquake caused a large-scale power outage affecting approximately 70,000 households in our service area. Immediately after the earthquake, we set up an Emergency Disaster Response Headquarters headed by me, and under the slogan “Together as One for Noto,” the entire group worked together to assess the damage and restore power supply in cooperation with the national and local governments, with support from our partner companies and other electric power companies. Despite harsh conditions such as aftershocks and snow, we were able to restore power quickly. We would like to express our deepest gratitude to everyone throughout Japan for their cooperation.

As for our power generation facilities, the Nanao-Ohta Thermal Power Station suffered extensive facility damage, including the collapse of the coal receiving facility and damage to boiler piping, but we went to great efforts to restore operations and both Units 1 and 2 were back in operation before the start of the summer season. At the Shika Nuclear Power Station, we have confirmed that there are no safety issues with the reactor facilities and that there are no abnormalities in terms of radiation levels outside, faults, or ground deformation at the site. However, the transformers, turbines, and other equipment did sustain damage. We will proceed

with detailed inspections and causal analyses, and plan to carry out appropriate restoration measures.

When the earthquake struck at 4:10 PM on New Year's Day, I was at my home in Toyama City. The house began to shake violently, and soon afterwards there were calls to evacuate to avoid the tsunami. It was truly an extraordinary event that instantly turned an ordinary day into an emergency situation. After the quake, I headed to my workplace at once and arrived at the office before 5:00 PM. The first meeting of the Emergency Disaster Response Headquarters was held at 6:00 PM. As we assessed the damage, we realized that this was an unprecedented disaster the likes of which our company had never experienced before, and we determined that in order to quickly restore the livelihoods and industries in our hometown to normal, we had to make a collective effort to restore power as soon as possible. Most power outages were resolved other than inaccessable areas by the end of January, and by March 15, we had restored power everywhere other than customer facilities that we were unable to confirm the integrity of. However, it will take more time for the restoration to be completed, and we will continue to make a collective effort for the restoration and reconstruction of the region under the slogan “Together as One for Noto.”

## FY 2024 Action Plan Based on the Group's Mission and Duties

The unprecedented experience of the Noto Peninsula Earthquake has given us an opportunity to rethink what the Group should be. We now have a renewed awareness of our mission to provide a stable supply of electricity, as well as of the Hokuriku region as an indelible part of the Group's DNA, and we are determined to contribute to the Hokuriku region to enable the earliest possible recovery and further develop it into a more vibrant region. Based on the above, for fiscal 2024 we have formulated the “FY 2024 Action Plan” to further improve our disaster response capabilities and strengthen efforts in each of the three operational pillars as well as our BCP for the region and our customers, while adhering to each pillar and the financial targets of the “Hokuriku Electric Power Group New Mid-term Business Plan (FY2023-FY2027).”

The New Mid-term Business Plan we formulated in the previous fiscal year is a strategy spanning the five years from FY2023 to 2027, based on three policy pillars: I) ensuring a stable supply, improving the financial balance, and strengthening the financial base; II) working with local communities to promote decarbonization; and III) expansion of new business domains for sustainable growth. We set our financial targets based on each pillar (consolidated ordinary income of 45 billion yen or more, consolidated equity ratio of 20% or more at the end of FY2027, and consolidated return on equity of 8% or more). Although we recorded an extraordinary loss of 45.1 billion yen in FY2023 due to the earthquake, we hope to achieve these goals by steadily implementing measures to improve operational efficiency, the balance of income and expenditures, and investing in various areas of growth.

## Building a Strong Platform for the Three Pillars by Boosting Efforts to Support Our Business Foundation

In order to accelerate our efforts toward supporting the three pillars, we believe it is essential to support the business foundation by increasing productivity, valuing human capital, and ensuring and enhancing compliance.

As a part of our efforts to improve productivity, we formulated a Digital Transformation (DX) Strategy to promote business reform and digitalization, and in FY2023, we were recognized under the DX Certification Program as stipulated by the Ministry of Economy, Trade, and Industry. In addition, we are promoting DE&I and healthy workplace practices including non-smoking and secondhand smoke prevention policies to enhance corporate value by promoting diversity, growth, and a corporate culture that values people. In particular, we achieved top-class results last fiscal year, including a 100% childcare leave utilization rate by our male employees. In July 2024, we established the General Affairs and Compliance Department to improve our compliance and risk management systems.

We will continue to proactively improve efforts to support the business foundation throughout the Group and build a solid base to support each pillar of our business.

## Message to the Stakeholders

Although the earthquake took a tremendous toll on the Group, it also gave us a great deal of insight. We will use this experience as a springboard to implement the New Mid-Term Business Plan through fiscal 2027, and beyond that, we will make concerted efforts to further enhance our corporate value, aiming to realize our vision of developing alongside the Hokuriku region, creating new value both nationwide and internationally, as stated in the Hokuriku Electric Power Group 2030 Long-Term Vision.

Furthermore, we will continue to contribute to the Hokuriku region as we meet the expectations of our customers, shareholders, and other stakeholders through the expansion of our business domain based on our mission of providing a stable supply of electricity, leveraging 3C to help Noto and all of the Hokuriku area recover from this disaster as soon as possible. We will take this Change as a Chance to rise to the Challenge.

I would like to express my sincere gratitude to all our stakeholders, whose continued support of the Group’s business activities is greatly appreciated. Thank you very much.

# Hokuriku Electric Power Group Materiality (Key Issues)

Every year, Hokuriku Electric Power Group analyzes the business environment and conditions both domestic and foreign in order to identify key risks and opportunities. We then evaluate these findings from the viewpoint of the Group and stakeholders in a meeting of the board to determine materiality.

## The Process of Determining Materiality

Analyze the business environment surrounding the Group → Organize the risks and opportunities surrounding the business → Evaluate the importance of the findings from the viewpoint of the Group and stakeholders → Determine Materiality (key issues)
Materiality determined by the Board of Directors

### Changes in the Business Environment

**Change in the Business Environment**

**Deteriorating Business Foundation**
- Increasing risk of electricity supply-demand crunch
- Damage to financial base
- 2024 Noto Peninsula Earthquake

**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)

**Medium- to Long-Term Trends of Change in Business Environment**

- Progress in Electricity System Reform (Competition intensified following the full liberalization of the retail market)
- Increased Environmental Awareness (Carbon Neutrality 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)

### Risks and Opportunities Surrounding Our Business

| Category | Risks | Opportunities |
|---|---|---|
| Stable Supply | ● Prolonged shutdown of Shika Nuclear Power Station (Includes effects of 2024 Noto Peninsula Earthquake)<br>● 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<br>● Violent fluctuations in fuel and wholesale electricity market prices and deterioration of the energy procurement environment<br>● Unscheduled shutdowns of coal-fired and other power generation facilities<br>● Power facility problems due to large-scale natural disasters, such as typhoons and earthquakes, becoming increasingly severe<br>● Aging of power generation, transmission, and distribution facilities; securing construction capability | ● Improved performance of equipment due to technological innovations<br>● 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.<br>● Tighter environmental regulations toward carbon neutrality by 2050 (Fade-out of coal-fired power, carbon pricing [carbon levies, emissions trading])<br>● Expansion of renewable energy sources (distributed energy, increased utilization of self-generated power in the home) 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<br>● Decline in profitability of renewable energy sources (rises in material and construction costs, etc.)<br>● Degradation of the value of our renewable energy sources (revisions to RE100 rules, etc.)<br>● Manifestation of insufficient recovery of costs of reserve capacity associated with the expansion of the reserve capacity market<br>● Risk of water flow rate fluctuations due to precipitation fluctuations<br>● 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)<br>● Persistently high or volatile fuel prices<br>● Steep rise in costs for the procurement of materials and equipment<br>● Depreciation of the Yen due to trends in Japan-U.S. interest rate differentials and higher domestic interest rates due to a reduction in monetary easing and other factors | ● Increased advantages of nuclear power generation and renewable energy<br>● Government policies to promote carbon neutrality (Public-private Green Transformation investment policy with investments totaling roughly 150 trillion yen; hydrogen and ammonia support investment)<br>● Diversification of customer needs, such as for added-value services (Energy conservation and decarbonization)<br>● Cost recovery through utilization of various markets (Non-fossil fuel energy value trading market, capacity market, Long-term Decarbonization Auction)<br>● 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<br>● Increased power demand due to the expansion of data centers and generative AI<br>● Growing needs for disaster prevention and mitigation within society |
| Business Domain Expansion | ● Delayed investment decisions resulting in loss of profit opportunities<br>● Country risks associated with overseas operations (foreign exchange, geopolitical risks) | ● Business opportunities due to the liberalization of the electricity and gas markets<br>● Expansion of business opportunities by solving issues such as SDGs and local issues<br>● Increasing demand for electricity in Asia and other overseas markets<br>● Productivity improvement and new business creation through the utilization of digital technologies |
| Strengthening of Business Foundation | ● Worsening balance of income and expenditures due to ballooning recovery costs following the 2024 Noto Peninsula Earthquake<br>● Obsolescence of business models due to technological innovations and other changes in the business environment<br>● Deteriorating perceptions of companies reluctant to address climate change<br>● Decline in social trust caused by a breach of business ethics<br>● Delay in developing specialists, resulting in loss of business opportunities<br>● Impact on business operations due to cyber attacks | ● New value creation through the utilization of diverse human resources<br>● Productivity improvement through the progress of digital transformation and work style reforms |

### Materiality (key issues)

- Ensuring a Stable Supply, Improving the Financial Balance, and Strengthening the Financial Base
- Working with Local Communities to Promote Decarbonization
- Expansion of New Business Domains for Sustainable Growth
- Strengthening of Efforts to Support Our Business Foundation

# 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* ▶P84-89

**Financial Capital**

| Consolidated Total Assets | Consolidated Equity Ratio |
|---|---|
| ¥1,855,435 Million | 16.6 % |

**Human Capital**

| Consolidated No. of Employees | Percentage of Female Employees |
|---|---|
| 8,541 | 13.0 % |

**Social, Facility, and Natural Capital, and Customer Base**

| The Trust of the Region | No. of Group Companies |
|---|---|
| 72 years since our establishment | 61 |
| Total Electricity Sales Volume | Hoku-Link Membership |
| 28.0 billion kWh | 631 thousands of members |
| Number of Power Stations | Total Power Station Output |
| 142 | 8,255 MW |
| Total Length of Transmission Lines | Total Length of Distribution Lines |
| 3,361 km | 43,644 km |
| Abundant Water Resources (No. of Hydroelectric Power Stations) | No. of Patents |
| 131 | 98 |

## Business Environment/ Corporate Philosophy and Business Activities

The Hokuriku Electric Power Group Philosophy

**Building an Affluent, Lively Hokuriku through Power and Intelligence**

### Hokuriku Electric Power Group New Mid-term Business Plan (FY 2023 – 2027)

The Hokuriku Electric Power Group New Mid-term Business Plan incorporates the determined materialities.

**The Hokuriku Electric Power Group 2030 Long-Term Vision**

### The Hokuriku Electric Power Group's Business Environment

2024 Noto Peninsula Earthquake

International affairs, domestic policies, technological innovation, socio-structural changes

## OUTPUT Services Provided

- Electricity Business
- Carbon Neutrality Services
- Next-generation Energy Management Business
- Digital Life Support Business
- Regional Development Business

## OUTCOME Value Delivered to Stakeholders

**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 ▶P11

**Natural Capital**

- $CO_2$ Emissions (Compared to FY 2013) (based on retail electricity sales volume) Change of 50 % or Higher (by FY 2030) ▶P38

**Manufactured Capital**

- Renewable Energy Development Amount 1 million kW or higher (3.0 billion kWh/year or higher) (by the early 2030s) (Compared to FY 2018)
- Ratio of Non-fossil Sources (based on electricity generated) 50 % or Higher (by FY 2030) ▶P38
- 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)

**Social and Relationship Capital**

- Offering new value and services that meet our customers' and the community's needs ▶P50-54
- Close communication with stakeholders ▶P83

**Human Capital**

- Percentage of Male Employees Taking Child-care Leave 100 %
- Promotion of Women in Active Roles, Diversity, Equity, and Inclusion (DE&I)
- Promotion of Health-conscious Management and Development of Human Resources ▶P58-63

Related SDGs

**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

* Consolidated figures are shown for FY 2023, or as of March 31, 2024.

# Hokuriku Electric Power Group Management Policies

2023 | 2024 | 2025 | 2026 | 2027 | 2030 | 2050

## Hokuriku Electric Power Group New Mid-term Business Plan (FY 2023 - 2027)

### The Hokuriku Electric Power Group 2030 Long-Term Vision

The Two Main Strategies of the Hokuriku Electric Power Group

Expanding Our Comprehensive Energy Business Based in Hokuriku × Cultivating New Growth Businesses

Environmental, Social, and Governance Perspectives

### 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

We have focused our priorities on Pillar I (Ensuring a Stable Supply, Improving the Financial Balance, and Strengthening the Financial Base) and set financial targets for each pillar.

We will 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.

■ Three Pillars of Management

- Pillar I: Ensuring a Stable Supply, Improving the Financial Balance, and Strengthening the Financial Base
- Pillar II: Working with Local Communities to Promote Decarbonization
- Pillar III: Expansion of New Business Domains for Sustainable Growth

Strengthening of Efforts to Support Our Business Foundation

**Financial Targets**

| | | |
|---|---|---|
| Pillar I | ■ 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 |
| Pillar II / Pillar III | ■ Growth Investment Amounts | ¥150 billion in a timely manner from FY2023 - 2027. |

| FY 2024 Action Plan | Corresponding Page(s) |
|---|---|
| **Pillar I: Ensuring a Stable Supply, Improving the Financial Balance, and Strengthening the Financial Base** | P21 |
| Ensuring a Stable Supply of Electricity | P22 |
| Recovery initiatives for affected facilities | P23 |
| Appropriate conservation and operational management through the use of AI and digital technology | P24 |
| Actions for Shika Nuclear Power Station | P25-27 |
| Initiatives in response to 2024 Noto Peninsula Earthquake (Hokuriku Electric Power Transmission & Distribution Company) | P28-29 |
| Efforts to secure a stable supply in the future | P30 |
| Enhancing disaster response capabilities in response to the 2024 Noto Peninsula Earthquake | P31 |
| Further Improvements in Balance of Income and Expenditures to Achieve Financial Targets | P32-33 |
| Revenue growth initiatives | P34 |
| Cost reduction initiatives | P35-36 |
| **Pillar II: Working with Local Communities to Promote Decarbonization** | P37 |
| Taking on Challenges toward Carbon Neutrality | P38 |
| Produce: Decarbonization of Power Sources | P39-43 |
| Deliver: Implementation of Next-generation Transmission and Distribution Networks | P44-45 |
| Support: Support for the Region's Decarbonization | P46-47 |
| **Pillar III: Expansion of New Business Domains for Sustainable Growth** | P48 |
| Creating a New Pillar of Growth Transcending the Framework of Our Electricity Business | P49 |
| Offering new value and services developed from our existing electricity business | P50-52 |
| Expansion and development of new business domains | P53-54 |
| **Strengthening of Efforts to Support Our Business Foundation** | P55 |
| Promotion of operational reforms and DX | P56-57 |
| Promotion of human capital management | P58-63 |
| Ensuring and strengthening compliance | P64-65 |

# Hokuriku Electric Power Group Management Policies

2023 → 2024 → 2025 → 2026 → 2027 → 2030 → 2050

## The Hokuriku Electric Power Group 2030 Long-Term Vision

### Our Ideal Future State

Developing alongside the Hokuriku Region, Creating New Value Nationwide and Internationally

The Two Main Strategies of the Hokuriku Electric Power Group

## Future Vision for 2050

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**

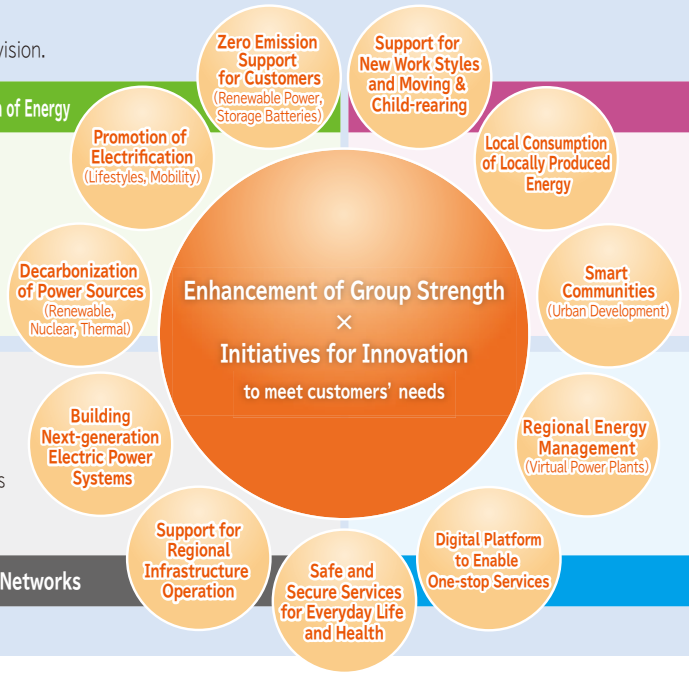
We will take on the challenge of **realizing carbon neutrality by 2050** through the following efforts: **decarbonization of power sources** by utilizing renewable energy as the major power source and other measures; **increased sophistication of transmission and distribution networks** to support the 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,** such as telework, **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**

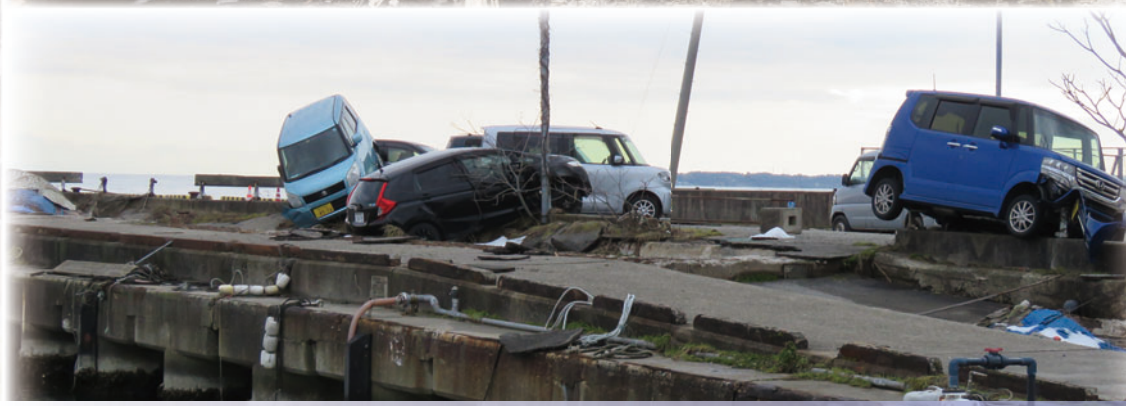
**4 Bringing Comfort to People's Lives with Digital Technologies**

Special Report

こころをひとつに能登
(Together as One for Noto)

# 2024 Noto Peninsula Earthquake

We would like to express our deepest condolences to those whose lives were lost and their families, as well as our heartfelt sympathy to all those affected by the disaster.



## Hokuriku Electric Power Group's Slogan for the Recovery Effort

こころをひとつに能登
(Together as One for Noto)

**The Sentiments We Hope to Express**

- As a company rooted in the community, we strive to offer our support to those affected by the disaster, together as one with the community
- We shall come together as one at all Group companies and cooperating companies
- Together as one, we will work in collaboration with all those who hope for Noto's recovery

# An Unprecedented Earthquake Strikes on New Year's Day

At 4:10 PM on January 1, 2024, a magnitude 7.6 quake with a maximum intensity level of 7 struck, with its hypocenter located below the Noto area.
In addition to the main quake, several large aftershocks of intensity 5-upper or higher also occurred. In addition to tsunamis, fires, landslides, and other disasters caused by the earthquake, snowfall combined to cause extensive damage in a wide area of the Hokuriku region, particularly in Noto.

■ Occurrences of quakes with a maximum intensity of 5 or higher

| Time | Epicenter | Magnitude | Maximum Intensity |
|---|---|---|---|
| January 1 4:06 PM | Noto, Ishikawa Prefecture | 5.5 | 5-upper |
| **January 1 4:10 PM** | **Noto, Ishikawa Prefecture** | **7.6** | **7** |
| January 1 4:12 PM | Off Coast of Noto Peninsula | 5.7 | 6-lower |
| January 1 4:18 PM | Noto, Ishikawa Prefecture | 6.1 | 5-upper |
| January 1 4:56 PM | Noto, Ishikawa Prefecture | 5.8 | 5-upper |
| January 1 6:08 PM | Off Coast of Noto Peninsula | 5.8 | 5-upper |
| January 2 5:13 PM | Off Coast of Noto Peninsula | 4.6 | 5-upper |
| January 3 2:21 AM | Noto, Ishikawa Prefecture | 4.9 | 5-upper |
| January 3 10:54 AM | Noto, Ishikawa Prefecture | 5.6 | 5-upper |
| January 6 5:26 AM | Noto, Ishikawa Prefecture | 5.4 | 5-upper |
| January 6 11:20 PM | Off Coast of Noto Peninsula | 4.3 | 6-lower |

Source: Japan Meteorological Agency, "Information on the 2024 Noto Peninsula Earthquake"

**Casualties**

1,629

Dead/Missing: 302

Injured: 1,327

**Damaged Dwellings**

Ishikawa Prefecture: 80,359

Toyama Prefecture: 20,718

Fukui Prefecture: 764

Source: Cabinet Office, "Regarding the State of the 2024 Noto Peninsula Earthquake" (As of July 30, 2024)

Collapsed Roads (route cut off)

Collapsed Buildings

# Emergency Disaster Response Headquarters set up immediately after the quake

Following the earthquake, the Company and Hokuriku Electric Power Transmission and Distribution Co., Ltd. immediately set up the Emergency Disaster Response Headquarters, which held its first meeting at 6:00 PM on the same day. Under the direction of the director-general (the company president), meetings were held a total of 70 times through March 15 to assess the damage to power facilities, report on the status of power outages and restoration response policies, and swiftly discuss and initiate measures to secure supply capacity based on supply-demand forecasts.

Emergency Disaster Response Headquarters established

# Large-scale power outage affecting a total of 69,700 homes: striving to restore power as soon as possible

The earthquake caused damage to facilities and houses, resulting in a total of approximately 69,700 households losing power in a large-scale outage (maximum at one time of approximately 40,000 households). With support from partner companies and other electric power companies based on the Disaster Coordination Plan, up to 1,400 people per day worked to restore operations as quickly as possible, supplying power with generator trucks in addition to repairing the power grid. As a result, supply was restored within about one month after the earthquake, except for some areas where early repairs were not feasible, such as areas rendered inaccessible by landslides.

## Homes Affected by Outage

Approx. **69,700** in total

## Distribution Equipment*

Leaning Utility Poles: Approx. 3,780
Broken Utility Poles: Approx. 770
Disconnected/Crossed Lines:
Approx. 1,690 locations

* As of the end of March 2024

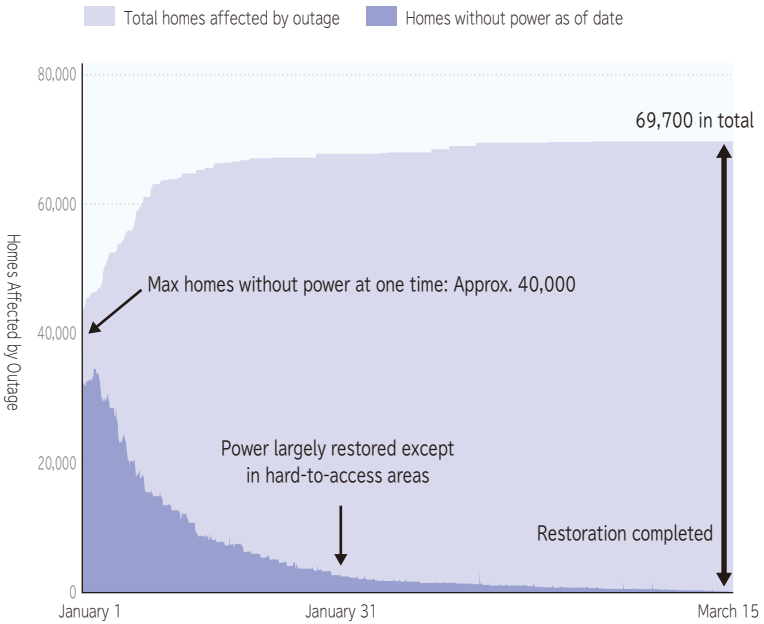
## Transmission Facilities

Cracked insulators, broken strands, etc. on some transmission lines

## Transformation Facilities

Transformers, switchgear, bushings, etc. damaged at some substations

## Change in Number of Homes Without Power Following Earthquake



Leaning utility poles (road damage)

Collapse of ground and mountain surfaces around 275 kV transmission towers

275 kV lightning arrestor devices damaged

## Structure of Repair Work

**Maximum of 1,400 people per day**

Approx. 650 employees of our Group (approx. 7,100 in total),
approx. 750 employees of other electric power companies (approx. 4,700 in total)

Makoto Bansho *
Hokuriku Electric Power Transmission & Distribution Company Suzu Distribution Center Head

Immediately after the earthquake, we were unable to survey the area due to blocked roads, and it was extremely difficult to assess the damage. The recovery workers conducted their work under harsh conditions due to intermittent large-scale aftershocks and snowfall.

In order to ensure safety while working to quickly restore power, we proceeded with restoration efforts sequentially, instructing workers to be aware of the surrounding conditions at all times and to take actions to protect their lives if they detected any danger. There were many new employees and younger workers at our distribution center who had no experience in disaster recovery, and there were concerns about how they would handle the situation, but on the scene they worked with a sense of purpose, and I strongly felt that our DNA as providers of electric power had been passed down to them.

Tomoki Takahashi *
Hokuriku Electric Power Transmission & Distribution Company Suzu Distribution Center

Immediately after the earthquake, I headed to Noto from my parents' home in Hakusan City, Ishikawa Prefecture. As we approached, we were left speechless at the transformed sight of the area, with fallen and leaning utility poles everywhere. This was my first experience in disaster response, and I was anxious, but I felt empowered by the encouragement of my supervisors, seniors, and colleagues, and by recognizing my duty to deliver electricity. We had to deal with severe conditions due to landslides and collapsed roads, but we worked in cooperation with those who came to support us, while placing the highest priority on safety. A customer said to me, "Thank you so much. I can finally go home." This filled me with determination, and I wanted to help everyone I could by delivering electricity to as many homes as possible. I would like to use this experience to continue to uphold and have pride in my duty as a power distribution worker to deliver a stable supply of electricity to our customers.

*Affiliations and positions are as of January 2024.

# Extensive Damage to and Emergency Shutdown of Nanao-Ohta Thermal Power Station

Units 1 (500,000 kW output) and 2 (700,000 kW output) of the Nanao-Ohta Thermal Power Station, which were in operation at the time of the earthquake, entered an emergency shutdown as a result of normal operation of their protective equipment. The earthquake caused extensive damage, including deformation of boiler piping, collapse of a coal reclaimer, derailment of a coal unloader, and sinking and cracking of roads on the premises.

Sunken stacker-reclaimer rails

Buckling/rupture of chimney support tower diagonal members

Deformation of boiler piping

Coal unloader derailment & rail deformation

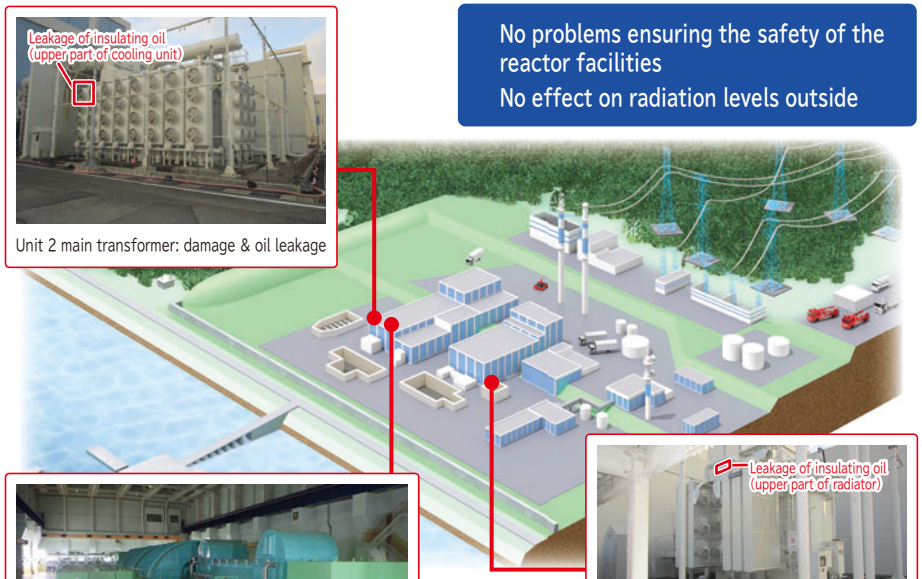
Collapsed reclaimer

Sunken & cracked roads

# Shika Nuclear Power Station: Damage to Some Equipment & Safety Secured

Both Units 1 and 2 had external power supplies, necessary monitoring equipment, cooling equipment, emergency backup power, and other such protective functions, and there were no problems with the safety of the reactor facilities. In addition, there was no change in the values reported by the monitoring posts installed at the plant, and there was no impact to radiation levels outside. However, there was damage to the Unit 1 startup transformer and Unit 2 main transformer. There was also oil leakage at Units 1 and 2, and damage to the thrust bearing of the Unit 2 turbine.

**No problems ensuring the safety of the reactor facilities**
**No effect on radiation levels outside**




Unit 2 main transformer: damage & oil leakage

Unit 1 startup transformer: damage & oil leakage

Damage to Unit 2 turbine

## ■ Information Dissemination During the Event

In the midst of this unprecedented disaster, we made use of press releases, our website, social media, and other means to accurately disseminate information in order to ensure that our customers received the answers they needed.

**Information**

- Power Outages
- Facility Damage
- The state of Shika Nuclear Power Station
- Help Desk for inquiries on special electricity rate measures and contracts

# “Together as One” for a Swift Recovery

**In order to resolve the power outage as soon as possible, we worked closely with Group companies as well as other relevant organizations and responded together as one.**

## Logistical Support

**We put into place a logistical support system and provided a wide range of support so that the Distribution Division could devote itself to the recovery work.**

### Bases of Operations

Command centers for recovery efforts were set up at Al Plaza Kashima and Noto Satoyama Airport. A logistical support leader and several assistants were deployed 24 hours a day to connect the bases with Disaster Response HQ and provide assistance and support for on-site operations.

### Power Distribution Administrative Support

Logistics support personnel were dispatched daily (including Saturdays and Sundays) from all divisions to the frontlines at the Wajima and Suzu Power Distribution Centers in addition to the Distribution Division at the Head Office to assist with clerical work.

