

INTEGRATED REPORT

HEPCO Group Report 2022

2022





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Editorial Policy

The HEPCO Group Report is an integrated report that provides a systematic account for our stakeholders of the HEPCO Group's business operations, ESG activities, as well as other non-financial and financial information.

So that our stakeholders better understand the value that we provide and the ideals to which we aspire, this report presents those first in the form of our value creation process comprising the capital and business model that are the source of our value creation. This report also describes the progress we are making toward achieving our management vision and initiatives to be carbon neutral.

Thorough explanations are provided for each ESG factor, describing our climate change response based on the TCFD framework for our environmental criteria, diversity promotion and health and safety initiatives for our social standards, and efforts to enhance the effectiveness of our Board of Directors regarding corporate governance.

It is our hope that the format of this report will be understandable, easy-to-read, and provide our stakeholders with the information that they need.

We welcome your candid opinions and impressions, and hope you will share them with us.

HEPCO Group participates in the following initiatives.

TCFD

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

The Task Force on Climate-Related Financial Disclosures (TCFD) Consortium, which is made up of companies and other organizations endorsing TCFD recommendations. More information is available on pp. 43 to 45.

VALUE REPORTING FOUNDATION
SASB STANDARDS

Sustainability Accounting Standards Board (SASB) standards guide information disclosure. These are described in more detail on pp. 73 to 76.

CDP
DISCLOSURE INSIGHT ACTION

The Carbon Disclosure Project (CDP) is an NGO working on environmental issues and headquartered in the United Kingdom. Since FY2021, the HEPCO Group has responded to the CDP's climate change questionnaire.

[Publication date] October 2022

[Period covered] FY2022 (April 1, 2021 to March 31, 2022)

(Some information has been included that goes beyond the aforementioned period.)

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[Rainbow Post] <https://www.hepco.co.jp/mailpost/mailpost.html>

Notes on Forward-Looking Statements

Future plans, forecasts and other outlooks about the HEPCO Group published in this report are based on currently available information and involve potential risk and uncertainty. Therefore, changes in future economic and market conditions, fluctuations in fuel prices, revisions of relevant laws and regulations, as well as changes in a variety of factors may lead to variations in actual performance, business conditions, and other expectations that differ from those anticipated in this report.

HEPCO Group's Business Foundation Hokkaido

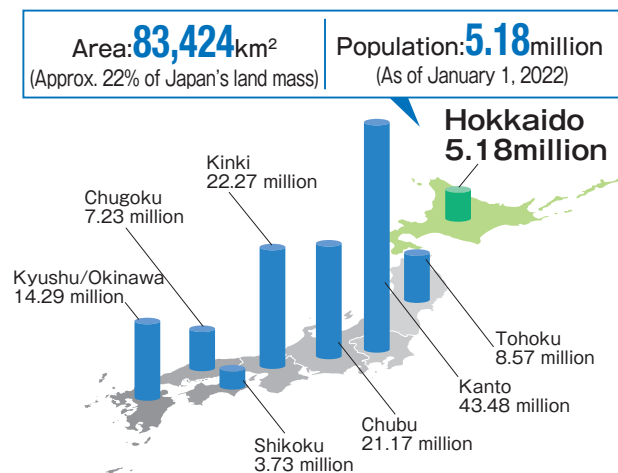
The HEPCO Group's business foundation is Hokkaido, the region where we have put down roots and developed our businesses. We will grow hand in hand with the development of this vast northern territory, a land of great bounty and, at times, trial.

Geography

Hokkaido is Japan's northernmost island, lying at roughly the same latitude as Chicago, Rome, Milan, and other major cities around the world (41~45 degrees north latitude).

Hokkaido covers 83,424km², accounting for 22% of Japan's land area. It is the largest prefecture and equivalent in size to Austria.

Japan Population by Region



Source: "Municipalities Area Statistics of Japan, 2022" published by the Geospatial Information Authority of Japan, Ministry of Land, Infrastructure, Transport and Tourism (as of April 1)
*Population, Population Movements, and Number of Households Derived from the Residential Basic Book (as of January 1, 2022), Ministry of Internal Affairs and Communications

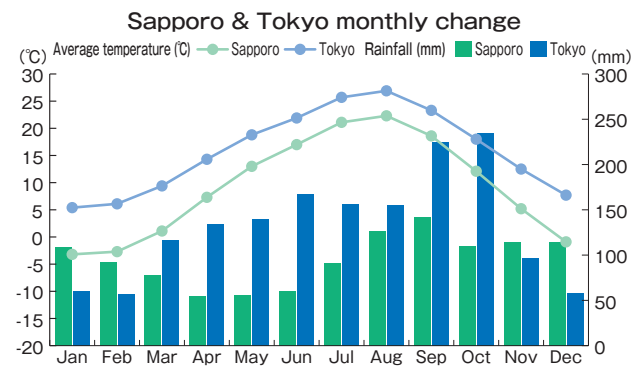
Climate

Almost all of Hokkaido has a subarctic climate. Temperatures are low throughout the year with considerable differences distinguishing each of the four seasons. Winters, in particular, will see continuing days with subzero temperatures.

Although there is substantial snowfall in winter, Hokkaido does not have a rainy season nor is it affected much by typhoons, consequently Sapporo has less rainfall than Tokyo.

Comparison of Sapporo and Tokyo Temperatures and Rainfall (30-year average 1991~2020)

	Annual average temperature (°C)	Annual rainfall (mm)
Sapporo	9.2	1,146
Tokyo	15.8	1,598



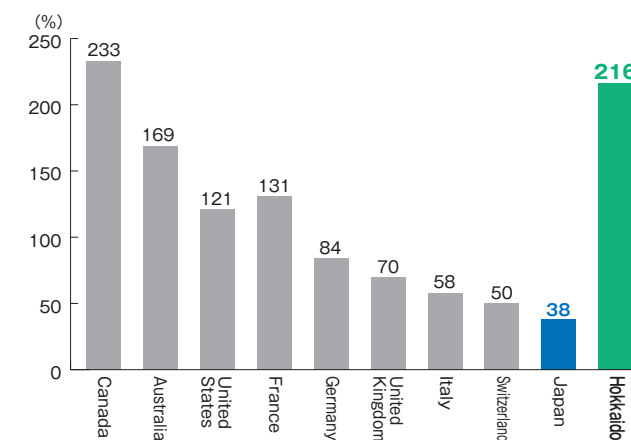
Prepared by HEPCO based on "Sapporo & Tokyo Averages (Annual & Monthly)" published by the Meteorological Agency

Food Self-Sufficiency

Over the long-term, Japan's food self-sufficiency rate tended to decline due to dietary changes such as greater consumption of livestock products, oils, and fats even as rice consumption has decreased. In recent years, this trend has remained flat.

Japan's calorie-based food self-sufficiency rate was 38% in FY2020, which is lower than other countries. However, Hokkaido's rate exceeds 200%, the highest nationwide.

Calorie-Based Food Self-Sufficiency Rate (FY2020)



Prepared by HEPCO based on "World Self-Sufficiency Rates" published by the Ministry of Agriculture, Forestry and Fisheries, and "FY2020 Figures" by the Hokkaido Regional Agricultural Administration Office.

[HEPCO Group Management Philosophy and Vision]

The principal mission of the HEPCO Group is to keep the lights on in Hokkaido, support the regional economy as well as our customers' lives even in a business climate of significant change.
Based upon our enduring management philosophy, all employees share the vision of the kind of company that the HEPCO Group aims to be and work to sustainably enhance corporate value.

HEPCO Group Management Philosophy

**Respect for
humanity**

**Contribution
to local
communities**

**Efficient
management**

In fulfilment of our management philosophy, we recognize that the HEPCO Group cannot develop unless the local community also enjoys sustained development. We will always live up to our responsibility as a member of society, contribute to its development and the economy, as well as foster culture through the provision of products and services integrating electric power.

Corporate Vision

True to our slogan "light up your future," we support sustainable development of the region through fulfilment of our responsibility to supply energy.

Adopting a fresh perspective, we aggressively take on challenges to grow and develop further as a total energy services corporate group.

We manage our business operations in a nimble and agile manner, reinforce our business foundation, and meet the expectations of our stakeholders.



President's Message

We will do our utmost to meet the carbon neutral challenge and blaze a trail for decarbonization in Japan

Management Philosophy & Mission

Since our founding in 1951, the HEPCO Group's primary mission has been to keep the lights on for the people of Hokkaido. We have strived to provide a stable supply of electric power by leveraging technology and reliably meeting the social challenges faced in each generation. Based on our management philosophy mandating 'respect for humanity,' 'contribution to local communities,' and 'efficient management' and our recognition that the HEPCO Group cannot develop unless the community develops, we have always valued conducting our business together with members of the local community.