Noto Satoyama Airport: Recovery Worker Standby Room

### Recovery Worker Facilities Installed

In addition to the transportation of relief supplies, it was essential to arrange lodging, meals, portable toilets, and human waste disposal to facilitate the smooth restoration of power outages, and the entire Group worked in unison to handle these tasks.

#### Accommodations

As many recovery workers gathered in the Noto region where transport, water service, and power were cut off, it was difficult to secure a place to stay. In addition to the cooperation of local inns and hotels, we secured sleeping accommodations by setting up trailer homes and container houses.

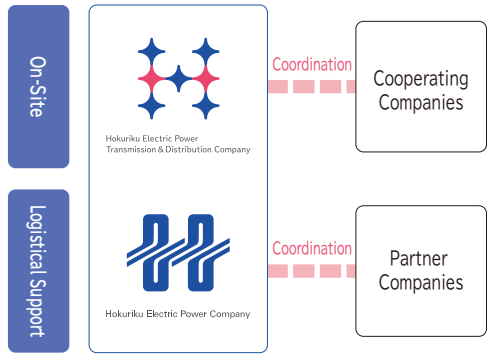
Shipping container housing

#### Sanitation

Maintenance and management of the company's installed portable toilets became a major issue as we worked to keep recovery workers' working environment in order around the clock. However, through coordination with national and local government we successfully established a disposal system.

Portable toilet installation

### Group-wide Efforts to Restore Power



Yoshitaka Hirachi *
Hokuriku Electric Power Transmission & Distribution Company Toyama Branch Office General Affairs Section Assistant Manager

Workers at the base of recovery operations at Noto Satoyama Airport coordinated with the General Affairs and Intelligence Team at the Head Office to replenish food and sanitary supplies, clean, refuel heaters, remove snow from tents, and perform other environmental upkeep. Recovery workers were working to restore power under harsh conditions, including inadequate sanitary facilities such as toilets and bathrooms. Under such conditions, I was most conscious of correctly receiving requests from the workers and promptly communicating them to the relevant sections in order to improve the environment as much as possible. I was determined to provide whatever logistical support I could in order to deliver electricity to customers as quickly as possible.

*Affiliations and positions are as of January 2024.

## Application of Generator Trucks

Continuous fueling of generator trucks was essential to provide a reliable supply of electricity to evacuation centers and other facilities. In addition to the Distribution and Power System Management divisions, administrative employees were also involved in the response.

### Around-the-clock Monitoring and Refueling Support

We monitored remaining fuel levels, observed tanker trucks making the rounds filling fuel storage drums, and refueled generator trucks 24 hours per day.

### Transport and Installation of Fuel Storage Drums

We transported fuel storage drums from stockyards to where generator trucks were deployed and installed them on location.

### Deployment of Tanker Trucks

More than 20 tanker trucks were secured from other electric power companies and other sources. We planned and led fueling routes based on road conditions and confirmed fueling status. Tanker trucks were stationed at Suzu Distribution Center, Wajima Distribution Center, and Noto Satoyama Airport to provide 24-hour fueling service.

Refueling Generator Trucks

## Individual Connection Support

In order to prevent electrical fires from occurring when the power was restored, power transmission was carried out individually according to the situation. Our employees went door-to-door to pass out information leaflets, and assisted individual customers in-person.

Power connection in the presence of the customer

Masahiko Mitsui *
Marketing & Sales Office

In order to keep the generator trucks that send electricity to evacuation centers in operation, we monitored them around the clock and resupplied them with new drums of diesel oil every four to six hours. We were under a lot of pressure because the work was different from our usual duties, and we were handling a hazardous material. Especially at night, we had to light up the inside of the tanks while refueling, which was very nerve-wracking. It was a tough job and we had to work day and night to keep the lights on, even sleeping in our vehicles, but when we went to the evacuation centers to greet the evacuees, we were told that they were very grateful to have electricity, which reminded me how important our duty was — that electricity was their lifeline and it was our job to deliver it to them responsibly.

*Affiliations and positions are as of January 2024.

# Cooperation with Relevant Organizations

## Collaboration with National Government (METI and MLIT) and local governments

■ We carried out recovery work while working closely with the Ministry of Economy, Trade, and Industry; and the Ministry of Land, Infrastructure, Transport, and Tourism; as well as local governments.

- Selection of critical facilities to be prioritized for power outage restoration
- Information sharing on routes which require road repairs or snow/obstacle removal in order to restore power

■ We worked closely with two cities and two towns in the Okunoto region (Wajima City, Suzu City, Noto Town, and Anamizu Town), which were hit particularly hard, by regularly and frequently sharing and exchanging information on the status of power restoration and other relevant matters.

## Cooperation with the Japan Ground Self-Defense Force and Japan Coast Guard

■ Japan Ground Self-Defense Force

- Transportation of key Group recovery personnel by helicopter

■ Japan Coast Guard

- Transportation of key Group recovery personnel by marine transport

Helicopter transport by Japan Ground Self-Defense Force

Marine transport by Japan Coast Guard

Kazuya Sanada
Community Relations & Development Division
Community Relations & Development Dept.
Manager

Immediately after the earthquake, I was stationed at the Ishikawa Prefectural Government Office as a local information liaison for disaster countermeasures, together with liaisons from the Distribution Division, to coordinate between the company and liaisons from the different prefectural departments and ministries. Because the scale of the disaster was completely different from past snow emergencies, we were involved in a wide range of activities: from tasks directly related to restoring power such as obtaining road opening information and priority fueling for vehicles related to the Group's recovery efforts, to others such as confirming the recovery status of prefectural water supply, requesting our offices and response centers to collect human waste, and coordinating the preparation of materials for the prefectural governor's press conference. We also coordinated the preparation of materials for the prefectural governor's press conferences. Although there was a constant sense of urgency, as a representative of the company I endeavored to coordinate with the local and the national government to the best of my ability so that power could be restored as soon as possible.

## Collaboration with Relevant Organizations (and Private Partners) Based on Disaster Cooperation Agreements

### Collaboration with Private Partners

■ HEIWADO CO., LTD.

- Use of parking area at store location (Al Plaza Kashima) as base of recovery operations
- Procurement of relief supplies (food, daily necessities, etc.)

■ AEON Co., Ltd.

- Procurement of relief supplies (food, daily necessities, etc.)

■ Central Nippon Expressway Company Limited (NEXCO CENTRAL)

- Priority use of closed highway sections

■ Maruichi Oil (local oil distributor)

- Priority refueling for vehicles related to our Group (refueling outside business hours)
- Priority use of oil depot as a fueling base for tanker trucks

■ Nihon BCP Corporation

- Arrangement of tanker trucks to refuel generator vehicles

■ Other

- Procurement of portable toilets and other rental equipment from NIKKEN CORPORATION
- Continuous procurement of premade meals for recovery staff from STAR FESTIVAL INC.

### Cooperation with Data Transmission Operators

■ NIPPON TELEGRAPH AND TELEPHONE WEST CORPORATION (NTT West)

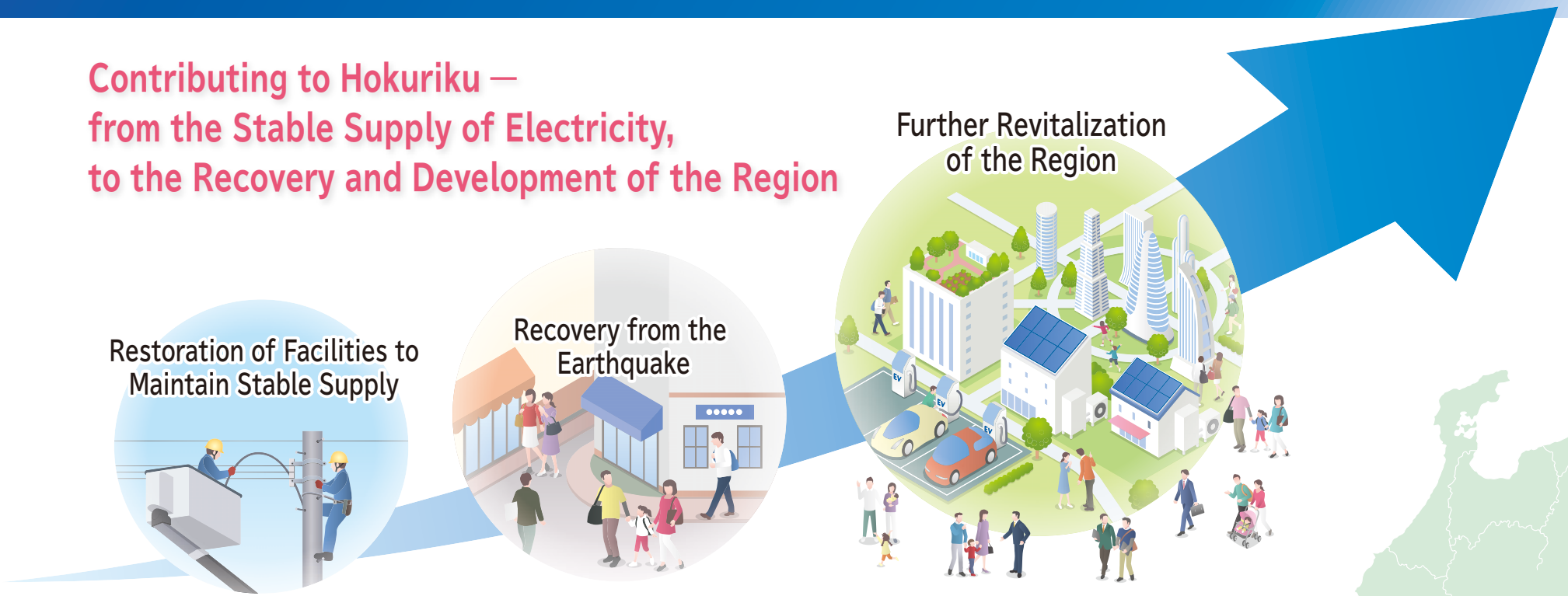
- Coordination for the smooth removal of electrical and communication equipment necessary for road opening

# The Duties of the Group Re-recognized, Following the 2024 Noto Peninsula Earthquake

In recognition of the great damage suffered by the Hokuriku region in the 2024 Noto Peninsula Earthquake, we have re-recognized the Group's duties: to ensure the stable supply of electricity to our customers, which is our most important mission, and to develop alongside the Hokuriku Region, where the Group is based.

As a comprehensive energy business operator with its roots in Hokuriku, we continue to contribute to the region through the Group's business activities, for the earliest possible recovery and further revitalization.

## Contributing to Hokuriku — from the Stable Supply of Electricity, to the Recovery and Development of the Region

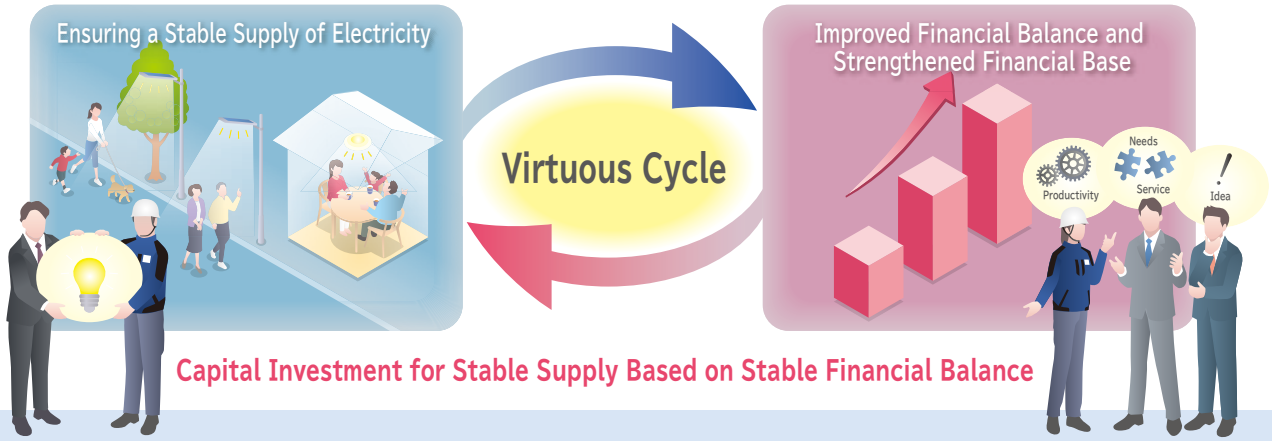


# Pillar I Ensuring a Stable Supply, Improving the Financial Balance, and Strengthening the Financial Base

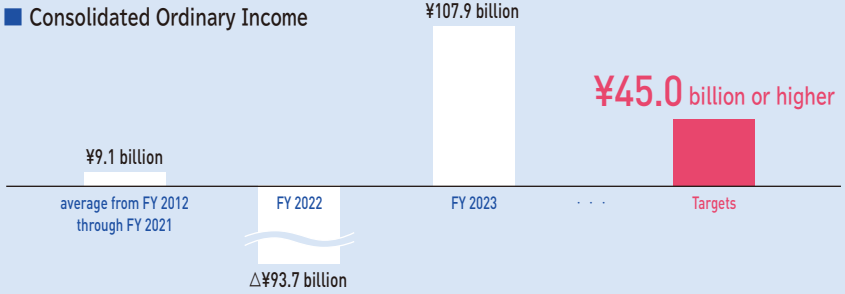
In order to maintain a stable supply of electricity, which is our most important mission, we are working to ensure the early restoration of damaged facilities on a full basis, further strengthen our disaster response capabilities based on this experience of the earthquake, and further secure stable supply capabilities.

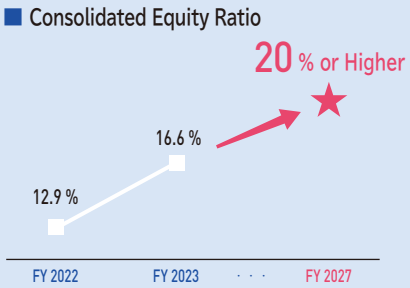
In addition, we will work to further improve our financial balance and strengthen our financial base early on, in order to continue delivering electricity to our customers.

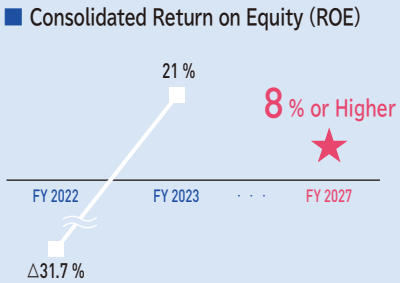
## Stable Supply is the Key to Power Business Management




## Financial Objectives




## Main Efforts

### (1) Ensuring a stable supply of electricity

| Category | Details | |
|---|---|---|
| Recovery initiatives for affected facilities | ● Restoration of Thermal Power Station | ▶P23 |
| Appropriate conservation and operational management through the use of AI and digital technology | ● Efforts in Thermal Power Generation<br>● Efforts in Hydroelectric Power Generation | ▶P24 |
| Actions for Shika Nuclear Power Station | ● Efforts toward Full Restoration of Damaged Facilities<br>● State of Responses to Reviews on Conformity to the New Regulatory Requirements<br>● Steady Implementation of Measures to Improve Safety (Human Side and Facility Side) | ▶P25 |
| Initiatives in response to 2024 Noto Peninsula Earthquake (Hokuriku Electric Power Transmission & Distribution Company) | ● Restoration of Distribution Facilities, and Transmission and Transformation Facilities<br>● Establishment of Reconstruction Dept. for the Noto Area<br>● Strengthening of Efforts to Speed Up and Digitalize the Assessment of Damage to Facilities | ▶P28 |
| Efforts to secure a stable supply in the future | ● Measures to Address Aging of Power Transmission and Distribution Facilities<br>● Efforts to Secure Work Execution Capability | ▶P30 |
| Enhancing disaster response capabilities in response to the 2024 Noto Peninsula Earthquake | ● Overall Picture of Strengthening of Disaster Response Capabilities | ▶P31 |

### (2) Further improvements in balance of income and expenditures to achieve financial targets

| Category | Details | |
|---|---|---|
| Revenue Growth Initiatives | ● Optimization of Supply and Demand Control<br>● Expansion of Profits from Non-electricity Businesses | ▶P34 |
| Cost Reduction Initiatives | ● Efforts to Reduce the Costs of Procuring Materials and Equipment | ▶P35 |

# Ensuring a Stable Supply of Electricity

Given the impact of the 2024 Noto Peninsula Earthquake, and in order to fulfill the Group's most important mission of ensuring a stable supply of electricity, we work to fully restore power generation facilities and transmission and distribution facilities, further strengthen our disaster response capabilities, and properly respond to the reviews on conformity to the new regulatory requirements for Shika Nuclear Power Station.

**Even More Stable Supply**

**Knowledge Gained from the recovery activities for the 2024 Noto Peninsula Earthquake**

**AI and Other Digital Technologies**

## MESSAGE Power Generation

### Seisho Shiotani

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

The most important mission is ensuring a stable supply of electricity. The Noto Peninsula Earthquake that occurred on January 1, 2024, caused extensive damage to our power generation facilities. Nanao Ohta Thermal Power Station suffered serious damage to its boilers and other equipment, but our hard work on the recovery efforts allowed us to resume operations by this summer, when electricity demand reaches its annual peak. Shika Nuclear Power Station suffered damage to transformers and other equipment, but there were no safety issues with the reactor facilities. We continue to work toward the full restoration of Shika Nuclear Power Station, as well as properly responding to the reviews on conformity to the new regulatory requirements while reflecting the lessons learned from this earthquake.

Amid the continuing unstable international energy situation, we promote initiatives to maximize profits while ensuring a stable supply, including the use of AI for early detection of problems and improvement of power generation efficiency, and strengthening of integrated management functions for supply and demand control, electricity trading, and fuel procurement.

## MESSAGE Transmission and Distribution

### Kazuya Tanada

Representative Director & President
Hokuriku Electric Power Transmission & Distribution Company

Our facilities for power distribution, transmission, transformation, and communication were severely damaged by the Noto Peninsula Earthquake that occurred on January 1 of this year. Power outages affected up to approximately 40,000 households. The Hokuriku Electric Power Group mobilized all its resources to restore power, as well as working with the national and local governments. We also received support from transmission system operators and other organizations across the country. As a result, all power outages were resolved, except in certain cases, such as when it was not possible to confirm the integrity of the customer's equipment.

The earthquake strongly reaffirmed our commitment to continue providing a stable supply of electricity to our customers. Going forward, under the slogan "Together as One for Noto," we will work to fulfill our mission by prioritizing the earliest possible recovery and reconstruction from the disaster on a full basis, while steadily implementing daily supply and demand control, facility maintenance and construction, and resilience improvements.

We will strive to contribute to the development of the Hokuriku region, by steadily addressing changes worldwide, proactively adopting new ideas and innovations, and taking on the challenges of reform and creation.

# Recovery Initiatives for Affected Facilities

Thermal Power Generation

## Results

### Nanao Ohta Thermal Power Station

**Restoration by the peak summer demand period**

- Unit 1 (500 MW)
  Operation restarted on Jul. 2, 2024
- Unit 2 (700 MW)
  Operation restarted on May. 10, 2024

**COLUMN** こころをひとつに能登 (Together as One for Noto)

### Handling of Disaster Waste at Nanao Ohta Thermal Power Station

We have been conducting tests to examine the feasibility of co-firing wood chips made from wood waste as biomass fuel at Nanao Ohta Thermal Power Station Unit 2, using waste generated from the demolition of houses and other buildings following the 2024 Noto Peninsula Earthquake.

We will continue to work to contribute to solving regional issues and supporting the recovery of disaster-affected areas.

Processing

Wood chips made from disaster waste (wood waste)

## Restoration of Thermal Power Station

At Nanao Ohta Thermal Power Station Units 1 and 2, which were halted by the 2024 Noto Peninsula Earthquake, we used drones to inspect upper locations inside the boilers, and promptly identified the damaged areas and extent of the damage. A team of 900 people, including our employees, as well as staff from group companies and plant manufacturers, worked hard to restore operations, and we were able to restart Unit 2 on May 10 and Unit 1 on July 2, putting in place a system ready to meet the high demand for thermal power generation this summer.

Based on this experience, we will work to improve our preparedness for large-scale natural disasters. To this end, our efforts will include identifying equipment and parts that are vulnerable to damage, creating and improving manuals for conducting inspections, and looking into ways to maintain spare parts and supplies.

Boiler repair work at Nanao Ohta Thermal Power Station

### Actions Taken on Main Equipment

| Category | Damage Summary / Actions | (Scheduled) Completion Date |
|---|---|---|
| Boilers | Extensive damage (deformation, cracks, etc.) was observed in pipes and tubes inside the boilers of Units 1 and 2.<br>Pipes and tubes with damage (deformation, cracks, etc.) were replaced. | Completed (Operation restarted)<br>Unit 1: July 2, 2024<br>Unit 2: May 10, 2024 |
| Turbines and generators | Deformation was observed in bearing parts of the turbines and generators of Units 1 and 2.<br>Bearing parts were replaced. | |
| Coal unloaders | Derailment of the travel mechanism and rail deformation were found in one of the two coal unloaders.<br>Restored by replacing the rail, and placing the wheels on the rail. | Completed (June 2024) |
| Stacker-reclaimers | Subsidence of the traveling rail was found in one of the two stacker-reclaimers.<br>Restored by filling in and leveling the subsided area. | Completed (June 2024) |
| Reclaimer | The reclaimer was found to have collapsed.<br>A simple reclaimer is scheduled to be installed. | Within FY 2024 |
| Smokestack | Buckling and breakage were found in some parts of the steel framework supporting the smokestack.<br>Diagonal bracings of the steel framework to support the smokestack are being replaced, and reinforcements are being applied. | Within FY 2024 |
| Buildings and on-site roads | Subsidence, tilting, and other damage were found for some buildings, roads, and other structures within the power station site.<br>Detailed surveying, such as subsidence measurement, will be carried out, and repair methods will be determined for restoration. | Within FY 2025 |

# Appropriate Conservation and Operational Management through the Use of AI and Digital Technology

Thermal Power Generation / Hydroelectric Power Generation

**Results**

## Number of Thermal Power Stations with AI System Units Installed

**6** Units

### Benefits

- Prevention of problems
- Improved operational efficiency

## Number of Dams with Optimal Dam Operation Systems for Hydroelectric Power Stations Installed

**5** Dams

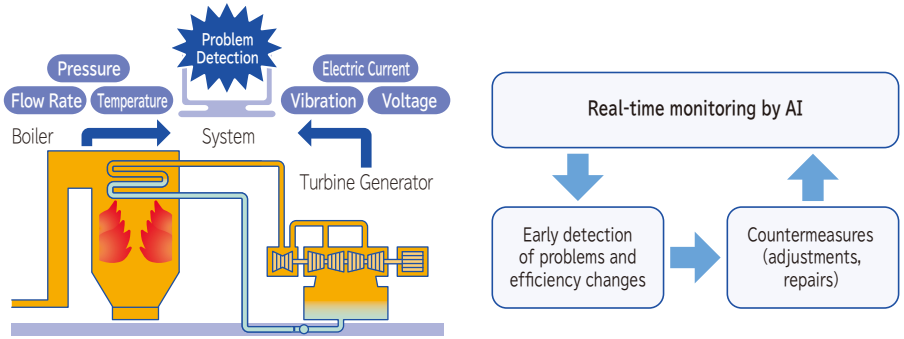
### Benefits

- Increased power generation (approx. 15 million kWh/year)

**In order to operate power generation facilities stably and increase generation efficiency, appropriate management for maintenance and operation is essential. We utilize AI and other digital technologies to reinforce several measures to prevent problems, as well as for efficient operation and increased power generation.**

## Efforts in Thermal Power Generation

Collection and analysis of massive amounts of operating data by utilizing AI 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 in Hydroelectric Power Generation

We are working to increase the amount of hydroelectric power generation by optimizing operations using the Inflow Prediction AI, which accurately predicts dam inflow based on past precipitation data and inflow records, and the Optimal Dam Operation System, which combines AI technology with the data and know-how that we have accumulated in relation to dam and power station operations.

We are also working on systems to prevent problems by detecting signs of abnormalities, by collecting equipment operation data with information collection devices, in order to ensure the stable operation of power generation facilities. Furthermore, we are planning to add AI functions to power station monitoring cameras, for early detection of signs of equipment abnormalities such as oil or water leaks from the images captured by the cameras.

# Actions for Shika Nuclear Power Station

## Tasks

### Full Restoration of Damaged Facilities

### Appropriate Response to Reviews on Conformity to the New Regulatory Requirements

See Page 26

### Steady Implementation of Measures to Improve Safety

- Human Side See Page 26
- Facility Side See Page 27

**Shika Nuclear Power Station is a crucial power source from various perspectives, including stable supply, decarbonization, and improved financial balance.**

**While working toward the full restoration of the damaged facilities, we will carefully examine the new knowledge gained from the experience of the 2024 Noto Peninsula Earthquake and appropriately reflect it in our earthquake and tsunami review, as well as properly responding to the reviews on conformity to the new regulatory requirements by the Nuclear Regulation Authority (NRA). We will further push ahead with safety improvement measures, step by step, and aim to restart operations on the premise of securing sufficient safety and the understanding of the local community.**

## Efforts toward Full Restoration of Damaged Facilities

We expect it to take some time to fully restore the main transformer of Unit 2, which will require a complete replacement. During this time, we will be carrying out engineering work to use existing facilities, and we plan to be able to receive power from a total of five external power lines by the first half of FY 2025. For the turbine and generator of Unit 2, we have started a full-scale investigation to check for any damage.

Most of the other damaged areas have been repaired either completely or with temporary measures, and we continue work on the restoration, step by step, with a target of completing it by the end of FY 2024.

### Actions Taken on Main Equipment

| Category | Damage Summary / Actions | (Scheduled) Completion Date |
|---|---|---|
| Transformers | Damage and oil leakage in the Unit 1 startup transformer and the Unit 2 main transformer<br>Fractography and structural analysis suggested that the damage was caused by resonance. Measures including resonance suppression shall be taken. | First half of FY 2025<br>Engineering work is to be carried out to enable power reception from five lines. |
| Transmission lines and substations | Damage to bushings (porcelain tubes for insulation) in the gas-insulated switchgear (GIS) at the Nakanoto Substation, defects in insulators for transmission lines, and broken strands in jumper cables<br>Insulators, jumper cables, and bushings have been replaced. | Completed (June 2024) |
| Turbines and generators | In the Unit 2 low-pressure turbine, an alarm indicating a large differential expansion occurred following the earthquake, and thrust bearings and other parts were damaged.<br>The generators, high-pressure turbines, and low-pressure turbines are currently undergoing an overhaul. | To be determined<br>To be discussed based on the results of the overhaul |
| Spent fuel storage pools and related facilities | Fallen objects in the spent fuel storage pool of Unit 2<br>The fallen objects were removed on March 29, 2024. | Completed (March 2024) |
| Buildings, on-site roads, and related facilities | Subsidence, bumps, tilting, and other damage were found for some buildings, roads, and other structures within the site.<br>Restoration is scheduled to be completed by the end of FY 2024, following detailed surveying, such as subsidence measurement. | Within FY 2024 |

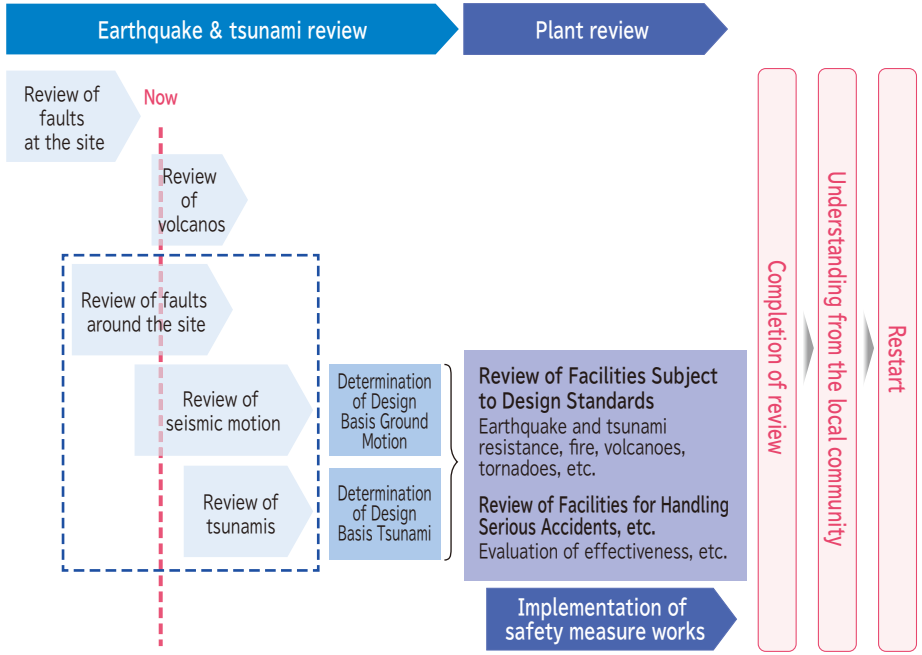
## State of Responses to Reviews on Conformity to the New Regulatory Requirements

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.

With regard to the evaluation of faults around the site, seismic motion, and tsunamis, we will carefully examine the findings in relation to the 2024 Noto Peninsula Earthquake, and reflect them as appropriate in the explanations at the review meetings.

At present, we are working on reviews related to volcanoes that will not be affected by the 2024 Noto Peninsula Earthquake.

### Review Process




: The new knowledge gained from the experience of the earthquake shall be carefully examined, and reflected in the earthquake and tsunami review as appropriate.

## Steady Implementation of Measures to Improve Safety (Human Side)

### Efforts to Maintain and Improve Technical Capabilities

In order to enable a reliable restart and ensure continuation of safe and stable operation, we perform training using simulators and take other educational measures.

### Nuclear Disaster Prevention Training

We continue to conduct drills to help maintain and improve our ability to respond to natural disasters, such as earthquakes or tsunamis, and other events that could occur on an unprecedented scale.

We took part in a nuclear disaster prevention training program, conducted on November 23, 2023, by Ishikawa Prefecture, Shika Town, and other organizations; we confirmed the division of roles and coordination with the government and the local public authorities.

Emergency response center (power station)

Evacuation screening

### Efforts to Gain Understanding Concerning Safety

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*, based on our daily dialogues with the local community.

Shika Nuclear Power Station Virtual Tour on our website

*Hamanasu Net* Newsletters

The cable TV program *Shika Nuclear Power Station News*

## Steady Implementation of Measures to Improve Safety (Facility Side): Proven to Be Effective Even in the 2024 Noto Peninsula Earthquake

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. These measures functioned effectively even during the 2024 Noto Peninsula Earthquake. We will continue to steadily implement safety improvement works.

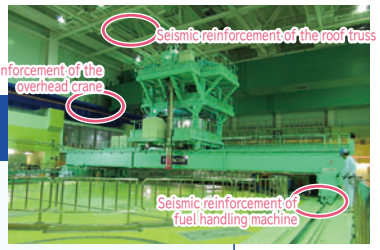
### Overview of safety improvement works

Red text : Actual track record of functioning effectively during the 2024 Noto Peninsula Earthquake

#### (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)

⇒ The seismic motion of the 2024 Noto Peninsula Earthquake was less than 1,000 gal, and seismic integrity was confirmed to have been secured for the reactor buildings, turbine buildings, seawater heat exchanger buildings, and equipment in the buildings.

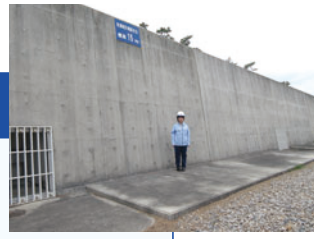


Seismic Reinforcement inside the Reactor Building

#### (2) Preparing for Tsunamis

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

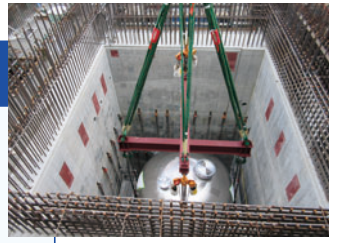
⇒ Even though the sea level rose to about 3 meters above normal, the height of the site ground (11 meters) plus the height of the seawall (4 meters) allowed no flooding into the site or the buildings.


Seawall

#### (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

#### (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.)

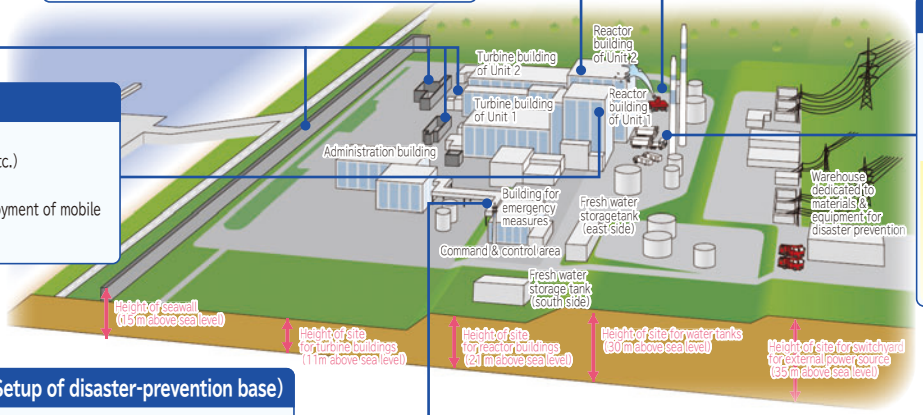
⇒ Despite the transformer failures, which reduced the number of external power sources from 5 to 3, a sufficient backup power supply was secured.

Permanently Installed Alternative AC Power Supply Equipment

#### (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

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

Establishment of emergency response building and expanded emergency response center

⇒ The emergency response building effectively served as the command center for gathering information, giving instructions and orders, and performing other tasks.

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 as Measure for Forest Fires

# Initiatives in Response to 2024 Noto Peninsula Earthquake

Hokuriku Electric Power Transmission & Distribution Company

## Tasks

- Steady Implementation of Restoration Work in Line with Local Governments' Recovery Plans, etc.
  - Work has begun on replacing utility poles (about 3,000) and repairing broken or entangled high-voltage cables (about 1,700 locations)
  - Power supply to temporary housing (approx. 5,600 households) is ongoing
- Establishment of Reconstruction Dept. for the Noto Area (July 2024)
- Map System with Information Centralization and Analysis Functions under Development

▶See Page 29

**COLUMN** こころをひとつに能登 (Together as One for Noto)

### Simplification of Application Procedures for Drone Flights in the Event of a Disaster

After the earthquake, the entire Noto Peninsula was designated as an emergency response airspace,* and drone flights would require prior on-site verifications and applications. We requested that the national government simplify the application procedures for drone flights required for inspecting infrastructure facilities with a high degree of urgency, with an eye on enabling swift inspections of facilities in the event of disasters in the future. As a result of discussions with the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism, Article 132-92 of the Civil Aeronautics Act (Special Exceptions for Search, Rescue, etc.) has been applied, and the procedures for flying drones have been simplified.

*Emergency response airspace:
Airspace where flights of unmanned aircraft are prohibited as a general rule, when flights of aircraft for emergency duties, such as police or firefighting activities, are expected.

## Restoration of Distribution Facilities, and Transmission and Transformation Facilities

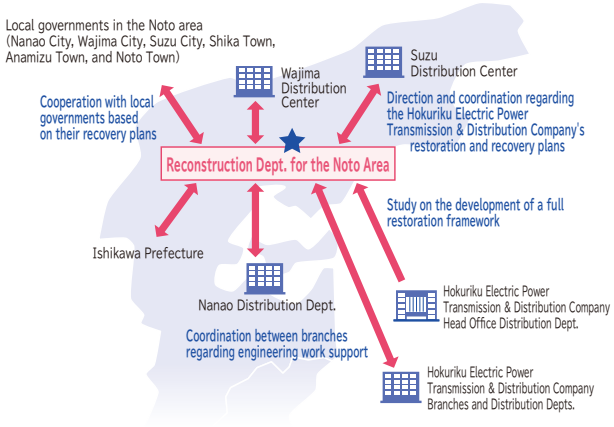
Since immediately after the earthquake, we have been making group-wide efforts to carry out temporary restoration work on damaged facilities, and have been working to resolve power outages as quickly as possible and ensure a stable supply of electricity.

A significant number of power distribution facilities, mainly in the Noto area, need to be repaired or replaced. For example, approximately 3,000 utility poles, including slanted poles and temporarily installed/repaired poles, will need to be replaced or otherwise worked on. We are putting our maximum resources into the full restoration of these facilities, while making adjustments to the local government' s recovery plans and other relevant schemes. In addition, in order to protect the livelihood of those affected by the disaster, we are responding to the electricity contract applications from approximately 5,600 households in the order of their temporary housing being completed.

For power transmission and transformation facilities, we are steadily repairing or replacing damaged equipment, and also working to maintain spare parts and supplies in preparation for future disasters.

## Establishment of Reconstruction Dept. for the Noto Area (July 2024)

In July 2024, we established the Reconstruction Dept. for the Noto Area directly under the Ishikawa Branch of the Hokuriku Electric Power Transmission & Distribution Company, as an organization to implement overall coordination of recovery plans for the Okunoto area, and operations related to post-earthquake recovery including construction planning. With a base near the affected area, we are working on recovery activities in a more flexible manner.



Noriyasu Hashimoto
Hokuriku Electric Power Transmission & Distribution Company Ishikawa Branch General Manager of Reconstruction Dept. for the Noto Area

The earthquake gave me my first opportunity to accept support staff dispatched from other electric power companies. Although extensive facility damage forced us to continue working in harsh conditions, we were able to proceed with temporary restoration work thanks to the generous support and assistance of people from the Hokuriku Electric Power Group, other electric power companies, and related organizations.

Full-scale restoration and recovery will continue to require significant time and effort. Taking pride in our unprecedented endeavor to recovery, and under the slogan "Together as One for Noto," the staff of the Nanao Distribution Department and the Wajima and Suzu Distribution Customer Service Centers will work in close cooperation with local governments and road-related organizations, to carry out the engineering tasks and deliver peace of mind to the local community.

### Examples of Restoration Work in Collaboration with Local Governments and Other Relevant Parties

Field Survey (Mountain Area)

Field survey in collaboration with local governments and other relevant parties

Before Restoration Work (City Area)

After Restoration Work (City Area)

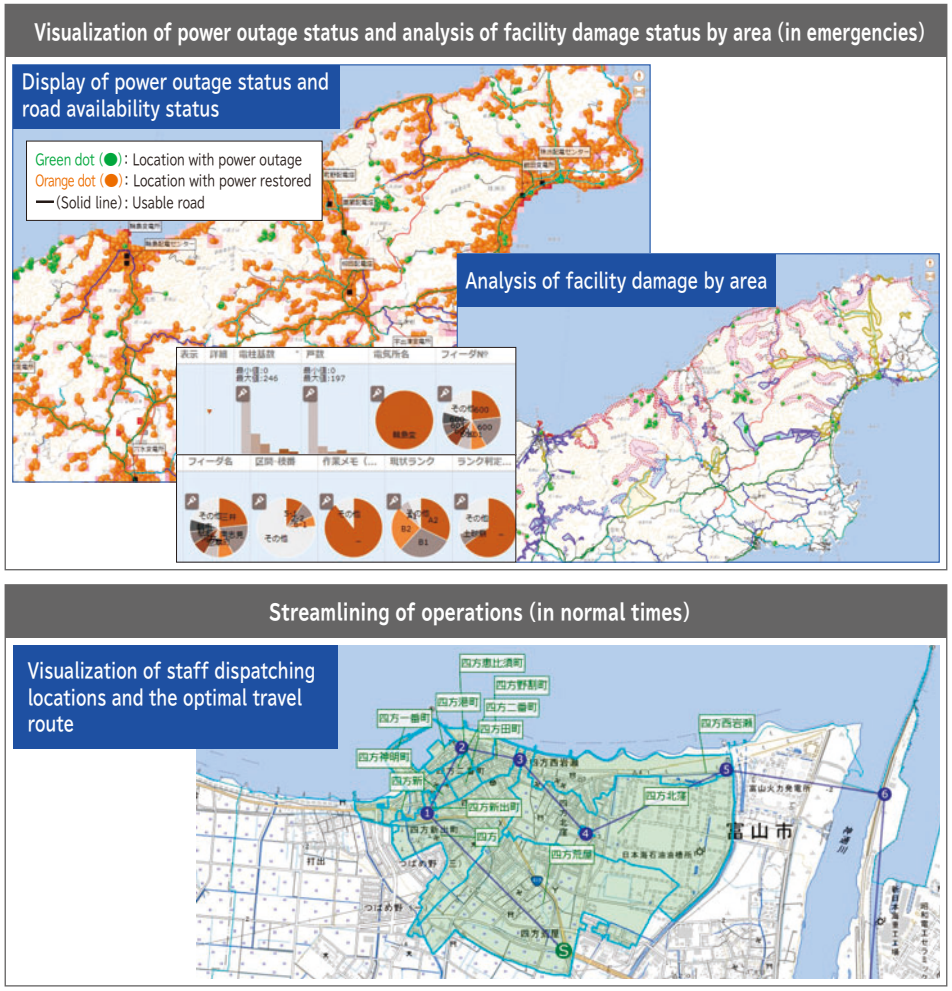
## Strengthening of Efforts to Speed Up and Digitalize the Assessment of Damage to Facilities

For the formulation of recovery plans following the 2024 Noto Peninsula Earthquake, we used the Facility Damage Information Sharing System introduced in 2020, and also made trial use of the Company-wide NW Map System that was under development, to centrally manage and visualize road details and other information, and to analyze the state of damage to facilities in each area (making the most of the systems and digital transformation).

In FY 2024, we aim to build a full-scale Company-wide NW Map System, with additional functions, to more efficiently understand situations in both normal and emergency settings, and to conduct more sophisticated analysis work.

### Facility Damage Information Sharing System

### Company-wide NW Map System



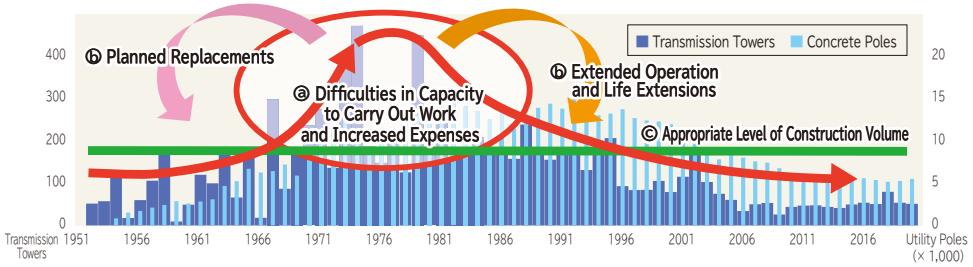
# Efforts to Secure a Stable Supply in the Future

## 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 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.

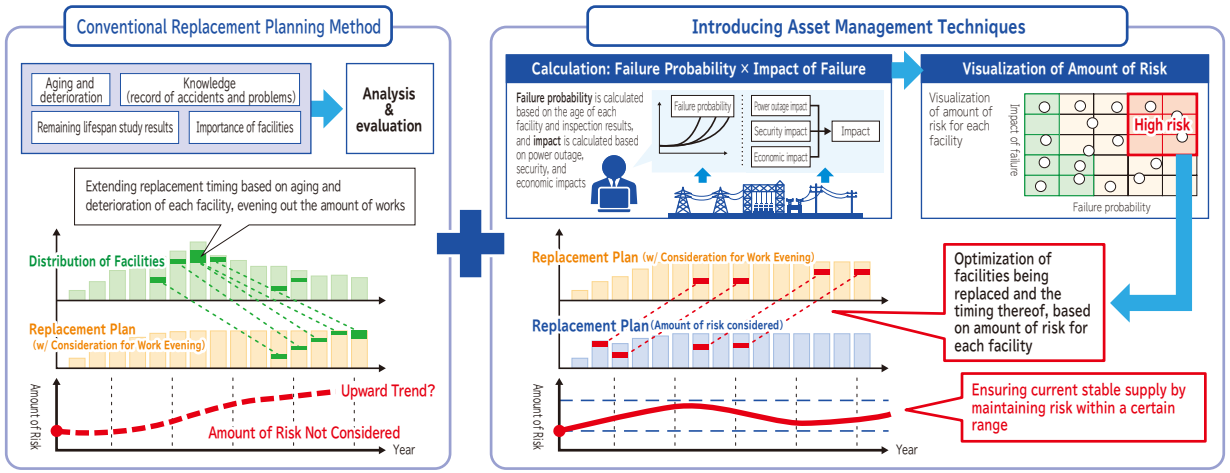
### The Need for Long-Term Measures to Address Aging

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.

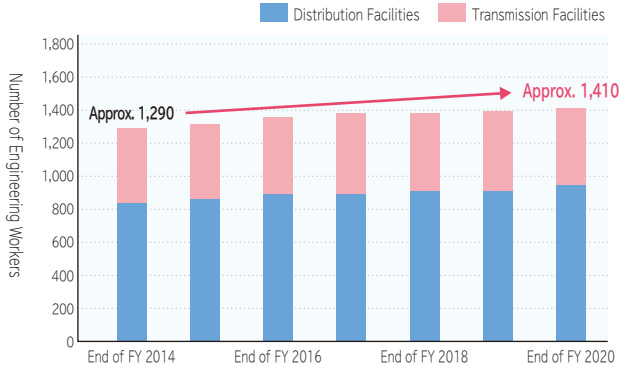



## Efforts to Secure Work Execution Capability

Following a nationwide decline in engineering workers, we established a corporate group called E-League Hokuriku in collaboration with companies engaged in engineering works on transmission and distribution facilities in the Hokuriku region. This group is working 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.

As a result of this initiative, the number of engineering workers has increased by about 10% since the group was established.

● Number of Engineering Workers over Time



Teaching Material for Technical High Schools

Transmission Tower Cards

Social Media

Promotional video

# Enhancing Disaster Response Capabilities in Response to the 2024 Noto Peninsula Earthquake

## Actions Taken Following the Noto Peninsula Earthquake

### ■ Provision of Information to Customers

We provided information on various topics, such as power outages after the earthquake, conditions of power generation facilities, and special measures for electricity fees.

#### Press Releases

A total of **61*** press releases issued

#### Social Media

X (formerly Twitter): **269*** posts in total
(14,130,000* views in total)

*Total for Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company (Jan. to Mar. 2024)

### ■ Collaboration with Relevant Organizations

#### Collaboration with Local Governments

| Local Governments | Period | No. of Liaisons |
|---|---|---|
| Ishikawa Prefecture | Jan. 2 to Mar. 31* | 2 |
| 6 municipalities: Wajima City, Suzu City, Noto Town, Anamizu Town, Shika Town, and Nanao City | No liaison staff were stationed in the towns or cities under agreement. After the earthquake, however, dedicated contact personnel are stationed at our offices 24 hours a day, 7 days a week, and work closely with the relevant personnel of each town or city, including making necessary emergency visits. | |

*The contact system has continued in place after April as well.

#### Collaboration with Private Sector Companies

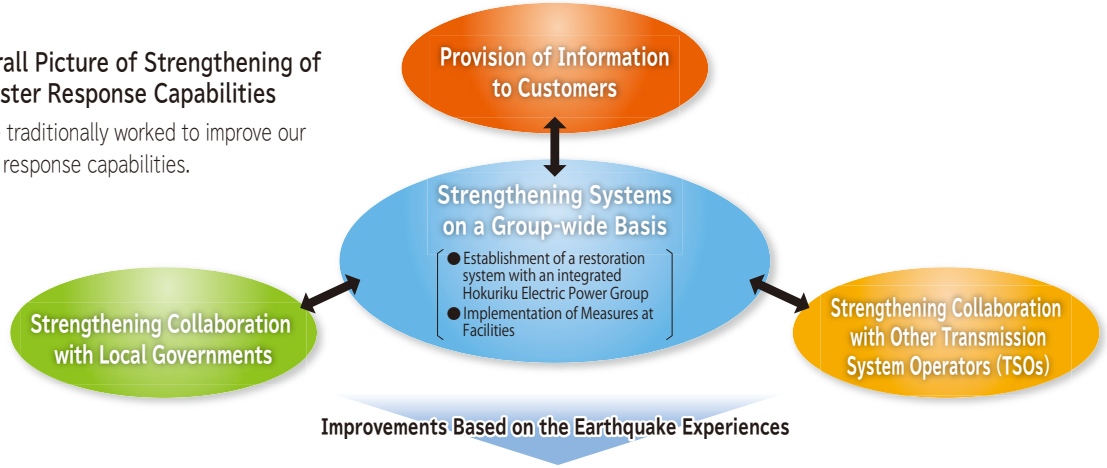
Agreements with **10** companies

As a responsible power company, we have always worked to strengthen our disaster response capabilities, and these efforts were also proven effective in the 2024 Noto Peninsula Earthquake.

In order to enable even swifter and more effective disaster response, we will make improvements based on the experiences of the 2024 Noto Peninsula Earthquake.

### ■ Overall Picture of Strengthening of Disaster Response Capabilities

We have traditionally worked to improve our disaster response capabilities.




#### Provision of Information to Customers

- Prompt and accurate provision of information to customers, taking advantage of the characteristics of various media (the press, radio, social media, websites)

#### Strengthening Systems on a Group-wide Basis

- Further improvement of disaster response capabilities using digital and IoT technologies, such as expanded use of drones in facility patrols following disasters, and adding and improving functions to various systems for better understanding of facility damage
- Further strengthening of the back-office operation system

#### Strengthening Collaboration with Local Governments

- Further strengthening collaboration with companies and other organizations regarding necessary supplies and other matters in preparation for disasters, as well as reinforcing liaisons with local governments

#### Strengthening Collaboration with Other Transmission System Operators (TSOs)

- Studies on further strengthening cooperation among TSOs

**COLUMN** こころをひとつに能登 (Together as One for Noto)

### Certificate of Appreciation from the Minister of Economy, Trade and Industry, for Earthquake Response Efforts

Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company received a certificate of appreciation from Minister of Economy, Trade and Industry Ken Saito, for our contribution to the restoration of power outages caused by the 2024 Noto Peninsula Earthquake.

Similar letters of appreciation were also presented to TSOs in other areas (Hokkaido, Tohoku, Tokyo, Chubu, Kansai, Chugoku, Shikoku, and Kyushu) and to companies that assisted by dispatching support staff.

Going forward, we will continue to work to strengthen collaboration with local governments, private sector companies, and other TSOs, to ensure swift and effective responses to disasters, based on the experience of this earthquake.

# Message from the Director of Corporate Planning and Accounting

Director & Executive Vice President **Wataru Hirata**

## Achieving Financial Targets and the Goals of the New Mid-Term Business Plan

With the “Hokuriku Electric Power Group New Medium-Term Management Plan (FY2023-2027)” (hereinafter referred to as the “New Mid-term Business Plan”) formulated and announced in April 2023, our top priority is to recover and strengthen the Group's financial base, which was severely damaged by soaring fuel and wholesale electricity market prices following the 2022 invasion of Ukraine. Furthermore, in October 2023, in light of progress in improving operational efficiency and changes in the environment, including revisions to electricity rates, we announced financial targets for three indices: consolidated ordinary income, consolidated equity ratio, and consolidated return on equity.

In addition to financial targets, we have also announced our policy on growth investment and shareholder returns. In terms of investment for growth, we will invest a total of 150 billion yen between fiscal 2023 and 2027, carefully selected with an emphasis on profitability, in a timely manner to promote carbon neutrality in the Hokuriku region and to realize high growth businesses. Regarding shareholder returns, we will strive to meet the expectations of our shareholders while working to recover our damaged financial base.

With regard to future electricity demand, it is anticipated to rise due to increased activity in the semiconductor and data center industries resulting from the digital transformation (DX) trend. To ensure the stable delivery of electricity, we will first work toward restarting the Shika Nuclear Power Station, which is pivotal to our carbon neutrality efforts, and make capital investments that will contribute to the decarbonization of thermal power plants. In addition, we will improve the financial balance in order to secure a stable financial base to power our investments through continued efforts such as optimization and maximization of the supply-demand balance.

Consolidated ordinary income for FY2023, the first year of the New Mid-term Business Plan, was 107.9 billion yen, a significant increase of 201.6 billion yen over the previous year, and the consolidated equity ratio recovered more than 3 points to 16.6%. However, the 2024 Noto Peninsula Earthquake caused about 61.0 billion yen in damage to the Group's facilities, and considering the need to prepare for future disasters, the Group must continue to accumulate profits.

The FY2024 Action Plan formulated in April of this year is designed to further strengthen our disaster response capabilities and BCP, based on the experience we gathered through the Noto Peninsula Earthquake of 2024, while adhering to the three pillars of management and financial targets. We will steadily implement the various measures set forth in the Action Plan to achieve the goals of the New Mid-term Business Plan.

## Initiatives to Increase Stock Price

We believe that it is our responsibility as a publicly listed company to manage our business with an awareness of the cost of capital and stock price, and as part of our efforts to enhance corporate value, we have set a profitability target of 8% or more for ROE, even without restarting the Shika Nuclear Power Station.

In FY2023, our stock price has been rising amid a large surplus, a favorable result in the compliance assessment determining if a fault line was present beneath Shika Unit 2, and a favorable turnaround in the business environment surrounding nuclear power. We will continue to work toward achieving our financial targets, which will lead to a higher stock price.

In the current fiscal year, we will work on thorough improvements in operational efficiency and business domain expansion, as stipulated in the FY2024 Action Plan, and continue to appropriately address various issues such as the restart of the Shika Nuclear Power Station and the decarbonization of power sources. In addition, from the standpoint of further raising awareness of the need to enhance corporate value, we introduced a transfer-restricted stock compensation plan this fiscal year.

We will continue to engage in dialogue with our investors and make concerted efforts to enhance our corporate value.

# Further Improvements in Balance of Income and Expenditures to Achieve Financial Targets

In addition to working to ensure the early achievement of our financial targets in FY 2024 and beyond, we will also aim to increase profits beyond the 45 billion yen consolidated ordinary income target, so that we can respond to various risks such as natural disasters and rising fuel prices.

## Strengthening of Efforts in Each Pillar of the New Mid-term Business Plan

| | Main Subjects | Specific Efforts |
|---|---|---|
| Revenue Growth | ● Optimization of Supply and Demand Control | ● **Further improvement of supply-demand balance** through **integrated management and analysis of supply and demand control, electricity trading, and fuel procurement** by the Power Trading & Fuel Dept.<br>● **AI-based optimization of supply and demand control**, including improved accuracy in predicting power demand and amount of run-of-river hydroelectric power generation, and optimization of vessel allocation plans. |
| | ● Development from Existing Electric Power Business | ● **Provision of new value and services in addition to electricity,** including **storage batteries, EVs, and solar power, which can help with BCP measures,** as well as carbon neutrality services and more. |
| | ● Expansion and Development of New Business Domains | ● Aiming to establish a top-level digital solutions business in the Hokuriku region through **strengthening cooperation among Group companies involved in information and communications business** and other efforts.<br>● **Effective and efficient investment in overseas business operations and new business domains, based on** accumulated **know-how** in business investment and M&A. |
| Cost Reductions | ● Thorough Streamlining of Management | ● **Further streamlining of equipment-related costs and various expenses, through measures such as further reduction of material procurement costs** by promoting upstream purchasing and improvement of maintenance management efficiency by introducing new technologies. |
| | ● Productivity Improvement through Operational Reforms and Digital Transformatiotn | ● **Acceleration of company-wide penetration of digital transformation (DX), through promoting the utilization of Kintone and generative AI across the company, and developing DX human resources, based on DX strategies** as a certified digital transformation company. |

## Achievement of Financial Targets in the New Mid-term Business Plan

■ 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

Aiming to further increase profits in order to prepare for various risks, such as natural disasters and rising fuel prices.

# Revenue Growth Initiatives

## Tasks

### Optimization of Supply and Demand Control

- Strengthening of integrated management functions in relation to electricity supply and demand
- AI-based optimization of electricity supply and demand control
- Utilization of derivative transactions
- Diversification in fuel procurement

### Expansion of Profits from Non-electricity Businesses

- Provision of new value and services developed from the existing electric power business

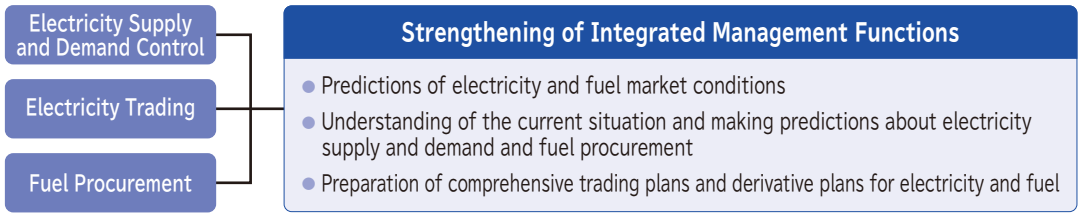
See Page 50

- Expansion and development of new business domains

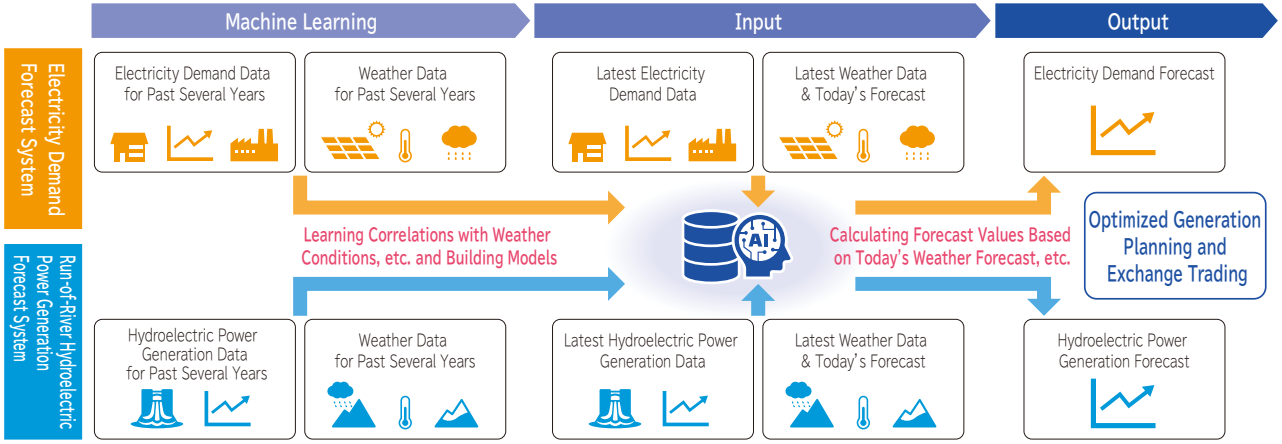
See Page 53

## Optimization of Supply and Demand Control

We are working to further enhance functionality by leveraging the knowledge and experience we have gained through integrated management and analysis of electricity supply and demand control, electricity trading, and fuel procurement by setting up the Power Trading & Fuel Department in 2022.




With the aim of maximizing profits, we utilize AI to optimize electricity supply and demand control, through such efforts as improving accuracy in forecasting electricity demand and run-of-river hydroelectricity generation, and optimizing vessel allocation plans.




## Expansion of Profits from Non-electricity Businesses

One of the three pillars of our management is our policy of Expansion of New Business Domains for Sustainable Growth. In order to expand profits from non-electricity businesses, we work to provide new value and services developed from our existing electricity business, as well as to expand and develop new business domains including overseas businesses. These efforts are expected to contribute to the sustainable growth of the Group and to the reconstruction and development of the Hokuriku region.

# Cost Reduction Initiatives

## Tasks

### Thorough Streamlining of Management

- Efforts to reduce the costs of procuring materials and equipment
- Improvement of maintenance management efficiency by introducing new technologies

See Page 36

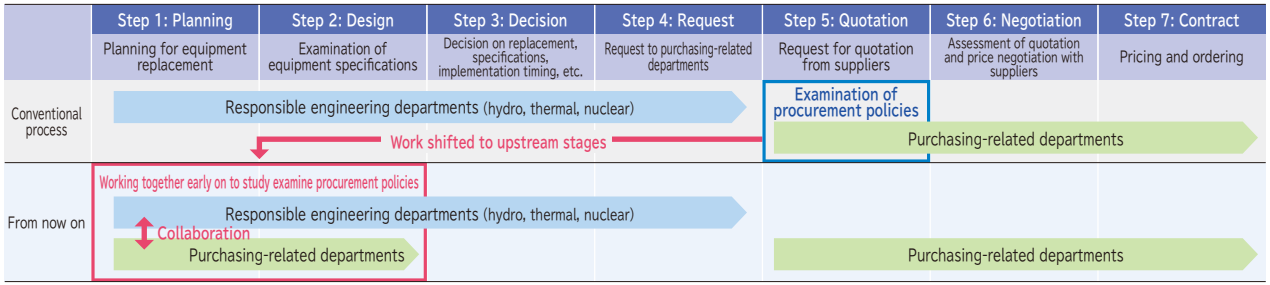
### Productivity improvement through operational reforms and digital transformation

See Page 57

## Efforts to Reduce the Costs of Procuring Materials and Equipment

### Promotion of Upstream Purchasing (Hokuriku Electric Power Company)

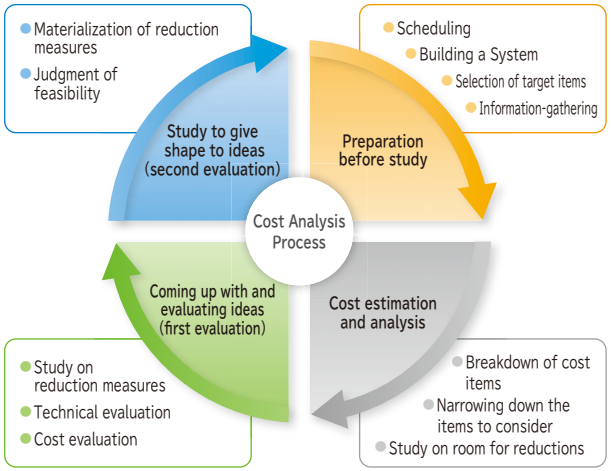
In addition to conventional approaches, such as diversification of procurement methods (increased competitive bidding, bulk ordering, etc.), and revision of specifications and construction methods, we work on upstream purchasing, where the responsible engineering departments and the purchasing-related departments collaborate from the planning stage to discuss and implement the most appropriate procurement measures, in order to further reduce material and equipment procurement costs.




### Improvements to Material and Equipment Procurement (Hokuriku Electric Power Transmission & Distribution Company)

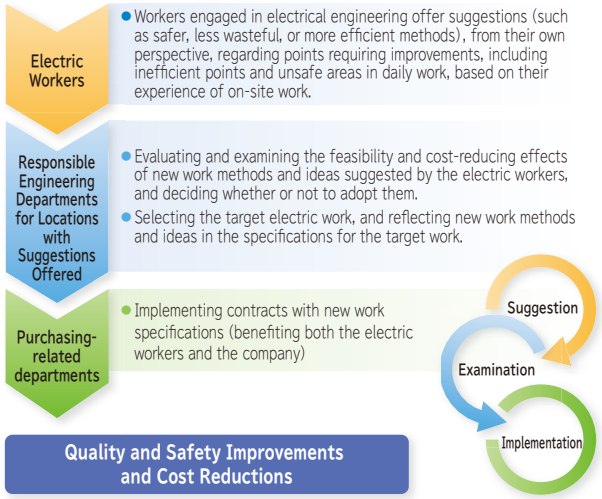
#### Cost Analysis and Reduction Efforts

In collaboration with manufacturers and workers, we examine room for price reductions through analysis of manufacturing and working costs, in order to reduce procurement costs.




#### Collection of Ideas from Electric Workers

We solicit and adopt a wide range of ideas and suggestions from all electric workers, in order to improve quality and safety as well as reduce costs.



# Improvement of Maintenance Management Efficiency by Introducing New Technologies

## Efforts for Efficient Maintenance Management of Hydroelectric Power Stations

With the aim of implementing efficient maintenance at hydroelectric power stations, we not only review the methods and timing of patrols and overhaul work to the maximum extent that does not affect safety, but also proactively introduce new technologies such as AI, ICT, and IoT equipment to promote smarter maintenance work, for improved productivity, more advanced periodical inspections, and earlier detection of accidents and defects.

### Examples of New Technology Applications

- Using drones to inspect penstocks, for reduced maintenance on steep slopes
- Using water surface drones to check headrace tunnels, which allows for waterway inspections during power generation
- Using satellite images to remotely monitor natural ground movement, for more advanced maintenance work with less labor
- Using image analysis AI to automatically detect deformations in images taken during internal inspections of waterways, for more advanced waterway soundness assessment work with less labor

## 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 for thermal power stations from TBM (time-based maintenance) to CBM (condition-based maintenance) and optimizing our inspection cycles based on factors such as aging and deterioration conditions.

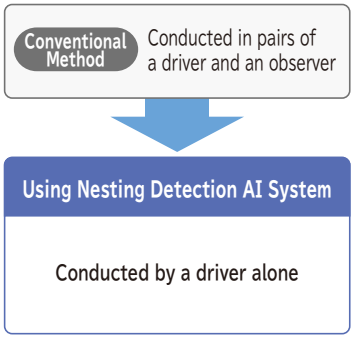
In this regard, we have acquired System S* certification as an organization that has been assessed as implementing sufficient and advanced measures for safety management, and have been able to extend the interval for regular voluntary inspections of boilers and turbines to six years. (Without this certification, regular inspections are required at intervals of two years for boilers, and four years for turbines.)

*We first acquired System S certification in October 2018, and since 2022, all thermal power stations collectively have been certified.

## Bird Nest Patrol Using Nesting Detection AI System

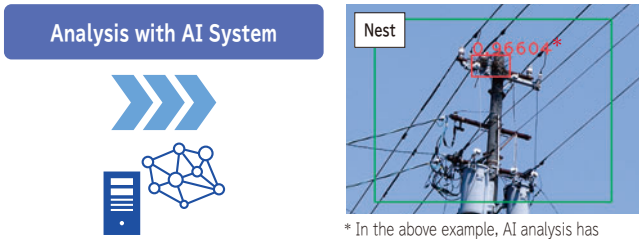
Wild birds, such as crows, sometimes nest on utility poles from early spring to early summer each year. Because their nests can cause power outages, we conduct patrols for these as part of our efforts to prevent power outages. Our bird nest patrols, which previously were conducted in pairs of a driver 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.

FY 2022: Pilot introduction (introduced at some offices)
FY 2023: AI upgraded, and introduced at more offices
FY 2024: Introduced at all offices




●Image capture with vehicle-mounted cameras

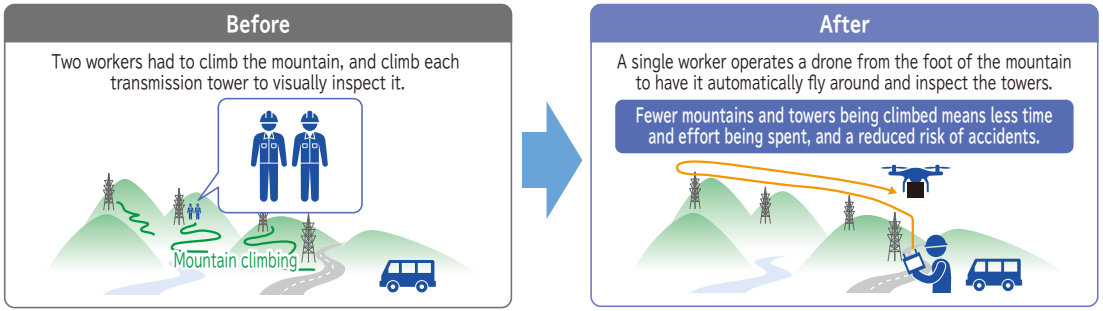
●Analysis with nesting detection AI system




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

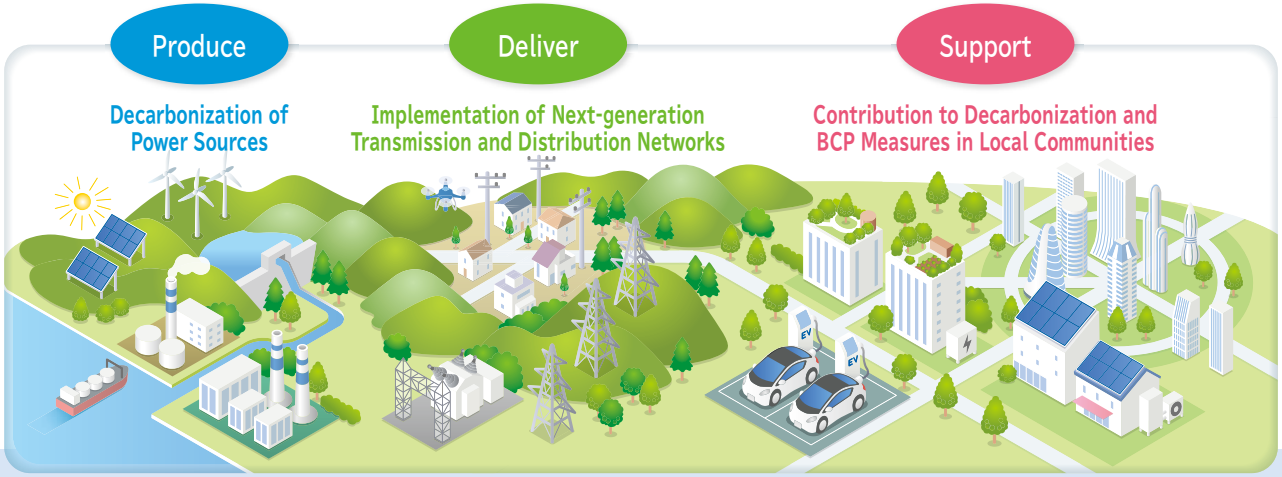
## Utilization of Drones for Transmission Line Facility Inspections

We have established routes for drones to fly over transmission lines, and are working to reduce the time spent traveling to sites, the time spent working, and the number of workers required, as well as to improve safety, by using drones for automatic patrols and inspections.



# Pillar Ⅱ Working with Local Communities to Promote Decarbonization

We will spearhead the advancement of carbon neutrality in the Hokuriku region through a comprehensive approach encompassing “generate,” “deliver,” and “support.” This strategy extends beyond decarbonizing power sources and next-generation transmission and distribution networks including decarbonization support services incorporating BCP requirements.




## Targets

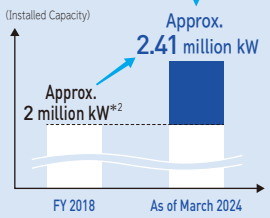
### Group Targets and Recent Results

**Amount of Renewable Energy Power Sources under Development**

Renewable energy development amount increased by **1 million kW or higher** (3.0 billion kWh/year or higher) by the early 2030s*1

Approximately +410,000 kW*3 (Approx.2.0 billion kWh)

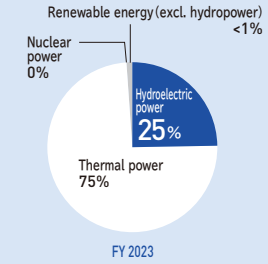
Achieved Up to One Third of the Development Target




**Ratio of Non-fossil Sources**

**50% or higher** electricity generated from non-fossil-fuel sources by FY 2030

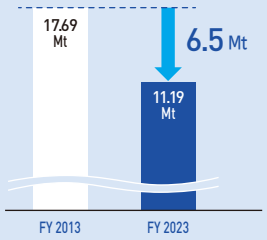
25%




**$CO_2$ Emissions**

**50% or greater reduction in $CO_2$ emissions** by FY 2030*4

37% reduction




## Main Efforts

### (1) Produce

| Category | Details | |
|---|---|---|
| Decarbonization of Power Sources | ● Development of Renewable Energy Sources | ▶P39 |
| The Need for Nuclear Power | | ▶P42 |
| Hokuriku Electric Power Company’s Power Source Mix | | ▶P43 |

### (2) Deliver

| Category | Details | |
|---|---|---|
| Implementation of Next-generation Transmission and Distribution Networks | ● Efforts toward Increased Sophistication of the Distribution System<br>● Initiatives to Reinforce Local Systems through “Push-type” Approaches | ▶P44 |

### (3) Support

| Category | Details | |
|---|---|---|
| Support for the Region’s Decarbonization | ● Integrating Decarbonization in Noto’s Reconstruction Efforts<br>● Joint Proposal to Be Decarbonization Leading Areas<br>● Establishment of Local Energy Companies in Collaboration with Local Governments<br>● Utilization of Surplus Electricity from Waste-to-energy Power Generation, Post-FIT Electricity, and Other Sources<br>● Development of Hydroelectric Power Generation that Contributes to Regional Development | ▶P46 |

*1 Compared to FY 2018 *2 The company’s total installed power generation capacity is approximately 8 million kW *3 Development capacity with operation/implementation already decided *4 Compared to FY 2013, based on retail electricity sales volume

# 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.**

## Roadmap toward Achieving Carbon Neutrality

| | | | 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<br>Renewable energy development amount increased by 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) | Achievement of Carbon Neutrality |
| | 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<br>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)<br>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<br>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<br>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<br>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 | |

## Participation in the GX League

The basic concept of the GX League, "simultaneously achieving corporate growth, consumer happiness, and contributions to the global environment," aligns with our policy of becoming carbon-neutral by 2050. This is why we joined the GX League, which started in FY 2023. Through our participation, we aim to collaborate with other players taking on the challenge of GX, to achieve carbon neutrality by 2050.

## Promotion of Green Finance (ESG Bond Issuance)

In FY 2021, we issued our first green bond as part of our proactive promotion of green finance. In FY 2022, we issued transition bonds to promote further efforts to achieve carbon neutrality.

### Issuance Overview, Status of Appropriation of Funds Procured and Environmental Improvement Effects (as of the end of March 2024)

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<br>15.3 billion yen/10 years<br>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<br>(2) Spending on transmission and distribution network projects |
| Target Projects | Renovation of existing hydroelectric power stations (targeting 21 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)<br>(2) Strengthening of transmission and distribution networks |

Status of Appropriation of Funds Procured and Environmental Improvement Effects of Target Facilities*1 (FY2023)

| | | |
|---|---|---|
| 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)<br>FY 2022: 2.6 billion yen ( 0 billion yen)<br>FY 2023: 2.9 billion yen ( 0 billion yen)<br>Total: 10 billion yen (1.9 billion yen) | (1) 36.5 billion yen (17.6 billion yen)<br>(2) 2.2 billion yen ( 2.2 billion yen)<br>Total: 38.8 billion yen (19.9 billion yen) |
| Unappropriated Balances*3 | Already appropriated | (1) 5.5 billion yen (2) Already appropriated |
| Installed Capacity | 995 MW *4 | (1) 210 MW *6 |
| Electricity Generated | 2,134,788 MWh/year | (1) 1,500,000 MWh/year (planned value) *6 |
| Amount of $CO_2$ Emissions Reduced | 975,491 t-$CO_2$/kWh *5 | (1) 1,000,000 t-$CO_2$/kWh *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 2024, 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 Unappropriated balances are to be held in cash and deposits, and appropriation of the transition bond is to be completed by FY 2024.
*4 For the power stations under renovation, the estimated installed capacity after the completion of the renovation was used.
*5 Estimation method: 2,134,788 [MWh] × 0.481 [kg-$CO_2$/kWh] ($CO_2$ emission intensity for FY 2023) × 0.95 (transmission loss) / 1,000 = 975,491 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

# Produce Decarbonization of Power Sources

As a responsible energy provider, the Group is advancing decarbonization through a diversified approach that leverages the unique attributes of each power source and regional characteristics, based on a premise of stable supply.

## Efforts toward Decarbonization

We will decarbonize our power sources and advance decarbonization by collaborating with other companies.

### Renewable Energy (Hydroelectric, wind power, etc.)

Major power sources for decarbonization.
**Development of renewable energy sources, including hydropower and wind power, will be promoted by means of collaboration with other companies, etc.**

### Thermal Power

Thermal power is necessary for supply and demand balance and as a stable supply source to complement the output fluctuations of renewable energy power sources caused by weather conditions.
**We work toward decarbonization by increasing biomass co-combustion ratios and upgrading to high-efficiency power generation stations.**

Balancing stable supply and decarbonization

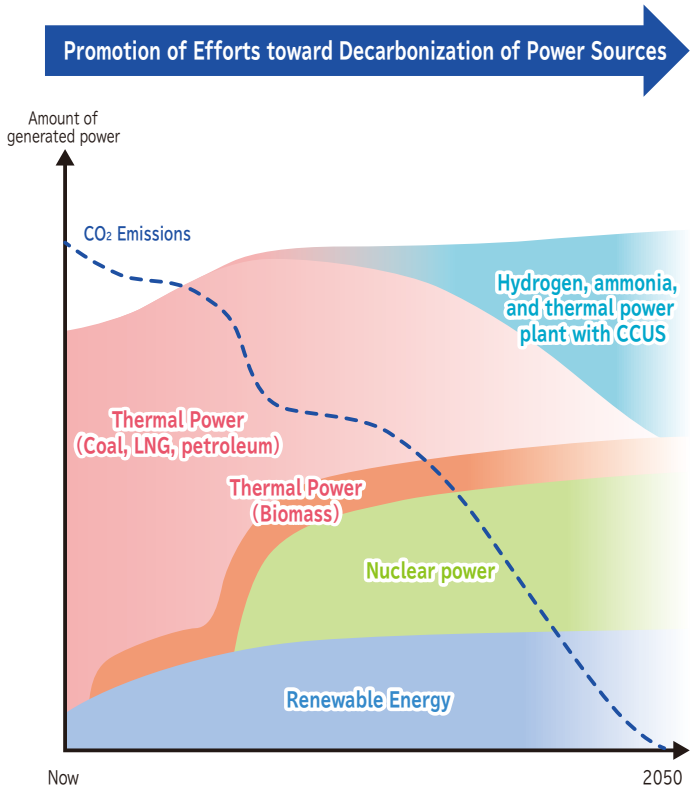
### Nuclear Power

Nuclear power is an important baseload power source contributing to decarbonization.
**The utilization of nuclear power is fundamentally premised on "safety first."**

### Hydrogen, ammonia, and CCUS

Effective measures for zero emission thermal power.
**We work toward commercialization and introduction by proactively participating in discussions and studies, including collaboration with other companies.**

● Image of decarbonization of power sources




## MESSAGE Renewable Energy

**Mitsuhiro Oda**
Managing Executive Officer
Deputy General Manager of Nuclear Power Division

Pushing forward with decarbonization is a major social issue, and the Group, as a trusted and preferred responsible energy provider, has formulated a comprehensive roadmap for achieving carbon neutrality by 2050. Initiatives to decarbonize our power generation sources are indispensable for realizing this vision. We have established interim targets, including a flagship goal to expand our renewable energy capacity by over 1 GW in the early 2030s relative to FY 2018 levels.

Initiatives to achieve these objectives include leveraging the Hokuriku region's abundant water resources by developing new hydroelectric facilities like the Betsumatadani Power Station, and implementing comprehensive repowering initiatives for existing hydroelectric power stations. Moreover, we are advancing various initiatives, including our participation in the Nyuzen offshore wind project — the first offshore wind project in the Hokuriku region — and increasing biomass co-combustion ratios at Tsuruga Thermal Power Station Unit 2 and Nanao Ohta Thermal Power Station Unit 2.

In our pursuit of carbon neutrality, we are committed to advancing renewable energy development while further strengthening our collaboration with businesses, local communities, and regional stakeholders.

# Decarbonization Initiatives for Power Sources

## Results

### Amount of Renewable Energy Power Sources under Development

**+410,000 kW**[*1]

*1 Compared to FY 2018
Development capacity with operational or implementation approval

(Breakdown)

Hydroelectric Power: 30,000 kW

Wind Power: 10,000 kW See Page 41

Biomass: 240,000 kW See Page 41

Photovoltaic: 130,000 kW See Page 50
(including PPA and Easy Solar)

### Ratio of Non-fossil Sources

**25%**

### $CO_2$ emission reduction

**37% reduction**[*2]

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

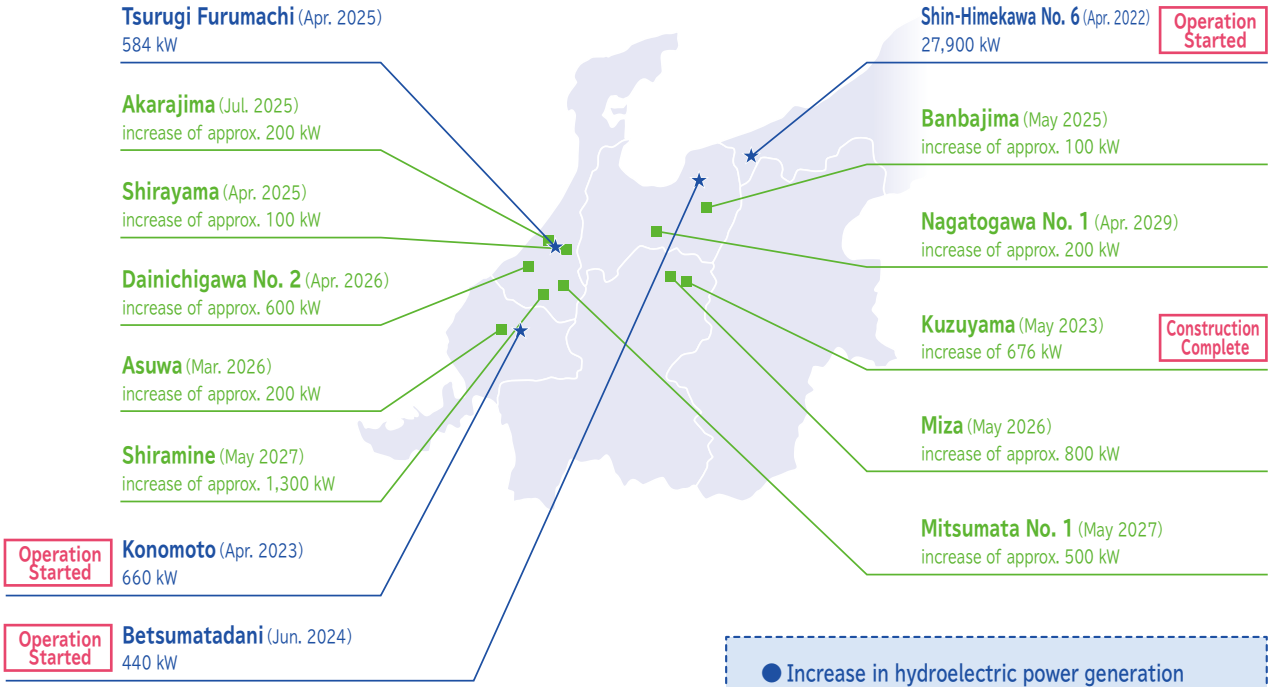
## Development of Renewable Energy Sources

### Development of Hydroelectric Power Generation

Since our inception, we have harnessed the Hokuriku region's abundant water resources to develop and expand our hydroelectric power generation capabilities.

In the future, to further utilize the abundant water resources of the Hokuriku region, we will continue to work to increase hydroelectric power generation by constructing new hydroelectric power stations and repowering existing ones, pushing forward with the decarbonization of power sources.

★ New Development (Planned Opening) ■ Repowering (Planned Construction Completion)



Betsumatadani Power Station: building and water turbines and generators

● Increase in hydroelectric power generation
(Compared to FY 2018)

**130 GWh/year** (Values during operation)

(Breakdown)

New Development: **50 GWh/year**

Existing power station repowering and optimization: **80 GWh/year**

(Including gains from advanced dam management systems, detailed on p.24)

## Development of Wind Power Generation

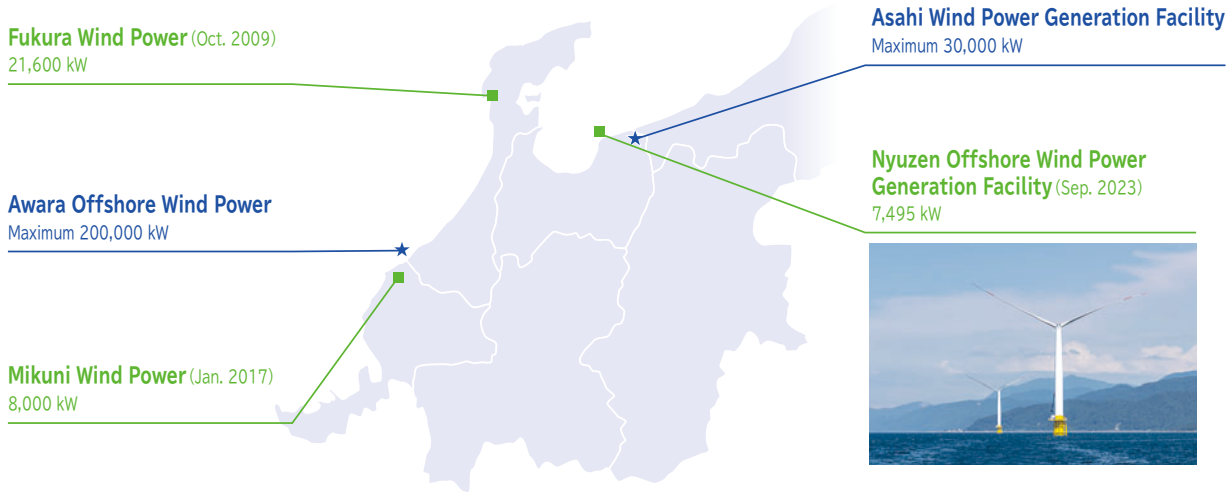
To achieve carbon neutrality, we work to develop wind power generation assets within and beyond the Hokuriku region, including collaborations with other companies.

In March 2022, we formed a consortium with Mitsui O.S.K. Lines, Ltd. and Toho Gas Co., Ltd. to participate in an offshore wind power generation project in Taiwan.

In addition, we constructed the Hokuriku region' s first offshore wind power station in Nyuzen Town, Toyama Prefecture, working with Venti Japan Inc. and JFE Engineering Corporation, which commenced operation in September 2023.

Additionally, we are conducting feasibility studies for an onshore wind power generation project in Asahi Town, Shimoniikawa District, Toyama Prefecture.

★ Survey/Study in Progress
■ Operation Has Started (Date of operation)




**Formosa I Offshore Wind Project** (Taiwan)
128,000 kW

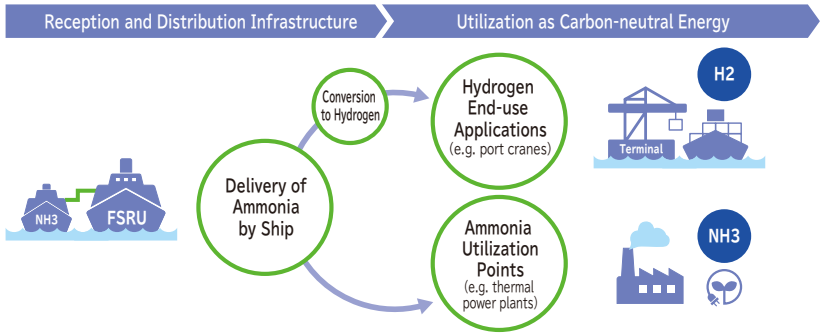
## Decarbonization of Thermal Power Generation

In pursuit of increasing our biomass co-combustion ratio, we have undertaken power generation equipment retrofits and the installation of dedicated fuel storage silos and transport conveyors at Tsuruga Thermal Power Station Unit 2 and Nanao Ohta Thermal Power Station Unit 2, targeting the commencement of operations for these upgraded facilities in FY 2024.

In October 2023, we partnered with Fukui Prefecture and Mitsui & Co., Ltd. to establish a hydrogen and ammonia supply chain. We are conducting a feasibility study for implementing floating ammonia storage and regasification facilities at Tsuruga Port.

Tsuruga Thermal Power Station biomass fuel storage silo (installation completed)

● Conceptual Diagram of Hydrogen and Ammonia Supply Chain



# The Need for Nuclear Power

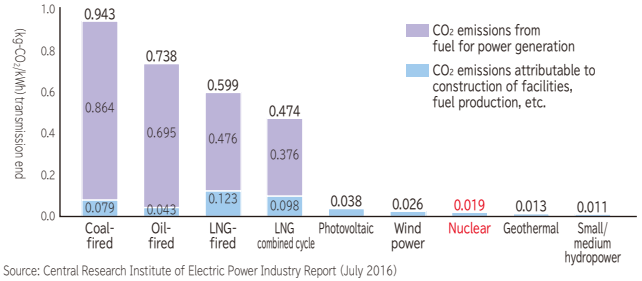
**Given the country' s low energy self-sufficiency rate, the proper energy mix is important for Japan, built on stable supply, environmental suitability, and economic efficiency, with the major premise that safety should come first. From the standpoints of ensuring a stable supply, achieving carbon neutrality, 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 $CO_2$ Emissions by Sources

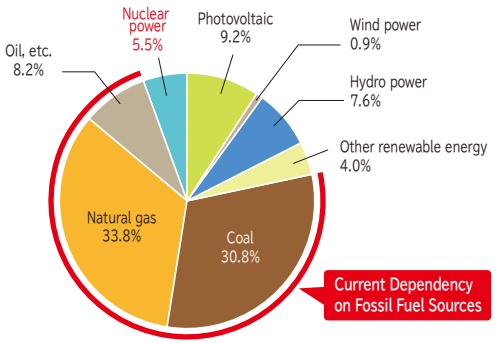
Nuclear power generation does not emit $CO_2$ when generating electricity, akin to renewable energy sources like solar and wind power. Since nuclear power is a reliable baseload power source providing substantial stable electrical output, regardless of weather conditions or time of day, it is crucial to achieving our 2050 carbon neutrality goals.

● $CO_2$ Emissions per kWh by Sources




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

● Japan's Power Generation Mix (FY 2022)

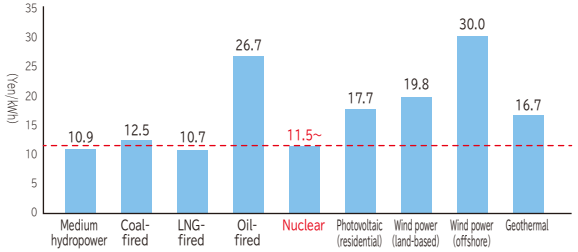



Source: Compiled based on *Comprehensive Energy Statistics* by the Agency for Natural Resources and Energy

### ❷ 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. Moreover, nuclear power is less affected by fuel price volatility due to the smaller proportion of fuel costs in its overall generation cost compared to thermal power generation.

● Power Generation Cost by Sources (2020 Model Plants)

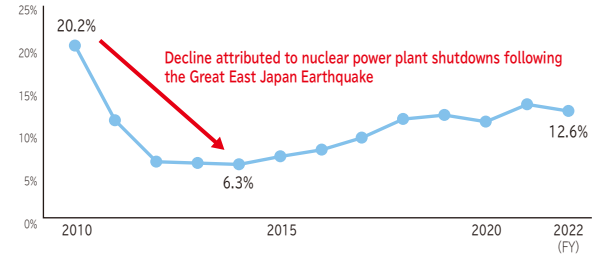



Source: Created based on the Sep. 2021 *Report on Power Generation Cost Verification for the Basic Policy Subcommittee*, by the Power Generation Cost Verification Working Group

### ❸ Energy Self-sufficiency Rate

Japan relies on other countries for the bulk of its energy resources, with an energy self-sufficiency rate of only 13% (data from FY 2022). 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.

● Japan's Energy Self-sufficiency Rate




Source: Compiled based on *Comprehensive Energy Statistics* by the Agency for Natural Resources and Energy

## MESSAGE Nuclear Power

**Akira Fukumura**
Managing Executive Officer
General Manager of Nuclear Power Division
General Manager of Community Relations Department, Nuclear Power Division

Nuclear power generation is a decarbonized power source that does not emit $CO_2$ during power generation. It is a valuable power source, providing consistent output regardless of weather conditions or time of day. Furthermore, nuclear power generation costs are comparable to other power generation methods. Additionally, nuclear power's high energy density and ease of fuel stockpiling make it a critical component of Japan's energy security strategy, particularly given the country's low energy self-sufficiency ratio.

In light of these characteristics, we consider utilizing nuclear power generation, prioritizing safety above all, indispensable in achieving our interim target of "50% or more electricity generated from non-fossil-fuel sources by FY 2030" in our roadmap toward achieving carbon neutrality.

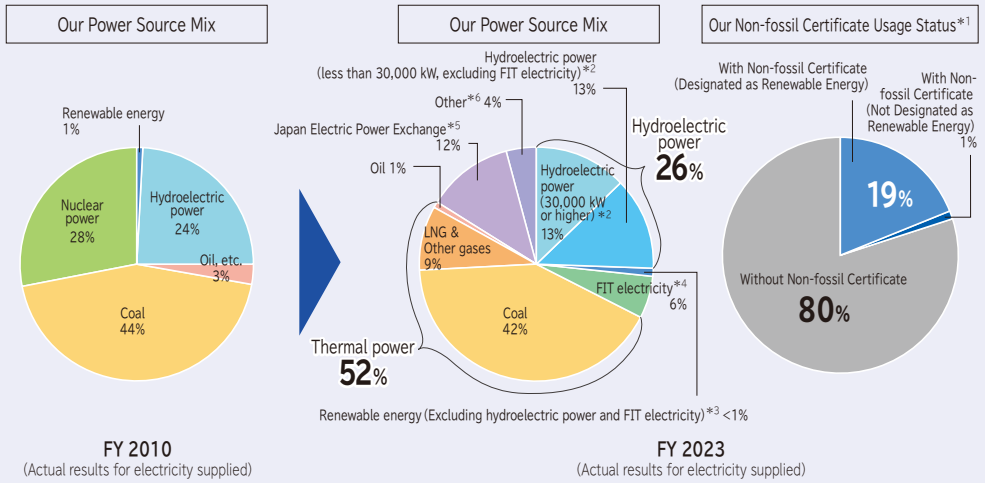
In light of the 2024 Noto Peninsula Earthquake, we are committed to carefully analyzing derived insights and appropriately reflecting them in our seismic and tsunami assessments, accurately responding to the conformity assessment for the new regulatory standards, systematically implementing safety enhancement measures, and intensifying our community engagement efforts to foster a deeper understanding of the Shika Nuclear Power Station among residents.

# 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 26%, 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 2024) 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: 25,372 GWh), taking into account the amount of electricity sold through this option (666 GWh) and the amount sold using non-fossil certificates. (Actual results for FY 2023 (April 1, 2023 to March 31, 2024))

Note 3: Our $CO_2$ emission intensity (adjusted emission intensity) for FY 2023 is 0.481 (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 2023).

*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.

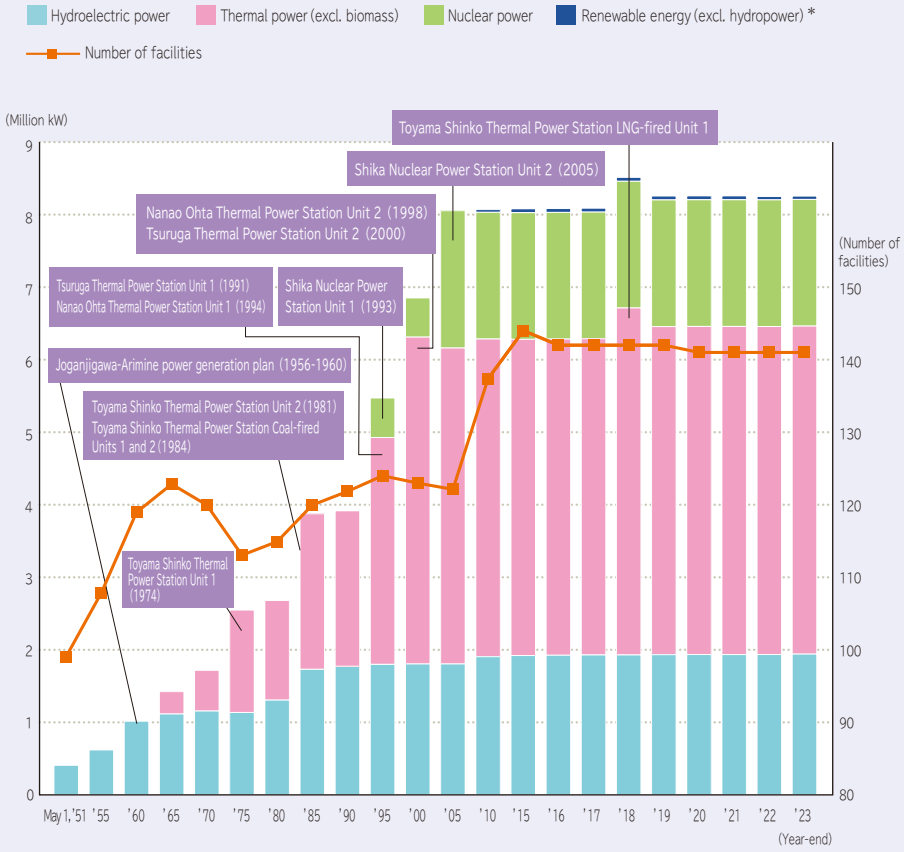
*3 "Renewable energy (Excluding hydroelectric power and FIT electricity)" refers to photovoltaics, wind power, and biomass (excluding FIT electricity).

*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 2023 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."

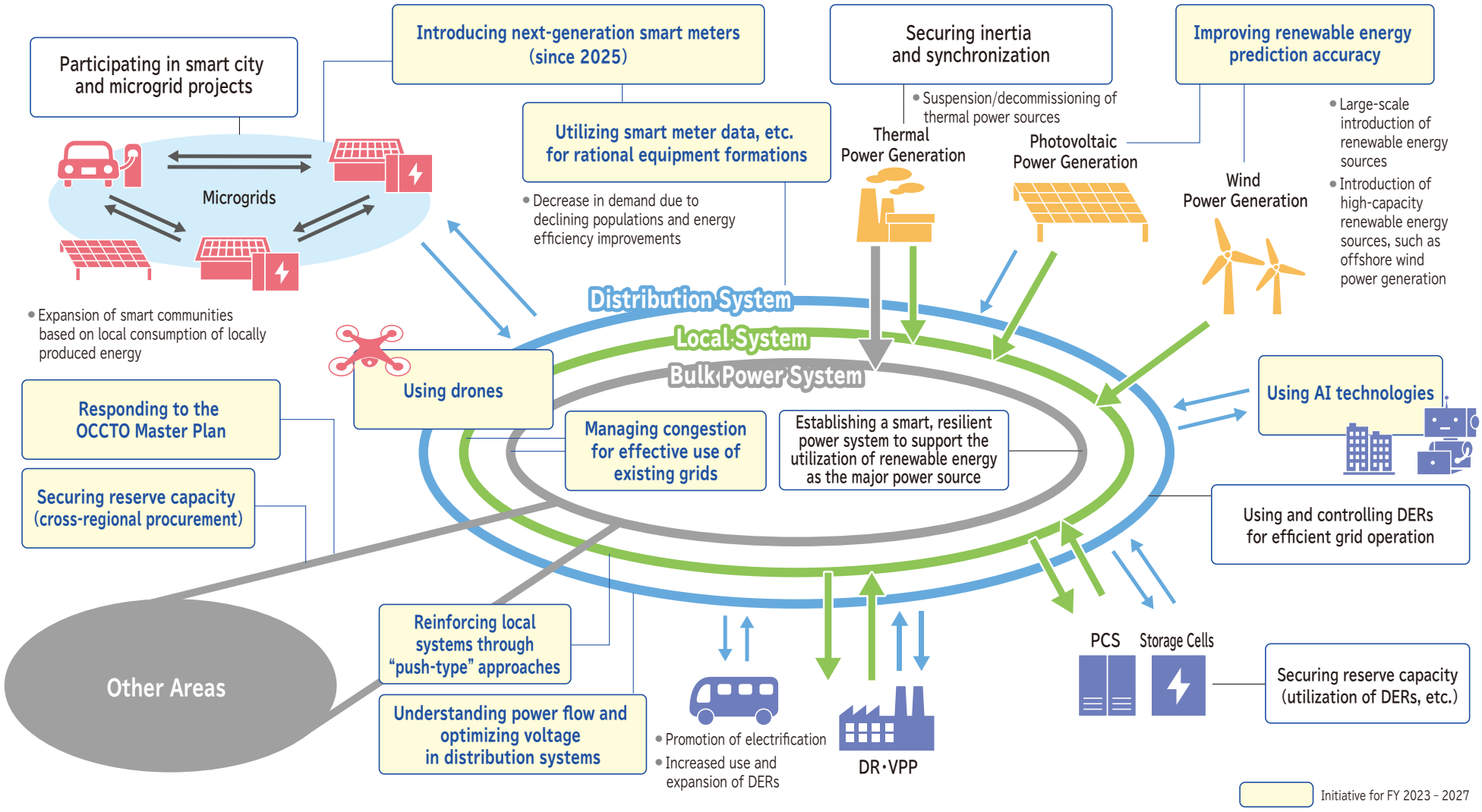
● Power Generation Facilities (Number of facilities and output capacity)




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

# Deliver Implementation of Next-generation Transmission and Distribution Networks

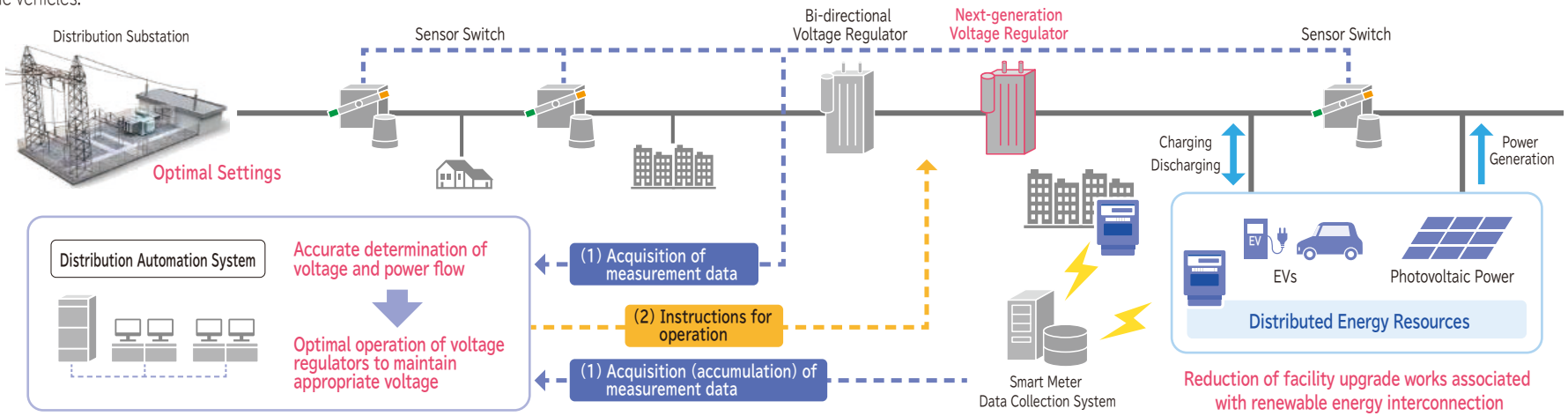
We work toward the implementation of next-generation transmission and distribution networks to contribute to realizing carbon neutrality in the Hokuriku region (facilitating large-scale introduction of renewable energy sources).



## 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.

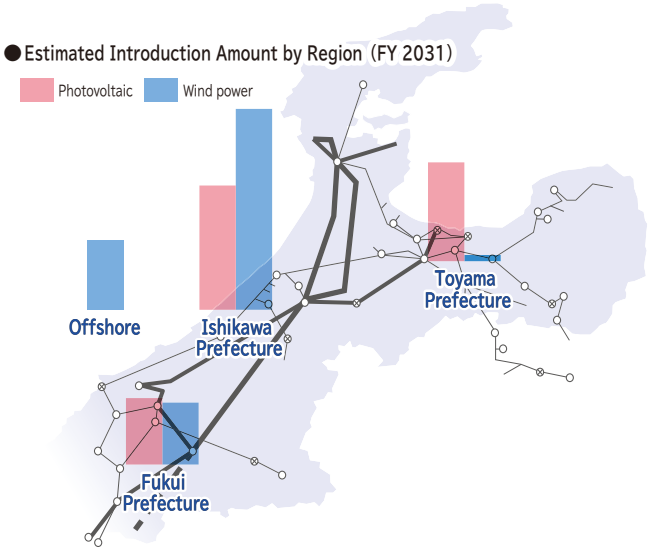
We are working to develop and introduce next-generation voltage regulators that control voltage at high speed for each separate phase, addressing the three-phase voltage imbalance arising from the increasing adoption of electric vehicles.




## Initiatives to Reinforce Local Systems through “Push-type” Approaches

From the perspective of promoting the early introduction of renewable energy, we are now accepting applications (FY 2023 onwards) for non-farm-type local systems that do not require the expansion of power transmission and distribution facilities and which are subject to renewable energy output control.

In regions where the amount of renewable energy introduced is particularly high, we look at the cost required to expand and enhance power transmission and distribution facilities to reduce the output control of renewable energy (C) , and compare it to the potential savings in fuel costs and the cost-reduction effect of $CO_2$ countermeasures (B). When there is a benefit (B/C > 1), we plan a push-type local system reinforcement.



# Support Contribution to Decarbonization and BCP Measures in Local Communities

We support regional decarbonization through our energy businesses focused on electricity, and also support BCP requirements. We aim to realize a smart society together with the community.

## Regional Decarbonization

Involvement in local energy businesses in collaboration with local governments

Provision of renewable energy to public facilities through renewable energy plans, PPAs, etc.

⋮

## Regional BCP Requirements

Electrification of public facilities and introduction of energy facilities

Energy management utilizing storage batteries and solar power

⋮

Eco-friendly, people-friendly society

Peace of mind in everyday life

Future Vision for 2050

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

Vibrant communities

Comfortable lifestyles

# Contribution to Decarbonization and BCP Measures in Local Communities

## Results

### Decarbonization Leading Areas in the Hokuriku Region

**2** Areas

- Tsuruga City, Fukui Prefecture (Selected in 2022)
- Takaoka City, Toyama Prefecture (Selected in 2023)

### Establishment of Local Energy Companies with Local Governments

**3** Companies

- Nanto Energy, Inc.
- Himi Furusato Energy, Inc.
- Kaga Furusato Denki Co., Ltd.

### Introduction of Waste-to-energy Local Production and Consumption Scheme

**4** Centers

- Kahoku District and City Clean Center
- Eastern and Western Environmental Energy Center
- Matto Ishikawa Environmental Clean Center
- Ecology Park Komatsu

### Introduction of Post-FIT Local Production and Consumption Scheme

**6** Municipalities

- Toyama City, Toyama Prefecture
- Kanazawa City, Ishikawa Prefecture
- Ono City, Sabae City, Echizen City, and Tsuruga City in Fukui Prefecture

## Integrating Decarbonization in Noto's Reconstruction Efforts

In March 2024, we started our Solar Power Plant Diagnostic Service to visually inspect solar power stations damaged by the 2024 Noto peninsula earthquake. Additionally, in July 2024, we newly established the Noto Regional Energy Promotion Team. We have strengthened our framework to enhance cooperation, support, etc., in the energy field; decarbonization; and BCP measures with local governments in the Noto region. We will contribute to rebuilding and the spread of renewable energy.

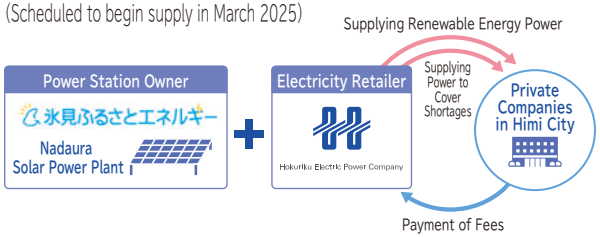
## Joint Proposal to Be Decarbonization Leading Areas

As a result of joint proposal with the Hokuriku Electric Power Company, Tsuruga City, Fukui Prefecture became the first municipality in the three prefectures of the Hokuriku region to be selected by the Ministry of the Environment as a Decarbonization Leading Area; the Ministry aims to select 100 such areas across Japan. In addition, Takaoka City in Toyama Prefecture was selected as the second such area in the Hokuriku region, following a joint proposal by the Takaoka City Carbon Neutral Management Association, of which our company is a member.

We will continue to lead the decarbonization of the Hokuriku region by leveraging our knowledge.

## Establishment of Local Energy Companies in Collaboration with Local Governments

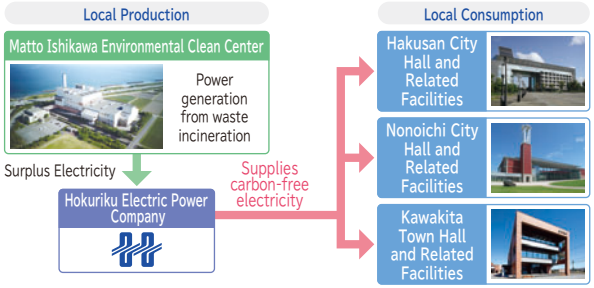
To advance the cause of local electricity production for local consumption, we invest in local energy companies in collaboration with local municipalities and proactively participate in local energy businesses. One company we have invested in is Himi Furusato Energy, Inc. This company is constructing the solar Nadaura Power Plant in Himi City. The power generated at this power plant will be supplied to private companies in the same city, achieving local power production for local consumption. (Scheduled to begin supply in March 2025)




## 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.

●Waste-to-energy Local Production and Consumption Scheme




## Development of Hydroelectric Power Generation that Contributes to Regional Development

We also participate in the power generation company Echizen Yoshinosegawa Hydropower (provisional name) involved in the Yoshinosegawa Dam Hydroelectric Power Station (provisional name) Installation and Operation Project (power plant output 376 kW; scheduled to start operation in FY2026) of Fukui Prefecture.

Part of the income from electricity sales will be allotted to local community development and town revitalization efforts, and in the event of disasters, electric power generated will be supplied to wide-area evacuation shelters specified by Echizen City.

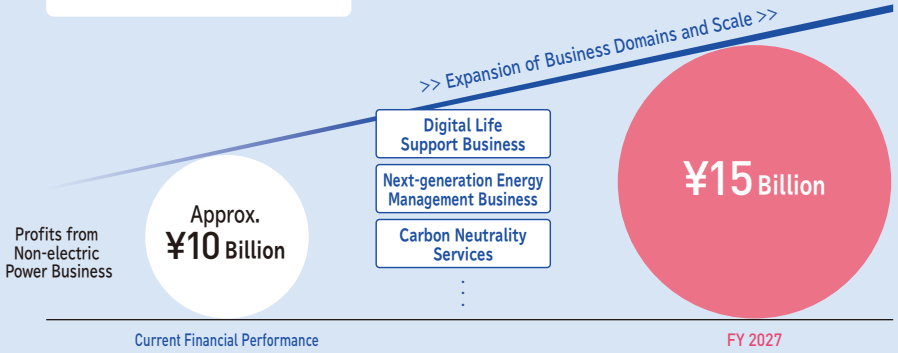
# Pillar Ⅲ Expansion of New Business Domains for Sustainable Growth

By identifying customer and societal needs, we aim to achieve sustainable Group growth by providing innovative value-added services evolved from our core electricity business and expanding new business domains, while contributing to the revitalization and advancement of the Hokuriku region.

## Targets

**Ordinary Profits from Non-electric Power Business**

**¥15 Billion**
(FY 2027)




## Main Efforts

Creating New Pillars of Growth beyond Our Electricity Business

| Category | Details |
|---|---|
| Offering New Value and Services Developed from Our Existing Electricity Business | ● Expansion of DR Services Utilizing Easy Series, EcoCute Electric Water Heaters, etc. ▶P50<br>● Exploring Advanced DR Services through Remote and Integrated Control of Home Appliances<br>● Provision of Innovative Electricity Rate Plans Designed to Optimize Renewable Energy Utilization<br>● Provision of PPA Services<br>● Provision of Integrated Services That Concurrently Address BCP Requirements and Decarbonization<br>● Provision of Various Electricity Rate Plans<br>● Provision of Asset Outsourcing Service for Energy-related Equipment<br>● Sales of Carbon-neutral LNG |
| Expansion and Development of New Business Domains | ● Strengthening Synergies Within the Group and Cooperating with External Companies ▶P53<br>● Aggressive Investment to Expand Business Domains<br>● Working with Local Communities to Resolve Issues<br>● Expansion of Overseas Electric Power Business<br>● Provision of Services to Meet Decarbonization Needs<br>● Utilization of Waste Glass from Solar Panels<br>● Provision of Services Utilizing AI-Driven Image Recognition |

# Creating New Pillars of Growth beyond Our Electricity Business

**We are advancing services that address evolving customer and regional needs, focusing on BCP requirements and decarbonization. Concurrently, we are proactively diversifying our business domains beyond our electricity business to ensure the sustainable growth of the Group.**

## MESSAGE Sales

### Yoshiaki Murata

Managing Executive Officer
General Manager of Marketing & Sales Division

Maintaining our position as the preferred company in the dynamic and rapidly evolving landscape of the electricity business necessitates precise and agile responses to our customers' increasingly diverse and sophisticated requirements.

Our ongoing dialogues with customers reinforce the escalating urgency and demand for comprehensive decarbonization solutions. Our Group is spearheading decarbonization initiatives in the Hokuriku region through a comprehensive suite of services, including on-site and off-site solar power purchase agreement (PPA) services, renewable-energy-oriented electricity rate plans, and the sales of carbon-neutral liquefied natural gas (LNG). In response to the growing interest in BCP requirements following the 2024 Noto Peninsula earthquake, we are implementing integrated solutions that address BCP requirements and decarbonization by leveraging hydroelectric, wind, and solar power generation facilities, storage batteries, and more, and contributing to building disaster-resistant communities.

Our strategy includes enhancing our existing services and introducing innovative, high-value offerings like advanced DR solutions. Our goal is to exceed customer expectations consistently, and solidify our position as the region's preferred and trusted energy partner.

## MESSAGE Business Development

### Masayoshi Hayashi

Managing Executive Officer
Deputy General Manager of Innovation Promotion Division

As the third strategic pillar of our new medium-term management plan, the Group aggressively pursues diversification and expansion into new business domains beyond our core electricity operations. This initiative is expected to drive sustainable growth for the Group and contribute to the socio-economic development of the Hokuriku region.

We have pursued a multifaceted strategy, including investments in new business domains, enhancing intra-group synergies and strategic alliances through mergers and acquisitions (M&A), and venturing into integrated energy services such as regional gas distribution and international power generation projects. Through these strategic initiatives, we have accumulated significant expertise and knowledge in both business investment and non-electricity business, laying a strong foundation for future business expansion.

In the future, the Group will leverage our acquired expertise to pursue strategic partnerships and targeted investments, aiming to achieve our goal of 15 billion yen in operating profit from non-electric-utility operations, drive sustainable growth, and contribute to developing the Hokuriku region.

# Offering New Value and Services Developed from Our Existing Electricity Business

## Results

### Expansion of DR services

- Easy Cute
  FY 2024
  Demand-side Management Award (Equipment Category)
  Recipient of the Director-General's Award, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry

- Hoku-Link Membership

**631,000** (as of the end of FY 2023)

### Number of PPA contracts (as of the end of FY 2023)

On-site: **86**
Off-site: **26**

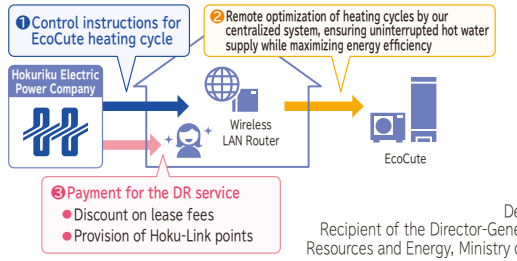
▶See Page 51

## Expansion of DR Services Utilizing Easy Series, EcoCute Electric Water Heaters, etc.

We launched our Easy Solar monthly service for solar power (generation) in July 2021 and are continuously expanding the service coverage and variations. Our Easy Cute service, combining EcoCute electric water heater leasing with remote-controlled demand response, won the Director-General's Award from the Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry for its contribution to the Demand-side Management Award in FY2024.

We continue to expand our DR services portfolio, leveraging digital innovation to promote energy conservation. Our Energy-Saving Challenge, facilitated through the Hoku-Link mobile application, gamifies peak-hour energy reduction. In April 2024, we introduced the Daytime Advantage Challenge, a points-based incentive program encouraging customers to shift their electricity consumption to off-peak daytime hours.

● Overview of Easy Cute DR Services

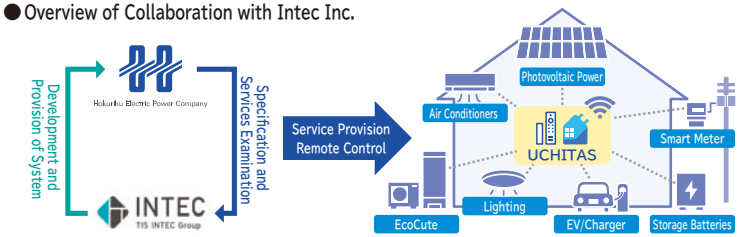


FY 2024
Demand-side Management Award
Recipient of the Director-General's Award, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry

## Exploring Advanced DR Services through Remote and Integrated Control of Home Appliances

In June 2024, we began collaborating with Intec Inc. to explore new DR services that optimize household electricity usage and enhance power system efficiency by remotely and integrally controlling EcoCute electric water heaters, storage batteries, and home appliances such as air conditioners and lighting.

● Overview of Collaboration with Intec Inc.

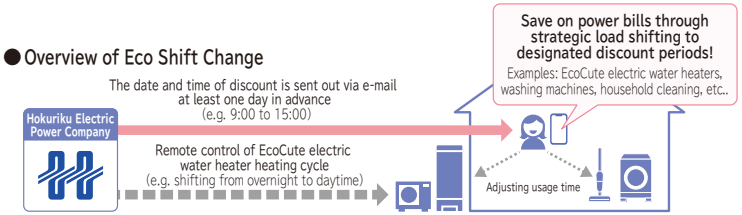



## Provision of Innovative Electricity Rate Plans Designed to Optimize Renewable Energy Utilization

### For Household Customers

In April 2024, we introduced Eco Shift Change, an electricity rate plan to incentivize customers to shift their electricity consumption to periods coinciding with output control measures for solar and other renewable energy sources.

● Overview of Eco Shift Change




### For Corporate Customers

In April 2024, we launched the Demand Adjustment Special Contract, enhancing our existing demand response incentives. This new structure includes additional discounts for load shifting to renewable energy output control periods, complementing our discount plan for demand reduction during times of tight power supply and demand.

## Provision of PPA Services

In recent years, we have observed a significant uptrend in customer demand for renewable energy solutions driven by initiatives such as RE100-compliant plans. We offer on-site and off-site PPA services to meet customer needs, and further expansion is planned.

### On-site

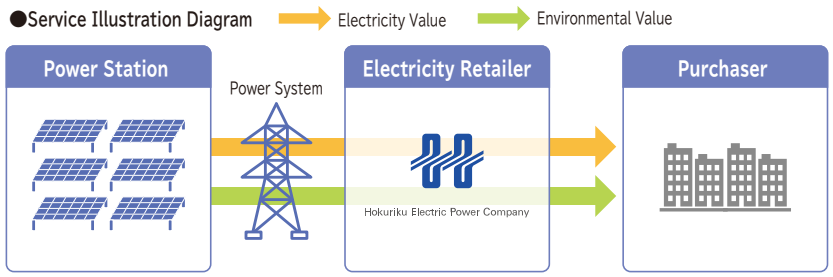
**Example Case**

In June 2024, we successfully implemented our largest on-site PPA service for KB Seiren Co., Ltd., a member of the Seiren Group. This landmark project, executed by Hokuriku Electric Power Biz Energy Solutions Co., Ltd., features a solar panel array with an exceptionally large capacity of approximately 3,000 kW.

### Off-site

**Example Case**

Supply began from Hoku-Hoku Solar Park (3,000 kW) based on a partnership agreement with the Hokuriku Bank, Ltd. in September 2023. Furthermore, we have executed an off-site PPA with the West Japan Railway Company, initiating phased power supply implementation for Shinkansen train operations beginning in FY 2024, with a capacity of 17,000 kW.




## Provision of Integrated Services That Concurrently Address BCP Requirements and Decarbonization

We will promote services that meet customers' BCP and decarbonization requirements by utilizing hydroelectric, wind, and solar facilities, and EVs and storage batteries.

**Example Case**

**Implementation of Carbon Neutrality (CN) Solutions at the New Corporate Headquarters of Takeuchi Denki Kouji Co., Ltd. (Kaga City, Ishikawa Prefecture)**
(July 2023)

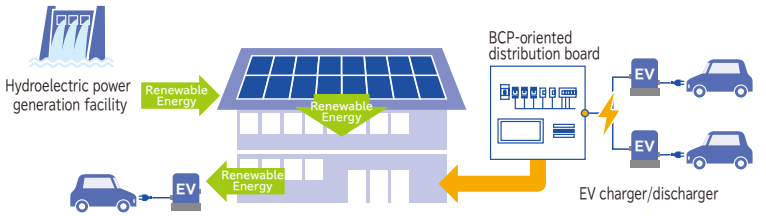
Uses 100% renewable energy

❶ Solar power generation on-site PPA services
❷ Aqua Eco plan

Ensures prolonged power availability during extended power disruptions

Functions as an evacuation center during power disruptions

❶ Solar power generation on-site PPA services
❸ Comprehensive Service to Introduce EVs (BCP services)




Achieving zero-carbon driving

Local EV charging spots during normal times

❸ Comprehensive Service to Introduce EVs (Charging equipment)

Electricity supply from EVs to company building (max. 12 kW)

## Provision of Various Electricity Rate Plans

### 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.

**Released in December 2023**

| Customer Needs | Plan Name | Overview |
|---|---|---|
| Want to support $CO_2$-free events | かがやきGREEN MICE | • Provision of **Net Renewable Energy Electricity** tailored to the duration and venue size of MICE* events<br>* Meetings (corporate conferences), incentive travel (training and study trips), conventions (international conferences), and exhibitions/events |

| 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 designated by 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.** |

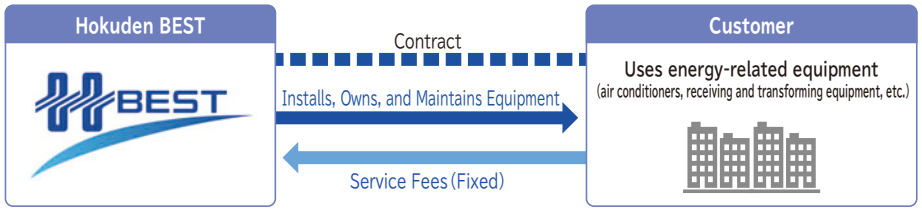
### Renewable-energy-oriented electricity rate plans for household customers

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.

## Provision of 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)

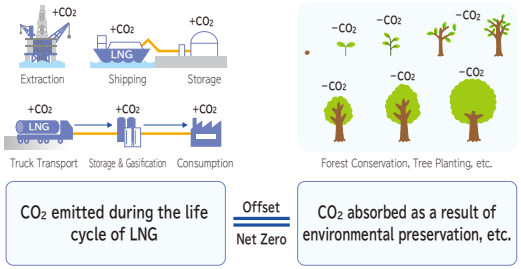
## Sales of Carbon-neutral LNG*

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 June 2024, 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.

# Expansion and Development of New Business Domains

## Results

### Track Record of Investments for Expansion of Business Domains

**22** Projects: Approximately **¥38** billion

(Group performance figures from FY2018 through June 30, 2024)

## Main Efforts

### Enhancement of Synergies and Partnerships within and beyond the Group

- Acquisition and consolidation of Emori Infotech Co., Ltd.
- Acquisition of Nikken Corporation by Hokuriku Electrical Construction Co., Ltd.
- Acquisition of Nakayama Construction Co., Ltd. by Nihonkaikenko Corporation.

### Aggressive Investment to Expand Business Domains

**Information security business**

- Investment in ZenmuTech, Inc.

**Overseas Business**

- Investment in Excelsior Renewable Energy Investment Fund Ⅱ
- Participation in the Fujairah F3 IPP Project
- Investment in the Cambodian power distribution retail company Sun-eee (Hokuriku Electric Power Transmission & Distribution Company)

**COLUMN** こころをひとつに能登 (Together as One for Noto)

#### Messages of Support for Reconstruction through Advertisements on Utility Poles and Contributions

Hokuhai Dengyou Inc. has launched the Ishikawa Support Campaign, featuring advertisements with messages of support on utility poles along routes to and within areas affected by the 2024 Noto Peninsula earthquake.

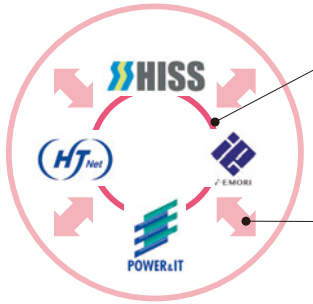
This initiative conveys the goodwill of participating advertisers to earthquake victims, and contributes 1,000 yen per advertisement to Ishikawa Prefecture as a charitable donation.

Our company is aggressively pursuing strategic investments, mergers and acquisitions, and external partnerships to establish new growth pillars beyond our core electricity business, with the aim of expanding and pioneering diverse new business domains.

## Strengthening Synergies Within the Group and Cooperating with External Companies

### Information and communications business

With Hokuden Information System Service Company, Inc.; Hokuriku Telecommunication Network Co., Inc.; Emori Infotech Co., Ltd.; and Power and IT Company as our core ICT entities, we aim to deliver premier digital solutions in the Hokuriku region through intensified intra-group synergies and strategic external partnerships.




**Enhancing Intra-group Synergies**

- Sales collaboration
- Development of new solution products
- Human resources acquisition and streamlining of business

**Collaboration beyond the Group**

- Collaboration with other companies, M&A

### Expanding Business Domains through M&A

#### Hokuriku Electrical Construction Co., Ltd.

We acquired Nikken Corporation as a subsidiary to expand into the Kanto region; the company focuses on a diverse business portfolio, primarily plumbing works, including HVAC, drainage systems, and electrical installation services.

#### Nihonkaikenko Corporation

To address local challenges and needs better, we acquired Nakayama Construction Co., Ltd. as a subsidiary in eastern Toyama Prefecture, enhancing our regional responsiveness.

## Aggressive Investment to Expand Business Domains

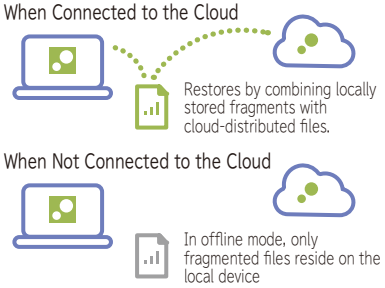
Through strategic investments in new business sectors and international ventures, we are strengthening our foundational capabilities, enhancing expertise and synergies, to facilitate business domain expansion.

●Recent Investment Highlights

#### ZenmuTech, Inc.

Leverages proprietary secret-sharing technology to deliver cutting-edge data security solutions.

ZENMU TECH




#### Excelsior Renewable Energy Investment Fund Ⅱ

This fund invests in North American renewable energy projects, including energy storage, hydrogen, and CCS technologies.

EXCELSIOR ENERGY CAPITAL

# Comprehensive Group-wide Strategic Initiatives

## Working with Local Communities to Resolve Issues

### Development of a Mixed-Use Complex in Komatsu Station East District: Hokuden Sangyo Komatsu Building LLC

Construction initiated in 2023 aims to bolster power infrastructure resilience, create vibrancy in the community, and enhance urban appeal. The project is progressing steadily toward its scheduled completion in FY 2025.

We are collaborating with the Komatsu Station East District Mixed-Use Complex Utilization Promotion Council, a non-profit organization established with local stakeholders, to proactively conduct public relations campaigns to promote the effective use of the complex' s multipurpose hall.

Artist's rendering of completed mixed-use complex

## Expansion of Overseas Electric Power Business

### Secured Consulting Contract for Hydroelectric Power Generation Facility Renovation in Papua New Guinea: Hokuden Techno Service (HTS)

HTS has formed a joint venture with Oriental Consultants Global Co., Ltd. (OCG) to secure a contract from the Japan International Cooperation System (JICS) for research, design, and bidding assistance services for grant aid to Papua New Guinea (PNG).

This project leverages OCG' s international project experience and HTS' s hydroelectric power station design expertise to support the renovation of facilities managed by PNG Power Corporation. We aim to stabilize PNG' s power supply and foster economic and social development.

## Provision of Services to Meet Decarbonization Needs

### Power and IT Company Introduces Carbon Neutral Electricity Promotion Service

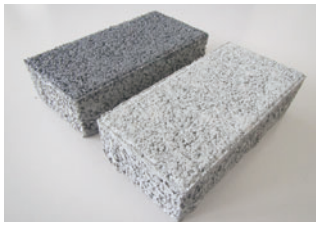
Starting in August 2024, Power and IT Company will procure non-fossil certificates from the Japan Electric Power Exchange (JEPX) for its data center clients. These certificates verify the renewable origin of the electricity consumed, allowing us to allocate environmental value to customers proportionate to their power usage.

By providing access to effectively $CO_2$-free electricity, we actively support our customers' decarbonization initiatives and sustainability goals.

# Provision of New Value and Services

## Utilization of Waste Glass from Solar Panels

We have engineered innovative interlocking blocks that utilize glass reclaimed from decommissioned solar panels. These blocks are slated for showcase in the Power Pavilion: Incubator of Possibilities exhibition by the Federation of Electric Power Companies of Japan, at the Osaka-Kansai Expo 2025. In the future, we will focus on enhancing quality and refining our technology for full-scale commercialization.

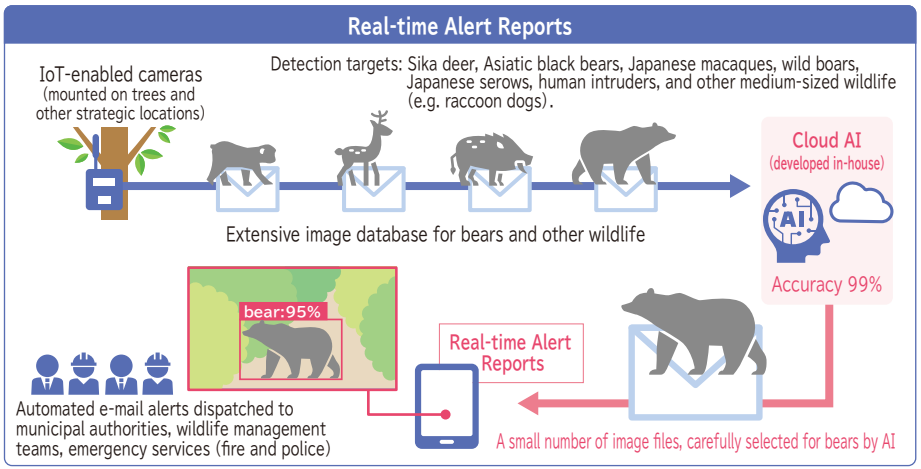


Interlocking block prototype

Artist's rendering of pavilion exterior

## Provision of Services Utilizing AI-Driven Image Recognition

We provide services through the development of an AI system that identifies specific wildlife threats from camera footage and alerts relevant authorities, including local governments, police, and fire departments. This service contributes to remote monitoring, prevention of human injuries, mitigation of agricultural losses, and enhancement of stakeholder safety, while reducing labor time and costs. It has been fully implemented by twelve municipalities in the Hokuriku region, with seven additional municipalities currently conducting pilot operations. The system has received high praise and is also being utilized in prefectures outside the Hokuriku region, such as Kanagawa and Yamagata.



# Strengthening of Efforts to Support Our Business Foundation

We work to strengthen the initiatives that form the foundation of each pillar, such as operational reforms and promotion of digital transformation (DX), promotion of human capital management, and strict and strengthened compliance, for even further development of the Group.

## Independent Evaluation Main Assessments

- **Acquisition of Digital Transformation Certification from the Ministry of Economy, Trade and Industry**
  Hokuriku Electric Power Company (2024),
  Hokuriku Electric Power Transmission & Distribution Company (2023)

- **Certified as a Health and Productivity Management Organization 2024 (White 500) by the Ministry of Economy, Trade and Industry**
  Hokuriku Electric Power Company and
  Hokuriku Electric Power Transmission & Distribution Company certified jointly

- **Acquisition of Platinum Kurumin certification from the Ministry of Health, Labour and Welfare** (annually since 2019)
  Hokuriku Electric Power Company
  (Efforts made jointly by Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company)

- **Acquisition of 3-star Eruboshi certification from the Ministry of Health, Labour and Welfare** (annually since 2017)
  Hokuriku Electric Power Company
  (Efforts made jointly by Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company)

## Main Efforts

| Category | Details | |
|---|---|---|
| Promotion of Operational Reforms and DX | ● Promotion of Operational Reforms (Planning and Implementation)<br>● DX Promotion | ▶P56 |
| Promotion of Human Capital Management | ● Support for Autonomous Career Development<br>● Securing Diverse Human Resources<br>● Promotion of DE&I<br>● Prevention of Occupational Accidents and Promotion of Health-conscious Management<br>● Respect for Human Rights | ▶P58 |
| Ensuring and Strengthening Compliance | ● Proactive and Recurrence-prevention Measures in Light of the Case of Inappropriate Handling of Customer Information (Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company)<br>● Strengthening of Compliance and Risk Management System (Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company)<br>● Past Efforts to Promote Compliance | ▶P64 |

# Promotion of Operational Reforms and DX

**The Group aims to enhance productivity and create new added value through the implementation and acceleration of Operational Reforms and Digital Transformation (DX). Additionally, we strive to improve our adaptability to changing environments.**

**Promotion of Operational Reforms**

We will review the current state of operations, and address any inefficiencies based on operational quality and cost effectiveness.

Operational Reform Approaches: Reorganization and discontinuation of operations, centralization of operations, digitalization, outsourcing, etc.

×

**DX Promotion**

As certified digital transformation companies, we will promote DX throughout the Group, based on the DX strategies of Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company.

DX Promotion Approaches: Implementation of DX strategies (utilization of AI and digital tools, increasing and strengthening of digital human capital, etc.)

→

- **Improving productivity**
- **Creation of new added value through the reallocation of human resources to new business domains and the use of digital technologies**
- **Enhanced adaptability to environmental changes (fostering a mindset of continuing to change and take on challenges)**

## MESSAGE Operational Reforms & DX

### Masato Fukumura

Director
General Manager of Corporate Planning Dept.
and General Manager of Business Process Reform & DX Promotion Project Sec., Corporate Planning Dept.

In order to flexibly respond to changes in the business environment and continue to grow together with the Hokuriku region, we are working tirelessly to promote operational reforms and DX throughout the company.

In order to promote operational reforms and DX, the cooperation of all employees is essential. We need to review and renew our work processes from all perspectives, incorporating the experience of our veterans and the ideas of our young staff, as well as information from Group companies and external partners.

Previously, efforts were mainly made individually by each department. Now, the Business Process Reform & DX Promotion Project Section has taken the lead in promoting company-wide measures, in collaboration with the individuals in charge of operational reforms appointed to each department and frontline workplace. Our efforts are starting to bear fruit, such as the establishment of productivity improvement action plans at each department and the acquisition of Digital Transformation Certification.

By taking on challenges like this and making our efforts more established and accelerated, I hope to continue to improve the productivity of the Group, so that the Hokuriku Electric Power Company will be able to continue to respond to the needs of our customers and the local community, aiming for sustainable development and the realization of a smart society.

### Katsunori Tsukasaki

Hokuriku Electric Power Transmission & Distribution Company
Representative Director & Executive Vice President
CKTO (Chief Kaizen and Transformation Officer)

With our mission to provide a stable supply of electricity to customers in the Hokuriku region, and kaizen, transformation, and DX promotion at our core, we aim to achieve financial stability and strength through extensive efficiency improvements, and cost reductions. Furthermore, we strive to provide top-tier service throughout Japan.

In an ever-changing society, we prioritize safety and maintain a fair, neutral, and transparent approach to business. By leveraging diverse knowledge from both inside and outside the company, we introduce new technologies and continuously work on kaizen, transformation, and DX. Our employees, in collaboration with group companies and transmission and distribution engineering firms, actively and autonomously engage in these initiatives. This comprehensive approach allows us to drive innovation in the power transmission and distribution business.

We will continue to implement drastic BPR*, and work together as a unified company to steadily realize the DX strategy roadmap that we established and announced last year. By doing so, we aim to further improve productivity and customer satisfaction, create new value, and continue to contribute to the development of the Hokuriku region.

*BPR: Abbreviation of "Business Process Re-engineering."

# Promotion of Operational Reforms

## Results

Hokuriku Electric Power Company

- Establishment of the Business Process Reengineering Implementation Plan (2024–2027)

Hokuriku Electric Power Transmission & Distribution Company

- Business Process Reengineering (BPR) (2022–2025)

Progress as of 2023: **58**%

# DX Promotion

## Results

Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company

- Publication of Digital Transformation (DX) Strategies and Acquisition of DX Certification

■Hokuriku Electric Power Company DX Strategy
https://www.rikuden.co.jp/hoshin/attach/dxsenryaku.pdf

■DX Strategy of Hokuriku Electric Power Transmission & Distribution Company
https://www.rikuden.co.jp/nw_hoshin/attach/2023DXStrategy_rikudennw.pdf

### Major Tools Introduced in FY 2023

- Collaboration tool (Microsoft Teams)
- No-code tools
- Generative AI (ChatGPT)
- Electronic contract and electronic document management systems

## Promotion of Operational Reforms (Planning and Implementation)

In addition to our ongoing efforts toward Operational Reforms, we have also established an implementation plan with measures to improve the productivity of each department. Going forward, we will steadily carry out the implementation plan to improve the productivity of our electricity business, while reallocating human resources to new value-creating operations for greater profitability.

Since FY 2022, the Hokuriku Electric Power Transmission & Distribution Company has been systematically reviewing its business operations in a drastic way by means of BPR, going beyond the conventional framework, and steadily pushing forward with operational reforms.

● Specific Measures for Operational Reforms

**Improvement and Discontinuation of Tasks, and BPR**
Considering discontinuation of tasks, reviewing workflow, and reducing person-hours using IT

**Outsourcing of Tasks**
Business process outsourcing (BPO) and utilization of shared service companies (SSCs)

**Effects of Operational Reforms**

**Productivity Improvements in the Electricity Business**

- Reduction in personnel and costs for the electricity business
- Reallocation of human resources to new businesses

## DX Promotion

Considering DX to be an essential means of realizing our business policy, the Hokuriku Electric Power Company and the Hokuriku Electric Power Transmission & Distribution Company have established a DX strategy and acquired Digital Transformation Certification* from the Ministry of Economy, Trade and Industry.

Digital Transformation Certification

* Within the Group, Hokuden Information System Service Company, Kanazawa Energy, and Hokuden Engineering Consultants have also acquired this certification.

### ■DX Promotion Efforts in FY 2024

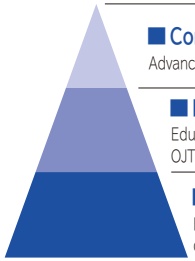
**Examples of Digital Tool Utilization**

We promote the use of digital tools to help improve productivity, flexibility, and efficiency in the workplace.

- Smartphones (expansion of work-related apps) — Scheduled for deployment
- FAQ tool — Scheduled for deployment
- Geographic Information System (development: power transmission and distribution) — Scheduled for deployment

**Increasing and Strengthening Our Digital Human Capital**

We provide education on a per-level basis, in order to not only help employees acquire skills to improve efficiency through the use of digital technology, but also to foster a mindset willing to take on the challenges of change.



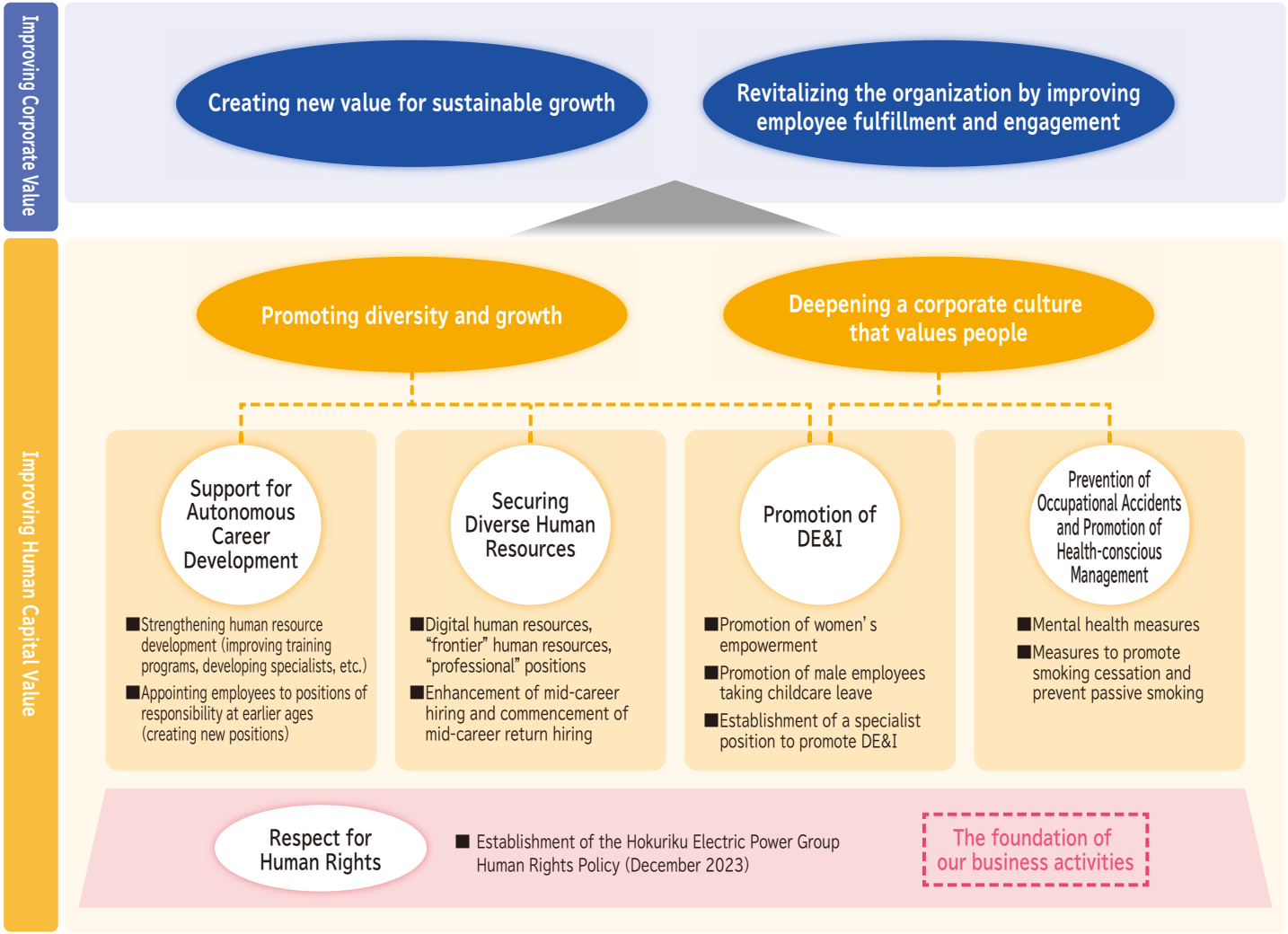
■Core Specialist Human Capital (Approx. 1%)
Advanced education related to AI construction, IoT, and other digital technologies

■Promotion and Leadership Human Capital (Approx. 10%)
Education in no-code app development and data analysis, training and OJT based on specifics of work, etc.

■Basic DX Human Capital (All employees)
Education in basic knowledge on information and digital technologies, data analysis, etc.

# Promotion of Human Capital Management

Based on the belief that human resources are irreplaceable assets, the Group proactively invests in human capital, alongside efforts to promote diversity and growth, and to deepen a corporate culture that values people, thus enhancing corporate value.




**MESSAGE** Personnel and Labor Relations

Kenichi Joko
Managing Executive Officer
General Manager of Human Resources Dept.

We believe that human resources are the most important capital for achieving sustainable growth while fulfilling the Group's primary mission of ensuring a stable supply of electricity, and that it is essential to build a corporate culture that allows each and every employee to continue to maximize their performance to the fullest extent of their potential.

The Group has positioned respect for human rights as the fundamental basis of our business activities, and has established the Hokuriku Electric Power Group Human Rights Policy. Based on this, we are working on various measures, such as assisting employees in balancing work with family care and promoting women's empowerment, from four perspectives: Support for Autonomous Career Development, Securing Diverse Human Resources, Promotion of DE&I, and Prevention of Occupational Accidents and Promotion of Health-conscious Management. As a result, we have achieved 100% of male employees taking childcare leave when eligible, as well as receiving high external recognition, including the Platinum Kurumin and 3-star Eruboshi certifications.

We will continue to revitalize the organization by improving employee fulfillment and engagement, through proactive investment in human capital, such as supporting autonomous career development.

# Support for Autonomous Career Development

## Results

### Number of Participants and Days of Attendance in Basic Education for Young Employees (FY 2023)

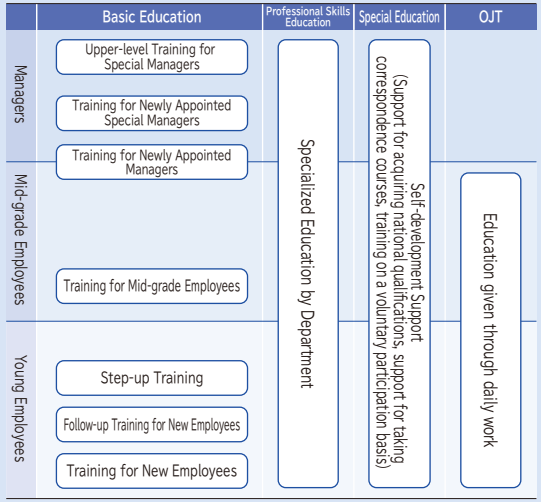
Number of participants: **317**
Number of days of attendance at basic education: approx. **48** days (average per person)

### Recipients of National Qualifications, etc. (eligible for congratulatory monetary gifts) (FY 2023)

Electrical Chief Engineer (First, Second, or Third Class): **67**
Hazardous Materials Engineer (Class B Group 4): **22**
TOEIC (650 points or higher): **21**
and other qualifications, etc.

## Educational System

●Educational System




**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 proactively working to support autonomous career development, with the aim of improving employee fulfillment and organizational strength.**

### ■Employee Education

We provide basic education to acquire 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.

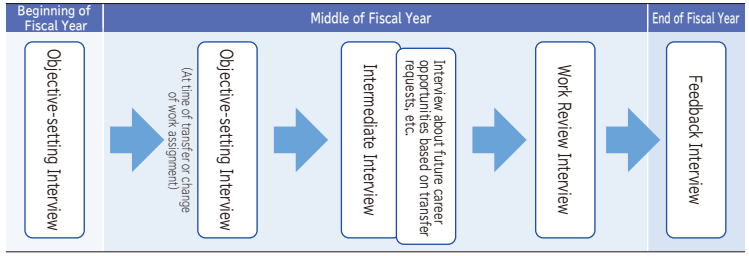
In addition, we provide support for designing career paths aimed at self-realization, so that each employee can clarify their own career vision, autonomously consider their own career, and continue to grow with a sense of fulfillment while envisaging their future goals.

### ■Mentoring System

We have introduced a mentoring system, in which more experienced workers will act as mentors to provide one-on-one guidance and advice to new team members. This system is intended to help young employees resolve their worries and concerns, and support their independence and growth.

### ■Human Resource Development and Career Development Support through Personnel Evaluation Interviews and Other Means

Employees are interviewed by their supervisors at least four times a year, to communicate interactively about work assignments, the significance of the work they are in charge of, expectations for their growth, and other topics. In addition, job rotations are carried out on a regular basis. Through these opportunities, we aim to motivate employees toward competency improvement and autonomous career development.




### ■Job Posting System

We have established a system to assign personnel through job postings, mainly for projects related to new businesses and new management issues. This system also helps us to hone our employees' ambition and autonomy.

### ■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.

## Efforts to Further Encourage Young Employees to Play Active Roles

In order to allow young employees to take on tasks that involve responsibility, such as measures that have a significant impact on management, we lowered the age at which employees can be appointed to positions of responsibility, and established a new position of Project Promotion Leader in July 2024. This motivates young people to grow and take on new challenges, and encourages them to play an even bigger role.

# Securing Diverse Human Resources

## Results

**Number of Mid-career Hires: 22** (FY 2023)

**Technical Masters*: 37**

●Number of Technical Masters by Department (as of the end of April 2024)

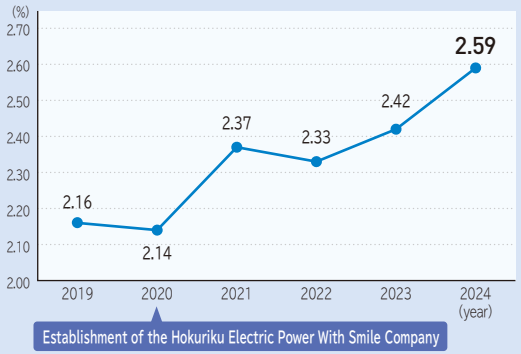
| Hydro Power | Thermal Power | Nuclear Power | Power System Management | Distribution |
|---|---|---|---|---|
| 1 | 8 | 5 | 10 | 13 |

*Employees who have excellent on-site technical skills, certified to promote the improvement and succession of such skills

Technical Masters at Work

**Proportion of Employees with Disabilities: 2.59%** (as of June 1, 2024)

●Proportion of Employees with Disabilities over Time




**We continue to hire people with diverse skills and expertise in order to fulfill our social mission of ensuring a stable supply of electricity, as well as to work with local communities to promote decarbonization and expand new business domains for sustainable growth.**

## Employment of Diverse Human Resources

### Employment of New Graduates

In addition to hiring "digital human resources" and "frontier human resources,"*1 we are also hiring employees for "professional" positions*2 in order to support diversified work styles.

*1 Human resources for creation of new businesses and services
*2 Human resources who work mainly at front-line offices/facilities in areas desired by the individual, and who build their careers while enhancing their expertise in specific fields

### Mid-career Employment

Since FY 2013, we have been hiring mid-career professionals with experience working in different industries or with advanced skills or qualifications. We have hired more than 180 individuals so far. They play active parts in various departments.

In addition, in FY 2024, we began a new "mid-career return hiring" program, with the aim of having people who have left the company to change jobs, or for other reasons, make use of their experience and skills they gained thereafter, again with us.

## 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.

### Post-retirement Reemployment System

We allow all employees who wish to continue working after the age of 60 to remain employed until the age of 65. (381 employees are working beyond the statutory retirement age, as of the end of FY 2023.)

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

We certify employees who have excellent on-site technical skills as "Technical Masters" with the aim of promoting the improvement and passing on of such skills.

## 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 2024, a total of approximately 100 people with disabilities work at various workplaces of Hokuriku Electric Power Company, Hokuriku Electric Power Transmission & Distribution Company, and Hokuriku Electric Power With Smile Company. We will continue to expand employment of people with disabilities.

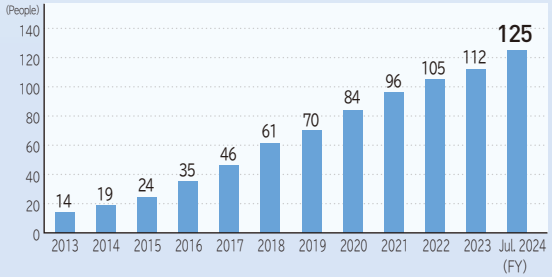
Interoffice Mail Collection and Delivery by Employees of the Hokuriku Electric Power With Smile Company

# Promotion of DE&I

## Results

### Number of Female Managers: 125
(as of July 1, 2024)

● Number of Female Managers over Time




### Targets

Having the percentage of female managers among all female employees match the percentage of male managers among all male employees

⇒ By the end of FY 2028, we will...

- Increase the number of female managers by 30%, and
- Halve the difference in the ratio of managers between male and female employees (a reduction of around 10 points), compared to the end of FY 2022.

---

### 3-star Eruboshi Certification (annually since 2017)

### Platinum Kurumin Certification (annually since 2019)

### Percentage of Male Employees Taking Child-care Leave: 100% (FY 2023)

### Number of Days of Paid Annual Leave Taken*: 21 Days on Average (FY 2023)

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

**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 "Eruboshi" three-star certificate every year since 2017, based on the Act on Promotion of Women's Participation and Advancement in the Workplace. We are actively working on various efforts, including implementation of a 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.

Eruboshi symbol

## Assisting Employees in Balancing Work with Child-care (Percentage of Eligible Male Employees Taking Child-care Leave: 100% Achieved)

We offer leave systems for childcare and nursing care exceeding the statutory requirements, and hold seminars on returning to work after childcare leave and seminars on maintaining a balance between work and child-rearing or nursing care, as part of our efforts to support employees. In FY 2023, our efforts to promote the taking of child-care leave by male employees led to 100% of eligible male employees taking child-care leave (31 days on average).

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.

Platinum Kurumin symbol

## Creating a Pleasant Workplace

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. Starting in FY 2022, we have held *ikuboss* cultivation seminars for these managers to further deepen understanding and raise awareness of the basic knowledge of *ikuboss* and management methods applicable in workplaces.

We also 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, as well as establishing diverse work systems to allow for a variety of work styles, including telecommuting.

| 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 |
|---|---|

## DE&I Promotion Leaders

In July 2024, we established a new position called DE&I Promotion Leaders. They serve as workplace counselors for matters such as balancing work with family care and preventing harassment, and work to improve engagement and respect for human rights across the workplace.

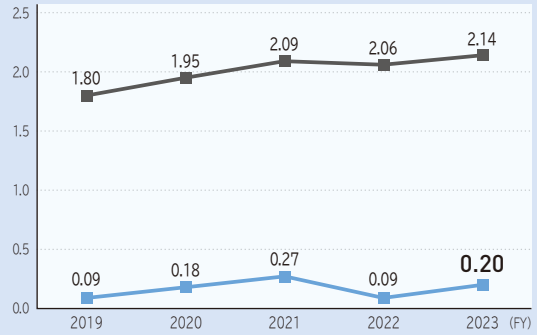
# Prevention of Occupational Accidents and Promotion of Health-conscious Management

**Results**

## Number of Fatal Work-related Accidents

| FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
|---|---|---|---|---|
| 0 | 3 | 1 | 0 | **0** |

## Rate of Lost-worktime Injuries




National Average (National averages are based on calendar year rather than fiscal year.)

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

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

## Establishment of the Hokuriku Electric Power Company Health Charter (April 2023)

## Health and Productivity Management Organization White 500 Certification (annually since 2023)

**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 2024

| | |
|---|---|
| 1. Measures to Prevent Basic Work-related Accidents | ● Prevention of work-related accidents by sharing case studies<br>● 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<br>● Identification and revision of unclear rules<br>● Appropriate work instructions and safety guidance by supervisors and/or other relevant individuals<br>● Prevention of accidents involving tripping and falling over |
| 3. Measures to Prevent Work-related Accidents Involving Contracted Companies | ● Efforts to ensure thorough compliance with rules<br>● Confirmation and guidance on work management, etc. for seniors |

## 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. In order to improve employees' mental and physical health, we have established the Hokuriku Electric Power Company Health Charter and are working to foster a corporate culture where employees and the company actively work to promote good health, as well as implementing measures such as helping to maintain mental health, prevent lifestyle-related diseases, quit smoking, and avoid passive smoking. As a result, we have been certified as a Health and Productivity Management Organization White 500 for the second straight year.

2024 健康経営優良法人 Health and productivity ホワイト500

### Measures to Promote Smoking Cessation and Prevent Passive Smoking

We provide information on smoking cessation and encourage smokers to visit a smoking cessation outpatient clinic, as part of our efforts to promote smoking cessation among employees. In addition, in order to prevent passive smoking, smoking will be prohibited at all times on company premises, and during working hours regardless of location, starting in April 2025.

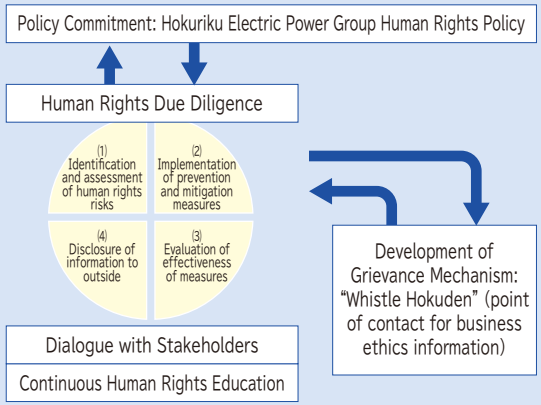
# Respect for Human Rights

**Placing respect for human rights at the heart of our business activities, the Group continues to aim to be a business entity trusted and chosen by customers and all other stakeholders.**

## Tasks

### Human Rights Due Diligence

In FY 2024, we will identify and assess human rights risks from the perspectives of severity and occurrence probability, based on the results of value chain analysis and internal surveys (questionnaires), while incorporating the opinions of external experts.




## Results

### Establishment of the Hokuriku Electric Power Group Human Rights Policy

(December 2023)

| | | | |
|---|---|---|---|
| 1 | Scope of Application | 5 | Education |
| 2 | Basic Stance | 6 | Dialogue with Stakeholders |
| 3 | Human Rights Due Diligence | 7 | Information Disclosure |
| 4 | Remedy | 8 | Revision of Human Rights Policy |

### Holding of Human Rights Enlightenment Promotion Committee Meetings

### Holding of Lectures on Human Rights

| | |
|---|---|
| Theme for FY 2023 | Business and Human Rights: Actions Required of Electric Power Companies |

## Efforts to Raise Human Rights Awareness and Prevent Harassment

### Raising Human Rights Awareness

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.

Every year, during Japan's Human Rights Week (December 4–10), we hold events in relation to respect for human rights and the promotion of DE&I, such as sending out a message from the company president and providing an e-learning program for all employees.

### Efforts 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.

## Establishment of Human Rights Policy and Implementation of Human Rights Due Diligence

On the basis of the recognition that efforts to respect human rights are an important social responsibility that businesses must fulfill, and in accordance with the United Nations Guiding Principles on Business and Human Rights, we established the Hokuriku Electric Power Group Human Rights Policy in December 2023, expressing the Group's renewed commitment to respecting human rights.

Based on this policy, we will promote initiatives for human rights due diligence under the Human Rights Enlightenment Promotion Committee. In FY 2024, the first year of these initiatives, we will identify and assess human rights risks, as the initial step in human rights due diligence.

## Respect for Human Rights in the Supply Chain

In hopes of working together with our business partners to actively fulfill the social responsibilities expected of businesses, including initiatives to respect human rights, we have revised our Fundamental Policies for Procurement, and based thereon, we are asking our suppliers to respect human rights as well. For our 91 main suppliers, we conducted a questionnaire survey on their current respect for human rights (appropriate labor management, ensuring health and safety, etc.), and we did not find any suppliers requiring improvement.

We will continue our efforts to ensure respect for human rights in our supply chain, including surveys of our suppliers' situations.

# Ensuring and Strengthening Compliance

In light of the fact that the entire electric power industry is under close scrutiny by society following the case of inappropriate handling of customer information, the Group will work even harder to ensure and strengthen compliance with laws and regulations, including the regulations of conduct laid out by the Electricity Business Act and the provisions of the Act on the Protection of Personal Information.

## Proactive and Recurrence-prevention Measures in Light of the Case of Inappropriate Handling of Customer Information (Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company)

| | Main Approaches | Status |
|---|---|---|
| System Improvements | ● Studies and implementation of measures to physically separate sales and distribution systems | ● The shared use of the system is scheduled to be terminated at the end of FY2027. |
| | ● Strengthening of information security (blocking access to external systems, properly managing IDs and passwords) | ● Done |
| Deepening of Conduct Regulations and Legal Compliance | ● Further education and changing mindsets<br>● Establishment of internal rules and thorough familiarization therewith | ● Ongoing |
| 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 | Reinforced<br>● Strengthening of company-wide risk management, including conduct regulations |
| | ● Periodic review of the effectiveness of measures by the Compliance Promotion Committee (including third parties)<br>● Periodic check of logs for access to external systems<br>● 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 | ● Ongoing |

* 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)

## Strengthening of Compliance and Risk Management System (Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company)

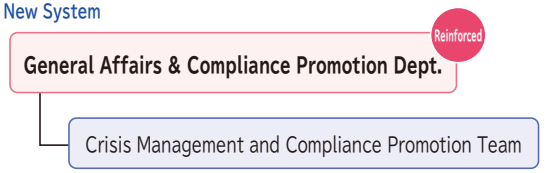
### Efforts to raise awareness regarding compliance

- Hokuriku Electric Power Company established the General Affairs & Compliance Promotion Dept. in July 2024.
  (Hokuriku Electric Power Transmission & Distribution Company has already established an equivalent department, in July 2023.)

### Efforts to build a risk management system

- Establishment and strengthening of company-wide risk management
  - The first line of defense identifies the risks of their own department.
  - The second line of defense understands and monitors risks, and reports to management.
  - The third line of defense conducts risk-based audits.
- Hokuriku Electric Power Company has established a Crisis Management and Compliance Promotion Team that is responsible for comprehensive risk management across the company, including conduct regulations.

New System



**Results**

## Compliance Promotion Committee

Meetings take place **twice** a year, as a general rule.

(Held **five times** in FY 2023, including extraordinary meetings)

## Distribution of e-mail newsletters on compliance issues

**8** times a year, **240** times in total

(FY 2007 - FY 2023)

## "Whistle Hokuden" (point of contact for business ethics information)

● Number of Consultations/Reports

| FY 2021 | FY 2022 | FY 2023 |
|---|---|---|
| 19 | 16 | **20** |

## Past Efforts to Promote Compliance

In order to be trusted by and provide peace of mind to the local community, the Group continues to make ongoing efforts to promote compliance, and to maintain a corporate culture of ensuring transparency and safety.

| | |
|---|---|
| 2002 | ● Established the Compliance Promotion Committee chaired by the company president, and a code of conduct<br>● Implemented group discussions and other activities at each workplace (ongoing) |
| 2003 | ● Established Whistle Hokuden, a point of contact for business ethics information |
| 2007 | ● Added an external third party (lawyer) point of contact for reports |
| 2010 | ● Added compliance violations by Group companies to subjects of reporting |

### Workshops to Raise Awareness of Compliance Issues

We hold lectures and workshops by internal and external instructors, for employees, including those from Group companies, on a per-level basis.

Participants learn the basics of compliance, ways to ensure information management, fundamental ways of thinking for preventing harassment, and more.

### Autonomous Activities at Each Workplace

We hold group discussions at all of our offices and facilities, based on actual, familiar case studies, encouraging employees to exchange opinions freely and openly.

Discussion topics cover case studies presented by the General Affairs & Compliance Promotion Dept., as well as issues raised by compliance leaders concerning their own workplaces.

● Structure of the Compliance Promotion Committee

**Compliance Promotion Committee**

Chair: President of the Hokuriku Electric Power Company

Deputy Chairs: Vice President of the Hokuriku Electric Power Company and President of the Hokuriku Electric Power Transmission & Distribution Company

**Establishment of basic policy regarding compliance promotion**
**Establishment of through compliance with the code of conduct**

+

**Verification of the effectiveness of proactive and recurrence-prevention measures in light of the case of inappropriate handling of customer information**

(Committee members include an external lawyer.)

# Roundtable with Female Independent Directors

External Director

## Yuko Yamashita

**PROFILE**

External director at the Hokuriku Electric Power Company (current position) since June 2023. Professor at Hitotsubashi University Graduate School of Business Administration. Involved in research in the field of marketing at the university for many years.

External Director

## 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 a background in sales, marketing, risk management, and more.

External Audit & Supervisory Board Member

## Etsuko Akiba

**PROFILE**

External audit & supervisory board member at the Hokuriku Electric Power Company (current position) since June 2015. Past positions include director of the Nippon Association of Consumer Specialists and member of the Japan Atomic Energy Commission.

External Audit & Supervisory Board Member

## Akiko Nakamura

**PROFILE**

External audit & supervisory board member at the Hokuriku Electric Power Company (current position) since June 2024. As a lawyer, she also serves as an external auditor for the Hokkoku Shimbun and Kusuri No Aoki Holdings.

### Q. What are the strengths and challenges of the Hokuriku Electric Power Company, as you see it as an external director or audit & supervisory board member?

**Akiba:** I think the company's strengths are its strong ties with the region, and the trust gained from the region. Following the 2024 Noto Peninsula Earthquake, everyone worked hard to restore power and eliminate the power outages, and I clearly remember how the local people were delighted.

The electric power business is susceptible to the influence of the nation's systems and policies, such as the electricity system reform and the liberalization of the electricity market, and I think the challenge is how much you can be proactive in your business in response to these changes in the times. In addition, with the number of Group companies increasing, I recognize that another challenge is how to ensure that the "DNA" of the Hokuriku Electric Power Company, which is characterized by integrity, a strong sense of responsibility, and a sense of mission to provide a stable supply, is instilled throughout the group and that the group can work together as one.

**Uno:** I think the company's strength is diligence. I felt that this strength worked well when the group members worked together as one and trusted each other after the 2024 Noto Peninsula Earthquake. I was following the Hokuriku Electric Power Company's account on X (formerly Twitter), through which they diligently provided information on the ever-changing status of the power stations, how power outages were being restored, and so on, which I felt led to a sense of trust in the company.

On the other hand, and this may be the flip side of that diligence, I feel that it would be better if there were more environments where they could take on new challenges. The top priority is to ensure a stable supply, so it wouldn't be practical to take too many risks, but I think it is acceptable to allow people to take on more challenges.

**Yamashita:** First of all, I think the high level of expertise of the members of the management team is wonderful. At board of directors' meetings, and other such occasions, the external directors and auditors have asked questions and expressed opinions from a variety of perspectives, and the internal board members have responded sincerely from a specialist' s point of view. I feel that a relationship of trust, which is the basis of governance, has been established between external and internal officers. Additionally, as both others have just mentioned, I was also deeply impressed by the responsible actions taken following the 2024 Noto Peninsula Earthquake.

Regarding challenges, I suppose it is difficult to predict the future in the electric power business, and you often have to respond to each event as it arises, but I feel that it is also necessary to be more aggressive and proactive rather than passive.

Hydroelectric power has been a strength of the Hokuriku Electric Power Company since its establishment, and I hope that the company will add value to the precious resources that contribute to decarbonization, including hydroelectric power, and make further use of these resources in the future.

**Nakamura:** The Hokuriku Electric Power Company is a long-established company that supports the lives and production of the Hokuriku region, and is an indispensable company for the region, so I think its existence is valuable in and of itself. I guess being involved in the operations of a company that is essential to people's lives is motivating for the employees.

As for challenges, I feel that there could be more flexibility. People might be afraid or worried about making mistakes, but as other people have said, I think they should take on more new challenges.

**Uno:** The Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company hold a contest every year to come up with new business ideas, right? This is a very good attempt, but I hear that many of the ideas that have come up there have not come to fruition as actual projects. It seems that putting

them into practice would need more support from the management than they get at the moment. Another option would be to launch a start-up within the company, and it would be good if the person who proposed the idea could be involved in the project themselves. This would make young people feel like it is an environment where they can take on challenges. Achieving ideas on a small scale and accumulating successful experiences within the company can lead to good results.

**Akiba:** I think the 3C approach ("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") that the president often mentions is a very good concept, so I would like to see it become even more deeply ingrained in employees' mindsets.

**Yamashita:** I think they are trying new things, but they may be lacking in external publicity.

As mentioned earlier, the Group holds business idea contests. In this regard, I heard that a proposal idea, of using waste glass from solar panels to make blocks, had been realized, and that these blocks will be used for some pavilions at the Osaka-Kansai Expo. I think this is a good example of taking on challenges.

I also think it would be good to see further strengthened cooperation within the company. Greater information sharing and communication between different departments would enable people to respond to change with greater speed and flexibility.

## Q. The Hokuriku Electric Power Group New Mid-term Business Plan (FY 2023–2027) was established last year, and the FY 2024 Action Plan this year, showing our future direction. What do you expect of the Hokuriku Electric Power Company?

**Uno:** I would like to see the third pillar of the business plan, Expansion of New Business Domains for Sustainable Growth, strengthened further. Toward the expansion of new business domains, I think it is also necessary to strategically gather the technology and know-how that the Hokuriku Electric Power Company alone lacks, by making use of Group companies and other organizations.

**Akiba:** For this third pillar, I think it would be good if we could see the direction the company is aiming for in expanding new business domains. Once the direction is shown, I think even people outside the company will be able to see that the Hokuriku Electric Power Company is trying to change. Taking on challenges based on such a direction will create new opportunities, which in turn will revitalize people and allow the company to change into a new one.

It is also a good idea to create a system to have young employees work at Group companies, gain a variety of experience there, and then return to the Hokuriku Electric Power Company. Achieving the third pillar requires developing talent first and foremost, so I think it is essential to give young employees the opportunity to experience a variety of new fields, and this will lay the foundation for expanding new business domains. The world is changing at a rapid pace, so I believe it is necessary to respond even more quickly than the company currently is.

**Yamashita:** In relation to what Akiba said, if you are going to make an investment, you need to have a clear idea of the company's mission, internal goals, and the criteria for deciding whether or not to invest. It's also important to make sure that the employees have a common understanding of these things. If there is a unified goal and principles, and everyone shares a common understanding, then even if there are some difficult challenges, I think it will be possible to make decisions about whether or not to take them on without wavering, and the direction to take will become clear.

**Nakamura:** I would like to pay attention to the second pillar of the business plan, Working with Local Communities to Promote Decarbonization, and how the company will actually work towards decarbonization in collaboration with local communities.

With regard to the efforts to support the business foundation, Promotion of Human Capital Management, the Hokuriku Electric Power Company has acquired Platinum Kurumin certification from the Ministry of Health, Labor and Welfare, and Eruboshi certification based on the Act on Promotion of Women's Participation and Advancement in the Workplace. At the same time, I do not want the company to be satisfied with just acquiring certifications, but would like them to look at whether the working environment is comfortable for the employees who actually work there, and whether there is room for improvement, to further deepen the corporate culture of valuing people.

I think the Hokuriku Electric Power Company is a leading company in the Hokuriku region, so I would want it to take a leading role in the region in various areas, particularly in promoting decarbonization and human capital management, which I have just mentioned. The company's pioneering efforts will also encourage other companies, and I expect the Hokuriku Electric Power Company to continue to lead the Hokuriku region.

# 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 (DE&I)
- 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**

**Fundamental Efforts**

- Building a Culture of Safety
- Thorough Compliance
- Active Efforts toward Environmental Conservation

**Efforts for Stakeholders**

- 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

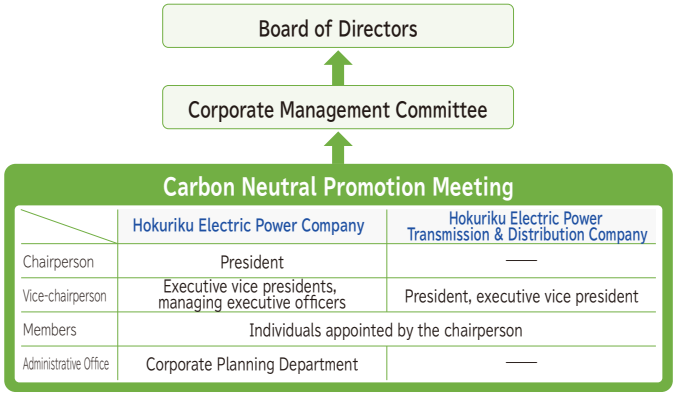
As a socially responsible energy company, we conduct our business operations with an emphasis on environmental, social, and governance factors, and support the aims of the TCFD recommendations on analyzing climate-related risks and opportunities to business activities, and promoting information disclosure. 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 details of discussions at the Carbon Neutral Promotion Meeting and other meetings are brought up for discussion by or reported to the board of directors as appropriate.

● Organization




| | Hokuriku Electric Power Company | Hokuriku Electric Power Transmission & Distribution Company |
|---|---|---|
| Chairperson | President | — |
| Vice-chairperson | Executive vice presidents, managing executive officers | President, executive vice president |
| Members | Individuals appointed by the chairperson | |
| Administrative Office | Corporate Planning Department | — |

**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

▶ P9-11, 38, 21-54

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

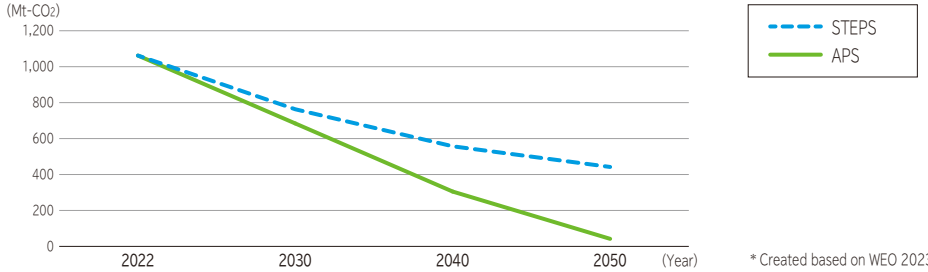
- In order to recognize risks and opportunities related to climate change, we refer to climate scenarios presented by the IEA and other relevant organizations, and consider multiple scenarios, including a 2°C or lower scenario, for the environments surrounding the Group.
- As a socially responsible energy 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 |
|---|---|
| Announced Pledges Scenario (APS) in the WEO 2023 *1 | ● Virtually zero $CO_2$ emissions in Japan by 2050 *<br>● Electrification rate increases toward 2050<br>* In Japan, this is considered consistent with the 1.5°C target. |
| Stated Policies Scenario (STEPS) in the WEO 2023 | ● Japan's $CO_2$ emissions gradually decrease and the electrification rate gradually increases toward 2050. |
| SSP5-8.5 Scenario in the Sixth Assessment Report *2 | ● As global warming progresses, the frequency and intensity of heavy rains, typhoons, and other abnormal weather conditions will increase. |

*1 The *World Energy Outlook* (*WEO*) is published by the International Energy Agency (IEA).
*2 The *Sixth Assessment Report* is published by the Intergovernmental Panel on Climate Change (IPCC).

**Estimated $CO_2$ Emissions in Japan***




* Created based on WEO 2023

Action on Climate Change and Biodiversity

## Strategy

▶P9-11, 38, 21-54

### 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<br>● 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<br>● 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 (Public-private Green Transformation investment policy with investments totaling roughly 150 trillion yen; hydrogen and ammonia support investment)<br>● **Increased advantages of nuclear power generation and renewable energy**<br>● 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 | ● Cost recovery through utilization of various markets (non-fossil value trading market, capacity market, long-term decarbonized power source auctions, etc.) |
| 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 per 100 million kWh | ¥1.0 billion per percent | ¥190 billion/year* (Effect of $CO_2$ reductions) | Approx. ¥15 billion (FY 2030) |

* Calculated in-house based on the *World Energy Outlook 2023* (US$135/t-$CO_2$)

**Transition Plan**

● The Group has established a roadmap toward achieving carbon neutrality, and is 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 ▶P38

## Risk Management

▶P9-11

### 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

▶P38

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

● The Group promotes 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)" ▶P86

# Compliance with TNFD Recommendations

As a socially responsible energy provider, and based on the belief that the conservation of the natural environment is important for sustainable corporate activities, the Group conducts business operations with the natural environment in mind.

In September 2023, the TNFD* announced a framework for risk management and disclosure to identify, assess, manage, and disclose issues related to nature. In light of this, we have begun disclosing information related to nature, and will examine ways to improve disclosure content in the future.

## Governance and Risk Management

**The organization's governance of nature-related dependencies, impacts, risks and opportunities**

**The organization's processes for identifying, assessing, prioritizing, and monitoring nature-related dependencies, impacts, risks, and opportunities**

- Important nature-related matters are discussed and reported at Corporate Management Committee meetings, Board of Directors meetings, and other occasions as appropriate.
- We appropriately handle nature-related risks. After grasping 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.

## Strategy

**The effects of nature-related dependencies, impacts, risks, and opportunities on the organization's business model, strategy, and financial planning**

- With the recognition that the Group's business activities have an impact on the natural environment, we take nature-related impacts into consideration as we conduct our operations, such as observing the temperature difference regulations for exhaust gas and intake and discharge water at power stations and implementing environmental impact assessments when developing power sources. Going forward, we will consider analyzing and evaluating nature-related risks and opportunities based on the risk management approaches proposed by the TNFD.

Compliance with TCFD Recommendations: Climate-related Risks and Opportunities ▶ P70

## Targets

**The metrics and targets used to assess and manage material nature-related dependencies, impacts, risks, and opportunities**

- The Group has established the Hokuriku Electric Power Group's Roadmap toward Achieving Carbon Neutrality and the Environmental Management Plan to promote environmentally-conscious efforts.

| | |
|---|---|
| Climate | ・Compliance with TCFD Recommendations: Metrics and Targets ▶ P70 |
| Wastes | ・Waste recycling rate of 95%<br>・Promotion of recycling of waste plastics |

The Hokuriku Electric Power Group's Roadmap toward Achieving Carbon Neutrality ▶ P38

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

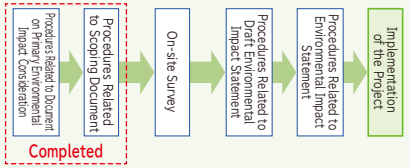
## The Group's Efforts

We take environmental conservation into consideration when advancing our business plans, such as by conducting environmental impact assessments.

### Environmental Impact Assessment of an Onshore Wind Power Generation Project in Asahi Town

- We are considering the development of an onshore wind power generation project in Asahi Town, Shimoniikawa District, Toyama Prefecture, and are conducting a development feasibility study. To achieve both the conservation of the rich natural environment of the project area and the development of renewable energy, we are working to communicate with the local community through measures such as holding resident information sessions as appropriate, and are moving forward with procedures based on the Environmental Impact Assessment Act as part of the development feasibility study.

●Flow of the Environmental Impact Assessment Procedures




Environmental Conservation Efforts ▶ P73

***TNFD: Task Force on Nature-related Financial Disclosures**

A market-driven, science-based, government-supported global initiative launched in 2021 in order to enable companies and financial institutions to take nature into account in their decision-making. It published recommendations in September 2023 to encourage companies to provide clear, comparable, and consistent information to investors and other funders.

# 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 2023)

### INPUT

**Power Generation Fuels**

| | |
|---|---|
| Coal*1 | 4,946 kt |
| Heavy Oil | 117 ML |
| Crude Oil | 0 ML |
| LNG | 427 kt |
| Gas Oil | 6 ML |
| Wood Biomass*1 | 8 kt |
| Nuclear Fuel*2 | 0 kg-$^{235}$U |

**Water**

| | |
|---|---|
| Water for Power Generation*3 | 5,330 kilo m³ |

**Materials**

| | |
|---|---|
| Limestone | 73 kt |
| Ammonia | 3 kt |

**Service Activities**

| | |
|---|---|
| Fuel for Company Vehicles<br>Gasoline<br>Diesel Fuel | <br>478 kL<br>237 kL |
| Kerosene Used | 88 kL |
| Water Used | 93 kilo m³ |
| Paper Used | 126 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 6.5 billion kWh

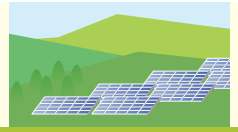
Wholesale 3.8 billion kWh

### Power Stations

Thermal Power Stations
18.2 billion kWh

Nuclear Power Station
0 kWh

Hydroelectric Power Stations
5.7 billion kWh



Photovoltaic Power Stations
4 million kWh

Power Consumption at Power Stations ▲1.1 billion kWh

**Power Transmission, Transformation, and Distribution Facilities**

Transmission and Distribution Loss ▲1.2 billion kWh

**Head Office Building & Other Offices**

Electricity Consumption at Hokuriku Electric Power Company Offices, etc. (Included in electricity sales volume) ▲0.2 billion kWh

**Customers** Electricity Sales Volume 24.2 billion kWh

### OUTPUT

**Atmospheric Emissions**

● Greenhouse Gases

| | | |
|---|---|---|
| Supply Chain Greenhouse Gas Emissions | | 13.15 Mt-$CO_2$ |
| Breakdown | $CO_2$ (Carbon dioxide) *1 | 13.11 Mt-$CO_2$ |
| | $SF_6$ (Sulfur hexafluoride) *2 | 10,886 t-$CO_2$ |
| | HFCs (Hydrofluorocarbons) *2 | 476 t-$CO_2$ |
| | PFCs (Perfluorocarbons) | None Handled |
| | $N_2O$ (Dinitrogen monoxide) | 32,713 t-$CO_2$ |
| | $CH_4$ (Methane) | 1,240 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. 2.6
*2 Annual values shown for $SF_6$ and HFCs.

● Other

| | |
|---|---|
| SOx (Sulfur oxides) | 4 kt |
| NOx (Nitrogen oxides) | 4 kt |

**Waste & Byproducts**

| | |
|---|---|
| Coal Ash | 509 kt |
| Gypsum | 133 kt |
| Other | 27 kt |

Amount Recycled: 629 kt

**Solid Radioactive Waste**

Equivalent to 372 200-liter drums

**Waste Water from Power Stations**

2,608 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 2024 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

## Efforts to Bring About a Recycling-Oriented Society

We are working to build a recycling-oriented society through effective use of resources and other efforts.

### Promotion of a Circular Economy

The Group is working to increase the proportion of waste recycled and to promote the recycling of waste plastic items, based on the principles of the Three Rs (Reduce generation of waste, and Reuse and Recycle recyclable resources) plus "Renewable" (conversion to biomass, use of recycled materials, etc.). In FY 2023, the Hokuriku Electric Power Company worked to recycle waste rollers from conveyor belts made with processed rubber (approx. 50 tons), as part of our efforts to reduce plastic waste, and the amount of industrial waste from products using plastic was 280 tons.* In FY 2023, the Group produced 683,000 tons of industrial waste, but through effective use efforts, 93.8% of that waste was recycled.

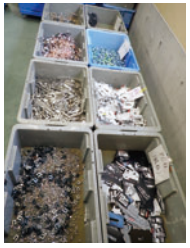
* Amount of plastic waste based on the Act on Promotion of Resource Circulation for Plastics

#### Smart Meter Recycling by a Group Company

Hokuriku Instrumentation, a Group company, became the first company in Japan to receive wide-area certification from the Ministry of the Environment for the business of disposing of used smart meters in January 2024, and began operations in March.

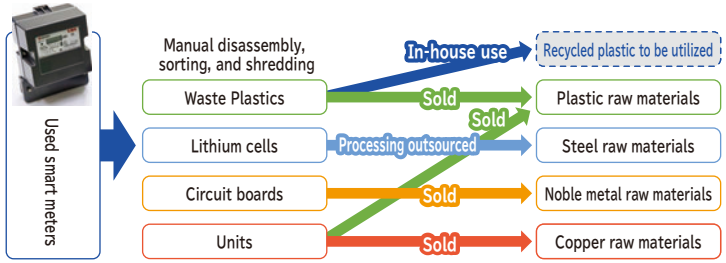
As a manufacturer, the company has a thorough understanding of the structure of the meters, and carries out advanced disassembly and recycling of used meters collected from a wide area, thereby contributing to the reduction of waste and ensuring proper disposal.

Every year, the company processes around 225 tons of smart meters into raw materials.



Parts after disassembly and sorting

● Processing Flow




#### 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, as well as in our own facilities (biomass storage silo foundations).

Biomass storage silos at Tsuruga Thermal Power Station

* 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.

COLUMN こころをひとつに能登 (Together as One for Noto)

### Research toward the Effective Utilization of Waste Roof Tiles Resulting from the Earthquake

Due to the 2024 Noto Peninsula Earthquake, large quantities of Noto-gawara (traditional roof tiles made and used in Noto) became unusable waste. Following this, a project to recycle these tiles as concrete aggregate and use them in reconstruction work was selected for the 30th Research Grant Program for the Revitalization of the Hokuriku Region organized by the Hokuriku Regional Management Service Association. This project was jointly applied for by the Hokuriku Electric Power Company and Ishikawa National College of Technology, and aims to solve the issue of waste treatment and disposal. Going forward, we will research ways to use waste roof tiles in fly ash concrete, and continue working to support the recovery of the region.

Methods for using fine roof tile particles as part of the sand in concrete are being investigated.

# Efforts toward Environmental Conservation with Consideration for Biodiversity

We work to conserve biodiversity in gratitude for the blessings of nature and living things.

## 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 2023, a total of about 10,000 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 2023, about 6,400 employees of the Group participated in cleanup activities, including ones hosted by local organizations.

Beach Cleanup

## 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 2023, we exhibited at 16 events. At the Toyama Environment Fair 2023 held in Takaoka, we provided children with an environmental board game to learn about eco-friendly practices, a solar car craft workshop, and a quiz rally with answers to be found on panels about the Group's environmental measures.

Toyama Environment Fair 2023

## 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 2024, we found a pair of white storks (a species designated for special protection by the national government) had built a nest on a utility pole in Shika Town, Ishikawa Prefecture, and had hatched chicks.

In response to requests for cooperation from the town government, we took the measures necessary to prevent power outages and to protect these storks from electric shocks. We watched over these birds until their fledglings left the nest.

## 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* 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 2023.

Company-owned Electric Vehicles

* 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.

# Contribution to the Local Community

**As a member of the region, we promote various activities where our employees can be seen and met in person, in order to be trusted and supported by local communities, and to contribute to the sustainable development of society.**

## 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, thus contributing to the sustainable development of regional society, while taking on the challenges of new businesses.

■Comprehensive partnership agreements: signed with 43 of the 52 municipalities in the Hokuriku area (as of March 31, 2024)
Toyama Prefecture: 14 municipalities Ishikawa Prefecture: 17 municipalities Fukui Prefecture: 12 municipalities

## Participation in Local Events Aimed at Regional Revitalization

As part of our efforts to coexist with the community, the Group actively participates in local events, such as festivals and sporting and cultural events held in each prefecture.

In FY 2023, a total of 615 employees participated in 117 events in the Hokuriku region, further improving our communication with local communities.

Jantokoi Uozu Festival

Kanazawa Marathon Water Station Volunteers

## 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 220 km worth of electric pole removal in areas such as emergency routes, commercial districts, and historic districts requiring townscape conservation.

In addition, in light of the recent trend of increasingly severe natural disasters, the company will work to remove electric poles (undergrounding), at its own expense as the manager of the power lines, in locations such as places at risk of prolonged power outages due to fallen trees caused by typhoons or snowfall.

Hokuriku Shinkansen Tsuruga Station, with no electric poles around

## Electrical Inspection of Important Cultural Properties

As part of its efforts during Electricity Usage Safety Month (Aug. 1–31), the Hokuriku Electric Power Transmission & Distribution Company conducts electrical inspections of buildings designated as important cultural properties in the Hokuriku region, including the Gassho-style Villages (designated a World Heritage site), in cooperation with relevant organizations and companies, such as the Electrical Engineering Contractors Cooperative of each prefecture and the Hokuriku 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 World Heritage Ainokura Gassho-style Village

## Donation of Hoku-Link Points to Organizations and Universities

With our membership service Hoku-Link, users can exchange points accumulated based on their electricity bill and other factors, for products from companies and organizations mainly in the Hokuriku region. As one of these options, we offer donations to various organizations (such as Japanese Red Cross Society and OISCA) and universities. We have made donations based on applications from our members.

We also donated a portion of the profit from the sale of our Toyama Mizu-no-sato Denki electricity rate plan option to Toyama Prefecture, and it was used for childcare support and other programs.

## 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

## Opening and Management of the Wonder Laboratory NEXT Website for the Next Generation

Our Energy Science Museum (nicknamed "Wonder Laboratory") closed in February 2023. However, in order to pass on the philosophy of that museum — fostering a spirit of scientific inquiry rich in creativity — and to interest the next generation throughout the three prefectures of the Hokuriku region in science and energy, we launched a new website called Wonder Laboratory NEXT in March 2024.

The website provides a variety of content on the themes of fostering scientific curiosity, correct understanding of energy issues, and stimulating interest in energy.

Website https://wonderlab-next.rikuden.co.jp/

In addition to online, we also provide traveling experiment workshops where children can experience science experiments firsthand.

## 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 2023, we held 226 visit lessons and 50 facility tours, with a total of 6,969 participants.

Visit Lesson
(Minami-Echizen Town Yunoo Elementary School)

## Operational Support for the Hokuriku Electric Power Company Educational Advancement Foundation

Educational Equipment Presentation Ceremony
(Ishikawa Prefectural Hodatsu High School)

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 people from the Hokuriku region who work in various fields to give talks and share their personal experiences. In FY 2023, about 1,560 students from twelve schools participated.

## Industry-Academia Cooperation

Signing Ceremony for Comprehensive Partnership Agreement with the University of Toyama

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 May 2024, we entered into a comprehensive partnership agreement with the University of Toyama. By making use of diverse knowledge, we work to solve various regional issues, including carbon neutrality, and aim to develop new value (create innovation).

## 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 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. (32,813 visitors in FY 2023)

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

Maintaining the Corporate Governance System

# 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

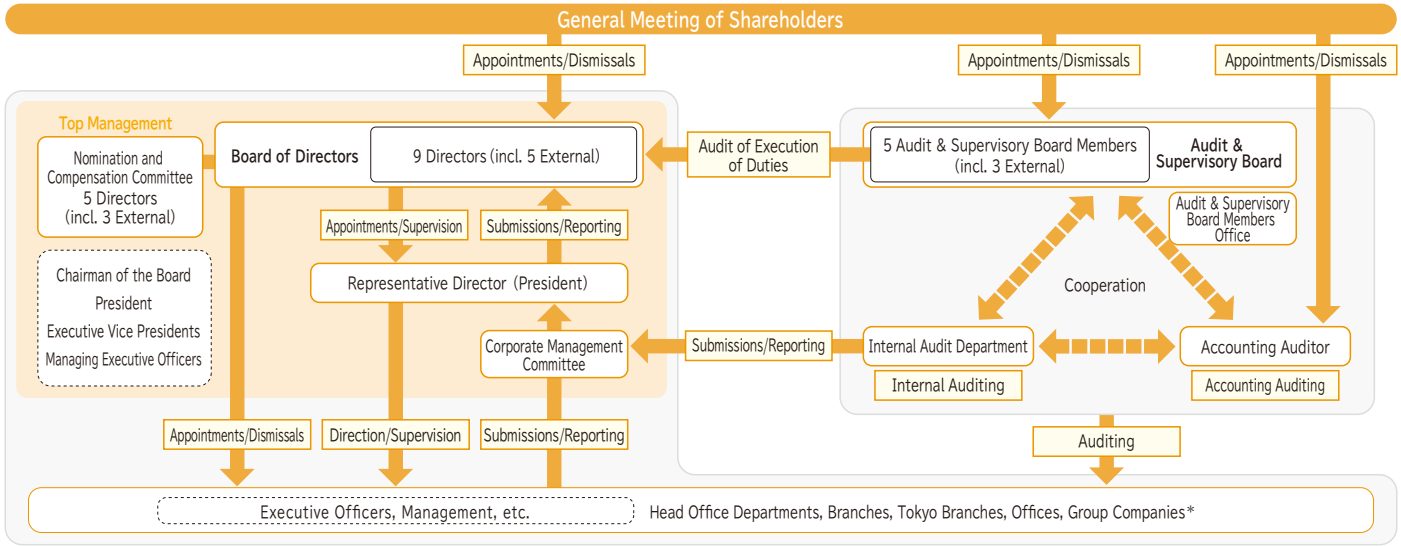
## Corporate Governance System

### 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 for 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, bonuses to be paid at certain times each year, and share-based compensation, 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, which is a target of our mid-term business plan, and individual performance. The bonus amounts for each director (except external directors) are to be 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 share-based compensation for each director (except external directors) is to be restricted stock units, set at approximately 10% of their total compensation, and the number of shares granted is to be fixed depending on their position.

The amounts of base compensation, performance-linked compensation, and share-based 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 to be 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 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 2024, 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.

Maintaining the Corporate Governance System

# Directors and Audit & Supervisory Board Members of the Hokuriku Electric Power Company (As of June 26, 2024)

## 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)

## Maintaining the Corporate Governance System

## 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

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

### Shinya Murasugi

Apr. 1990: Joined Hokuriku Electric Power Company
Jun. 2021: Became Executive Officer
Jun. 2024: Became Audit & Supervisory Board Member (Current Position)
Jun. 2024: Became Audit & Supervisory Board Member of the Hokuriku Electric Power Transmission & Distribution 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
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)

Audit & Supervisory Board Member (External)

### Akiko Nakamura

Apr. 1992: Registered with Nara Bar Association
Feb. 1994: Registered with Kanazawa Bar Association (Current Position)
Jun. 2024: Became Audit & Supervisory Board Member of the Hokuriku Electric Power Company (Current Position)

Maintaining the Corporate Governance System

# Directors and Audit & Supervisory Board Members of the Hokuriku Electric Power Transmission & Distribution Company (As of June 27, 2024)

## 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 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)

Director (Part-time)

### Tetsuya Ishimaru

Apr. 1991: Joined Hokuriku Electric Power Company
Apr. 2020: Transferred on loan to Hokuriku Electric Power Transmission & Distribution Company
Jun. 2020: Became Executive Officer
Jun. 2022: Became Director
Jun. 2023: Became Representative Director & President of Hokuden Techno Service (Current Position)
Jun. 2024: Became Director (Part-time) of the Hokuriku Electric Power Transmission & Distribution Company (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.

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 a sense of security.

# 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)

# 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 | Respect for Human Rights |
| 5 | Open Transactions |
| 6 | Fair and Impartial Procurement |
| 7 | Establishment of Mutual Trust (Partnerships) |
| 8 | Contribution to the Local Community |
| 9 | Proper Management and Protection of Information |

# Preparedness for Risks

## 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**

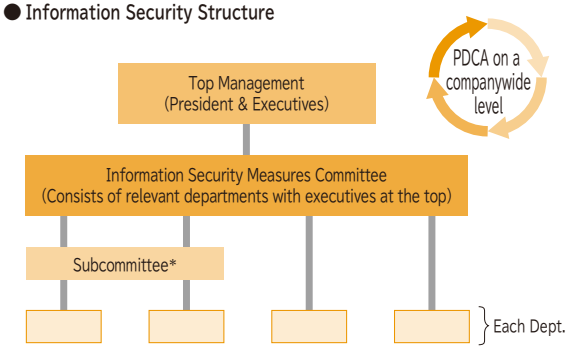
(1) We shall establish a system to continuously maintain and improve our information security level.

(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 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| Operating Revenue (Million yen) | 628,039 | 639,445 | 613,756 | 817,601 | 808,238 |
| Operating Income (Million yen) | 29,461 | 17,828 | Δ16,415 | Δ73,791 | 114,911 |
| Ordinary Income (Million yen) | 23,236 | 12,354 | Δ17,641 | Δ93,737 | 107,931 |
| Net Income (Loss) Attributable to Owners of Parent (Million yen) | 13,433 | 6,834 | Δ6,762 | Δ88,446 | 56,811 |
| Return on Equity (%) | 4.2 | 2.1 | Δ2.0 | Δ31.7 | 21.0 |
| Return on Assets (%) | 1.3 | 0.8 | Δ0.7 | Δ3.1 | 4.5 |
| Net Income per Share (Yen) | 64.34 | 32.73 | Δ32.39 | Δ423.69 | 272.16 |
| Capital Investment (Million yen) | 76,502 | 84,289 | 99,106 | 83,125 | 78,812 |
| Total Assets (Million yen) | 1,592,933 | 1,595,626 | 1,660,038 | 1,805,318 | 1,855,435 |
| Net Assets (Million yen) | 336,456 | 355,740 | 343,280 | 252,285 | 327,453 |
| Capital-to-asset Ratio (%) | 20.2 | 21.2 | 19.6 | 12.9 | 16.6 |
| Outstanding Interest-bearing Debt (Million yen) | 974,547 | 974,858 | 1,038,738 | 1,285,467 | 1,192,827 |
| Net Assets per Share (Yen) | 1,542.20 | 1,622.02 | 1,556.34 | 1,118.51 | 1,474.99 |
| Cash Flows from Operating Activities (Million yen) | 101,475 | 56,639 | 30,950 | Δ97,045 | 223,328 |
| Cash Flows from Investing Activities (Million yen) | Δ75,141 | Δ84,913 | Δ111,044 | Δ88,845 | Δ69,472 |
| Cash Flows from Financing Activities (Million yen) | Δ6,285 | Δ3,300 | 52,785 | 245,752 | Δ93,732 |
| Cash and Cash Equivalents at End of Period (Million yen) | 163,019 | 132,310 | 105,002 | 164,863 | 225,014 |
| Number of Employees | 8,562 | 8,326 | 8,593 | 8,565 | 8,541 |

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

## Group Companies

(As of March 31, 2024)

**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
- Echizen Yoshinosegawa Hydropower LLC

**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.
- Nikken Corporation
- Hokuriku Electric Power Biz Energy Solutions Co., Ltd.
- Hokuden Engineering Consultants Co., Ltd.
- Scairt Co., Ltd.
- Kanbara Equipment Engineering Co., Ltd.
- Nakayama Construction Co., Ltd.
- Seven Pride 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 Business**
- F3 Holding Company B.V.
- F3 O&M Company Ltd.
- Formosa Seagull Power Investment Co., Ltd.
- PT. Awina Rikudenko Solar Engineering Indonesia
- Sun-eee Pte. Ltd.

and 9 other companies

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

| Fiscal Year | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| Operating Revenue (Million yen) | 573,868 | 577,106 | 554,565 | 756,346 | 738,836 |
| Operating Income (Million yen) | 20,214 | Δ6,463 | Δ36,327 | Δ83,169 | 79,736 |
| Ordinary Income (Million yen) | 15,707 | Δ8,371 | Δ31,739 | Δ92,916 | 79,893 |
| Net Income (Million yen) | 10,294 | Δ5,094 | Δ12,828 | Δ81,942 | 47,993 |
| Ordinary Revenue / Loss (Million yen) | 577,532 | 582,915 | 566,616 | 770,899 | 750,668 |
| Electricity Sales (Retail) | 453,412 | 440,559 | 426,049 | 532,520 | 562,023 |
| Electricity Sales (Wholesale) | 55,032 | 81,974 | 113,649 | 187,180 | 97,852 |
| Other | 69,087 | 60,380 | 26,917 | 51,198 | 90,792 |
| Ordinary Expenses (Million yen) | 561,825 | 591,286 | 598,356 | 863,816 | 670,774 |
| Personnel Expenses | 51,156 | 29,429 | 26,528 | 26,550 | 29,807 |
| Fuel Expenses | 109,837 | 90,899 | 169,262 | 395,373 | 232,743 |
| Maintenance Expenses | 60,053 | 32,318 | 36,353 | 31,549 | 39,227 |
| Depreciation Expenses | 47,828 | 28,872 | 29,953 | 30,657 | 31,968 |
| Purchased Power Expenses | 105,013 | 136,269 | 124,922 | 144,355 | 99,571 |
| Interest Expenses | 7,654 | 6,934 | 6,563 | 7,172 | 7,415 |
| Taxes and Public Charges | 31,440 | 13,170 | 13,058 | 14,945 | 14,555 |
| Other | 148,841 | 253,392 | 191,713 | 213,211 | 215,486 |
| Return on Equity (%) | 3.6 | Δ1.8 | Δ4.7 | Δ36.5 | 22.6 |
| Return on Assets (%) | 1.0 | Δ0.3 | Δ1.7 | Δ3.7 | 3.3 |
| Net Income per Share (Yen) | 49.31 | Δ24.40 | Δ61.45 | Δ392.52 | 229.91 |
| Dividend (Yen) per Share | 10 | 15 | 10 | – | 7.5 |
| Capital Investment (Million yen) | 69,245 | 50,264 | 48,550 | 45,061 | 44,452 |
| Total Assets (Million yen) | 1,529,530 | 1,506,958 | 1,564,187 | 1,716,651 | 1,721,709 |
| Net Assets (Million yen) | 286,945 | 284,130 | 266,684 | 182,109 | 242,102 |
| Capital-to-asset Ratio (%) | 18.8 | 18.9 | 17.0 | 10.6 | 14.1 |
| Outstanding Interest-bearing Debt (Million yen) | 985,476 | 988,656 | 1,046,355 | 1,293,178 | 1,202,640 |
| Net Assets per Share (Yen) | 1,374.42 | 1,360.99 | 1,277.46 | 872.36 | 1,159.78 |
| Number of Employees | 5,325 | 2,801 | 2,761 | 2,700 | 2,601 |

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 2021 | FY 2022 | FY 2023 |
| 1 | Fuel Consumption for Power Generation | Coal | kt | 6,970 | 6,422 | 4,946 |
| | | Heavy Oil | ML | 242 | 283 | 117 |
| | | Crude Oil | ML | 14 | 0 | 0 |
| | | LNG | kt | 433 | 383 | 427 |
| | | Gas Oil | ML | 6 | 6 | 6 |
| | | Wood Biomass | kt | 26 | 19 | 8 |
| | | Nuclear Fuel | kg-$^{235}$U | 0 | 0 | 0 |
| 2 | Electricity Generated (Generating End) | Thermal power | billion kWh | 24.9 | 23.1 | 18.2 |
| | | Hydro power | billion kWh | 6.2 | 6.0 | 5.7 |
| | | Nuclear power | billion kWh | 0 | 0 | 0 |
| | | Photovoltaic | million kWh | 5 | 5 | 4 |
| 3 | Transmission and Distribution Loss Rate | | % | 4.4 | 3.8 | 4.4 |
| 4 | Electricity Consumption at Hokuriku Electric Power Company Offices, etc. | | billion kWh | 0.2 | 0.2 | 0.2 |
| 5 | Electricity Sold to and Purchased from Other Utilities | Purchased | billion kWh | 8.0 | 6.3 | 6.5 |
| | | Wholesale | billion kWh | 8.1 | 6.4 | 3.8 |
| 6 | Electricity Sales Volume | | billion kWh | 28.1 | 26.3 | 24.2 |
| 7 | Thermal Power Generation Efficiency: Benchmark Index B of the Act on the Rational Use of Energy | | % | 41.0 | 40.9 | 40.9 |
| 8 | Waste Water from Power Stations | | Kilo m$^3$ | 2,688 | 2,706 | 2,608 |

*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 Calculations were made based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain Ver. 2.6 (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 2021 | FY 2022 | FY 2023 |
| 1 | $CO_2$ Emissions *2 (based on retail electricity sales volume) | Basic | Mt-$CO_2$ | 13.47 | 12.79 | 11.19 |
| | | Adjusted | Mt-$CO_2$ | 13.58 | 13.11 | 11.65 |
| 2 | $CO_2$ Emission Intensity *2 (based on retail electricity sales volume) | Basic | kg-$CO_2$/kWh | 0.480 | 0.487 | 0.462 |
| | | Adjusted | kg-$CO_2$/kWh | 0.484 | 0.499 | 0.481 |
| 3 | SOx Emissions | Emissions | t | 6,352 | 6,146 | 4,375 |
| | | Standard Unit *3 | g/kWh | 0.26 | 0.27 | 0.24 |
| 4 | NOx Emissions | Emissions | t | 5,402 | 5,109 | 3,855 |
| | | Standard Unit *3 | g/kWh | 0.22 | 0.22 | 0.21 |
| 5 | $SF_6$ Emissions | | t | 0.6 | 0.3 | 0.4 |
| 6 | $SF_6$ Gas Recovery Ratio during Inspection and Disposal | | % | 99 | 99 | 99 |
| 7 | HFC Emissions | | t | 0.2 | 0.8 | 0.4 |
| 8 | PFC Emissions | | t | None Handled | None Handled | None Handled |
| 9 | $N_2O$ Emissions | | t | 110 | 102 | 123 |
| 10 | $CH_4$ Emissions | | t | 23 | 18 | 44 |
| 11 | Fluorocarbon Consumption | | t | 0.7 | 0.5 | 0.7 |

### ●Supply Chain Greenhouse Gas Emissions *4

| | Category | | Unit | FY 2021 | FY 2022 | FY 2023 |
|---|---|---|---|---|---|---|
| 12 | Scope 1 (Emissions from fuel combustion by the company itself) | | Mt-$CO_2$ | 18.76 | 17.48 | 13.15 |
| 13 | Scope 2 (Emissions from the use of electricity, heat, or steam) | | Mt-$CO_2$ | 0 | 0.00002 | 0.00002 |
| 14 | Scope 3 (Indirect emissions besides Scopes 1 and 2) | | Mt-$CO_2$ | 5.83 | 4.37 | 4.52 |
| | | Category 1 (Purchased goods and services) | Mt-$CO_2$ | 0.21 | 0.2 | 0.22 |
| | | Category 2 (Capital goods) | Mt-$CO_2$ | 0.3 | 0.28 | 0.27 |
| | | Category 3 (Fuel and energy-related activities not included in Scope 1 or 2) | Mt-$CO_2$ | 5.12 | 3.69 | 3.82 |
| | | Category 4 (Transportation and delivery (upstream)) | Mt-$CO_2$ | 0.0002 | 0.0001 | 0.0002 |
| | | Category 5 (Waste generated in operations) | Mt-$CO_2$ | 0.03 | 0.03 | 0.02 |
| | | Category 6 (Business travel) | Mt-$CO_2$ | 0.0007 | 0.0007 | 0.0006 |
| | | Category 7 (Employee commuting) | Mt-$CO_2$ | 0.002 | 0.002 | 0.002 |
| | | Category 11 (Use of products sold) | Mt-$CO_2$ | 0.15 | 0.17 | 0.19 |

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

| | Category | | Unit | Results | | |
|---|---|---|---|---|---|---|
| | | | | FY 2021 | FY 2022 | FY 2023 |
| 1 | Production and Proportion Recycled of Industrial Waste and Byproducts | Amount Produced (Amount of Coal Ash Produced, Included in the Total) | kt | 1,028 (799) | 901 (697) | 669 (509) |
| | | Percentage Recycled (Proportion Recycled of Coal Ash) | % | 95.7 (95.5) | 96.4 (96.2) | 93.9 (93.7) |
| 2 | Office Waste Collected by the Hokuriku Electric Power Company | Used Helmets | pcs. | 223 | 282 | 151 |
| | | Used Safety Shoes | pairs | 959 | 739 | 670 |
| | | Used Safety Harnesses | sets | 335 | 205 | 149 |
| | | Used Fluorescent Lamps | t | 3.2 | 3.5 | 2.4 |
| | | Used Batteries | t | 1.4 | 0.7 | 1.4 |
| 3 | Green Purchasing Coverage | | % | 91 | 92 | 91 |
| 4 | Number of Electric Vehicles Introduced*5 (Proportion of EVs among company vehicles) | | vehicles (%) | 218 (69.0) | 210 (67.1) | 195 (66.6) |
| 5 | Amount of Electricity Use at Offices over Time (Percentage, using the FY 2004 amount as 100) | | % | 80.8 | 77.4 | 74.1 |
| 6 | Production of Solid Radioactive Waste (200-liter drum equivalent) | | drums' worth | 816 | 564 | 372 |

*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 2023 Breakdown of Production and Proportion Recycled of Industrial Waste and Byproducts

| Product name | Amount Produced (t) | Percentage Recycled (%) | Main Use |
|---|---|---|---|
| Coal Ash | 508,890 | 93.7 | Raw material for cement |
| Gypsum | 133,320 | 100.0 | Raw material for cement |
| Heavy/Crude Oil Ash | 361 | 98.4 | Raw material for cement |
| Electric Wire Scrap, Iron Scrap | 5,886 | 99.9 | Metal stock |
| Waste Plastics | 454 | 14.8 | Plastic products |
| Decommissioned Concrete Poles | 5,711 | 100.0 | Roadbed material |
| Insulator Scrap | 486 | 98.2 | Land reclamation material, aggregate |
| Sludge | 8,897 | 24.8 | Raw material for cement |
| Construction & Demolition Waste | 415 | 0.8 | Land reclamation material, aggregate |
| Other | 4,751 | 75.8 | – |
| Total | 669,171 | 93.9 | – |

FY 2023 Uses of Recycled Coal Ash

| Uses | | Proportion (%) |
|---|---|---|
| Cement Raw Material (Clay substitution) | Domestic | 44.6 |
| | Overseas | 16.9 |
| Cement (Other than clay substitution) | | 2.3 |
| Land Reclamation Material | | 8.5 |
| Recycled Base Course Material | | 6.7 |
| Architecture | | 11.3 |
| Soil Stabilization Material (Drainage material for grounds, rice fields, etc.) | | 4.7 |
| Civil Engineering | | 4.9 |
| Other | | 0.1 |

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

| | Substance | No. of Facilities Submitting Notifications | Main Uses | FY 2023 | | |
|---|---|---|---|---|---|---|
| | | | | Amount Handled (t) | Amount of Emissions (t) | Amount Transferred (t) |
| 1 | Asbestos | 2 | Heat insulating material | 25.2 | 0 | 25.2 |
| 2 | Methylnaphthalene | 4 | Fuel | 79.0 | 0.4 | 0 |
| 3 | Methylenebis (4,1-phenylene) diisocyanate | 1 | Filler | 1.1 | 0 | 0 |

* 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 2021 | FY 2022 | FY 2023 |
| 1 | Number of Employees | Total | people | 5,513 | 5,428 | 5,315 |
| | | Women (Proportion of women) | people (%) | 891 (16.2) | 880 (16.2) | 870 (16.4) |
| 2 | Average Age | | years old | 42.3 | 42.4 | 42.4 |
| 3 | Length of Service | Total | years | 20.5 | 20.6 | 20.5 |
| | | Men | years | 21.8 | 21.8 | 21.6 |
| | | Women | years | 13.8 | 14.1 | 14.7 |
| 4 | Number of Managers | Total | people | 1,885 | 1,836 | 1,806 |
| | | Women (Proportion of women) | people (%) | 96 (5.1) | 105 (5.7) | 112 (6.2) |
| 5 | Proportion of Employees with Disabilities*2 | | % | 2.33 | 2.42 | 2.59 |
| 6 | Number of Employees Hired (Including Mid-Career Hires) | Total | people | 144 | 133 | 139 |
| | | Women (Proportion of women) | people (%) | 18 (12.5) | 14 (10.5) | 16 (11.5) |
| 7 | Number of Employees Taking Nursing Care Leave | | people | 2 | 2 | 2 |
| 8 | Usage Rate of Child-care Leave | Men*3 | % | 12 | 61 | 94 |
| | | Women | % | 100 | 100 | 100 |
| 9 | Number of Days of Paid Annual Leave Taken per Employee*4 | | days | 20.8 | 21.5 | 21.2 |

*2 Including the Hokuriku Electric Power With Smile Company. Proportion as of June 1 of the following year

*3 Usage Rate = Number of male employees who took childcare leave during the given fiscal year / Number of male employees whose spouse gave birth during the given fiscal year

*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 2021 | FY 2022 | FY 2023 |
| 1 | System Average Interruption Duration Index | | minutes/ customer/year | 17 | 26 | 510 |
| 2 | System Average Interruption Frequency Index | | times/ customer/year | 0.12 | 0.16 | 0.55 |
| 3 | Increased Amount of Buried Distribution Lines | Single Fiscal Year | km | 4.55 | 4.09 | 3.32 |
| | | Total | km | 213.13 | 217.22 | 220.55 |
| 4 | Hoku-Link Membership | | thousands of members | 515 | 553 | 631 |
| 5 | Visit Lessons and Facility Tours | | sessions | 199 | 270 | 276 |

# Governance

### (1) Data Related to Corporate Governance*1

| | Category | Unit | Results | | |
|---|---|---|---|---|---|
| | | | FY 2021 | FY 2022 | FY 2023 |
| 1 | Number of Directors (Number of external directors included in the total) | people | 9 (3) | 9 (4) | 9 (5) |
| 2 | Proportion of External Directors | % | 33.3 | 44.4 | 55.6 |
| 3 | Number of Board of Directors' Meetings Held (Average attendance rate) | sessions (%) | 11 (98) | 12 (98) | 11 (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 (42.9) | 7 (50.0) | 8 (57.1) |
| 7 | Number of Female Directors and Audit & Supervisory Board Members (Proportion) | people (%) | 1 (7.1) | 2 (14.3) | 3 (21.4) |

*1 Results for the Hokuriku Electric Power Company

### (2) Data Related to Occupational Safety*2

| | Category | Unit | Results | | |
|---|---|---|---|---|---|
| | | | FY 2021 | FY 2022 | FY 2023 |
| 1 | Number of Employee Injuries *3 | people | 3 | 1 | 2 |
| 2 | Rate of Lost-worktime Injuries *3 *4 | – | 0.27 | 0.09 | 0.20 |
| 3 | Number of Contracted Worker Injuries *3 | people | 17 | 13 | 16 |
| 4 | Number of Employee Fatalities | people | 1 | 0 | 0 |
| 5 | Number of Contracted Worker Fatalities | people | 0 | 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 | Code of Conduct | https://www.rikuden.co.jp/conp/kodo.html |
| 5 | Fundamental Policies for Procurement | https://www.rikuden.co.jp/shizai/houshin.html |
| 6 | Disclosure Policy | https://www.rikuden.co.jp/management/disclosure.html |

# Reference Independent Evaluation Main Assessments

■ Heat Pump & Thermal Storage Technology Center of Japan

First electric power company to receive this award

**The company received the Director-General's Award, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry, the highest award in the equipment category, of the 2024 Demand Side Management Award.**

Hokuriku Electric Power Company

■ Ministry of Economy, Trade and Industry

**Acquisition of Digital Transformation Certification**

Hokuriku Electric Power Company, Hokuriku Electric Power Transmission & Distribution Company, Hokuden Information System Service Company, Kanazawa Energy, and Hokuden Engineering Consultants

■ METI Agency for Natural Resources and Energy

**The company received the highest rating of five stars in the FY 2023 Energy Conservation Communication Ranking System.**

Hokuriku Electric Power Company

■ Information Technology Federation of Japan

**The company received a star in the Cyber Index Corporate Survey 2023.**

Hokuriku Electric Power Company

■ Ministry of Health, Labour and Welfare

**Platinum Kurumin Certification**

Hokuriku Electric Power Company*

* Efforts made jointly by Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company

**Kurumin Certification**

Hokuriku Electrical Construction, Hokuriku Telecommunication Network, Hokuden Information System Service Company, Nihonkai Environmental Service, and Cable Television Toyama

■ Ministry of Health, Labour and Welfare

**3-star Eruboshi Certification**

Hokuriku Electric Power Company, *1 Hokuden Information System Service Company, Emori Infotech, and Cable Television Toyama *2

*1 Efforts made jointly by Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company
*2 Also received the Platinum Eruboshi certification

**2-star Eruboshi Certification**

Hokuriku Electrical Construction and Nihonkai Environmental Service

■ Ministry of Economy, Trade and Industry

**Health and Productivity Management Organization 2024**

**Large Enterprise Category**

**Certified as White 500**

Hokuriku Electric Power Company and Hokuriku Electric Power Transmission & Distribution Company certified jointly

**Certified**

Hokuriku Electrical Construction

**Certified in the Small and Medium Enterprise Category**

Hokuriku Plant Services, Nihonkaikenko Corporation, Nihonkai Concrete Industries, Hokuden Information System Service Company, Nihonkai Environmental Service, Hokuden Engineering Consultants, Hokuriku Electric, and Hokuriku Electrical Safety Inspection Association

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