We are all aware that addressing climate change is an urgent challenge the entire world faces. Against the backdrop of Russia's invasion of Ukraine and other events, I feel a renewed awareness has arisen of the value of electric power and the significance of electric power companies from the standpoints of the importance of energy security and self-sufficiency. The HEPCO Group is called upon to contribute to achieving carbon neutrality with the aim of eliminating greenhouse gas emissions as we continue to fulfill our mission of providing a stable supply of electric power. While maintaining our focus on the 'co-creation' approach that creates new value with the community, we will do our utmost to meet the challenge of being carbon neutral and contribute to the sustainable development of our region.

Leveraging Hokkaido's blessings

Hokkaido, the foundation of our business, is blessed with some of the most abundant natural energy resources anywhere in Japan. In addition to wind

and solar power both of which make use of this vast land surrounded by sea and the favorable wind conditions and sunlight, there lies the potential for adopting and expanding woody and livestock biomass power generated in collaboration with the local forestry, livestock and other industries to say nothing of geothermal power generation and other renewable energies essential for realizing a carbon-free society. Turning to energy demand on the other hand, with the abundant winter snowfall and a cold climate, Hokkaido's annual household sector energy consumption is approximately 1.6 times the national average and over three times that level if only heating energy is considered. There is also a high demand for transportation energy due to the many municipalities interspersed across this vast and sparsely populated region.

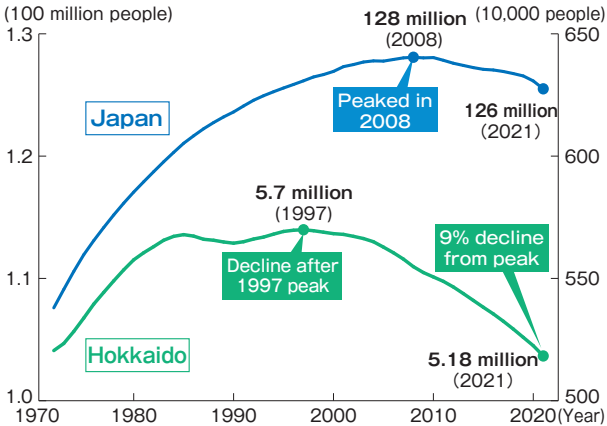
Currently, energy demand in Hokkaido is met mostly with fossil fuel-sourced supplies. HEPCO Group's greatest challenge over the medium- and long-term is to adopt and expand non-fossil fuel supplies, convert to CO₂-free thermal power, increase electrification, utilize green hydrogen, and pioneer a path to achieving carbon neutrality across Hokkaido's entire energy spectrum. In the late 1990s, Hokkaido's population started to decrease earlier than the anywhere else in the country and this process still continues

today at a pace faster than the country as a whole. While, at first glance, the decreasing electric power demand and other factors seem to create a business environment handicapping improvement efforts, this apparent disadvantage may be turned into an advantage offering an opportunity to convert the structure of fossil fuel-focused energy demand into the structure that will lead Japan by fostering electric power demand through the promotion of electrification using non-fossil fuel power and supplying CO₂-free hydrogen derived from renewable energies and other supplies so as to realize carbon neutrality in Hokkaido before the rest of the country. Hokkaido's food self-sufficiency rate currently exceeds 200%. Through the adoption and expansion of renewable energies in Hokkaido, we, the HEPCO Group, will make an active contribution to improving energy self-sufficiency throughout all of Japan.

Progress toward Management Vision 2030

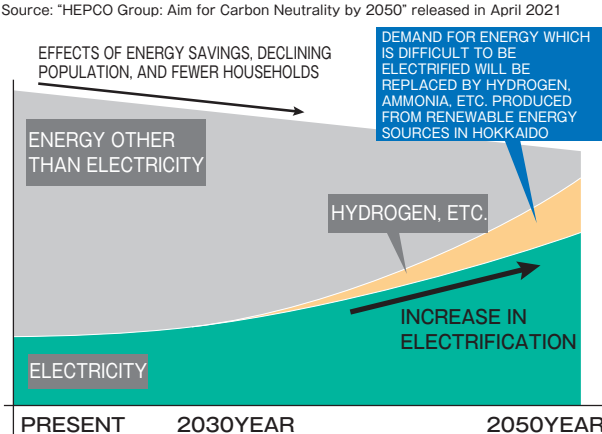
In April 2020, the HEPCO Group announced the HEPCO Group Management Vision 2030. In this document, we pledged that, along with aiming to realize a sustainable society, we will place greater emphasis on ESG than ever

Change in population



Source: Prepare by HEPCO based on "Population Projection" published by the Statistics Bureau, Ministry of Internal Affairs and Communications

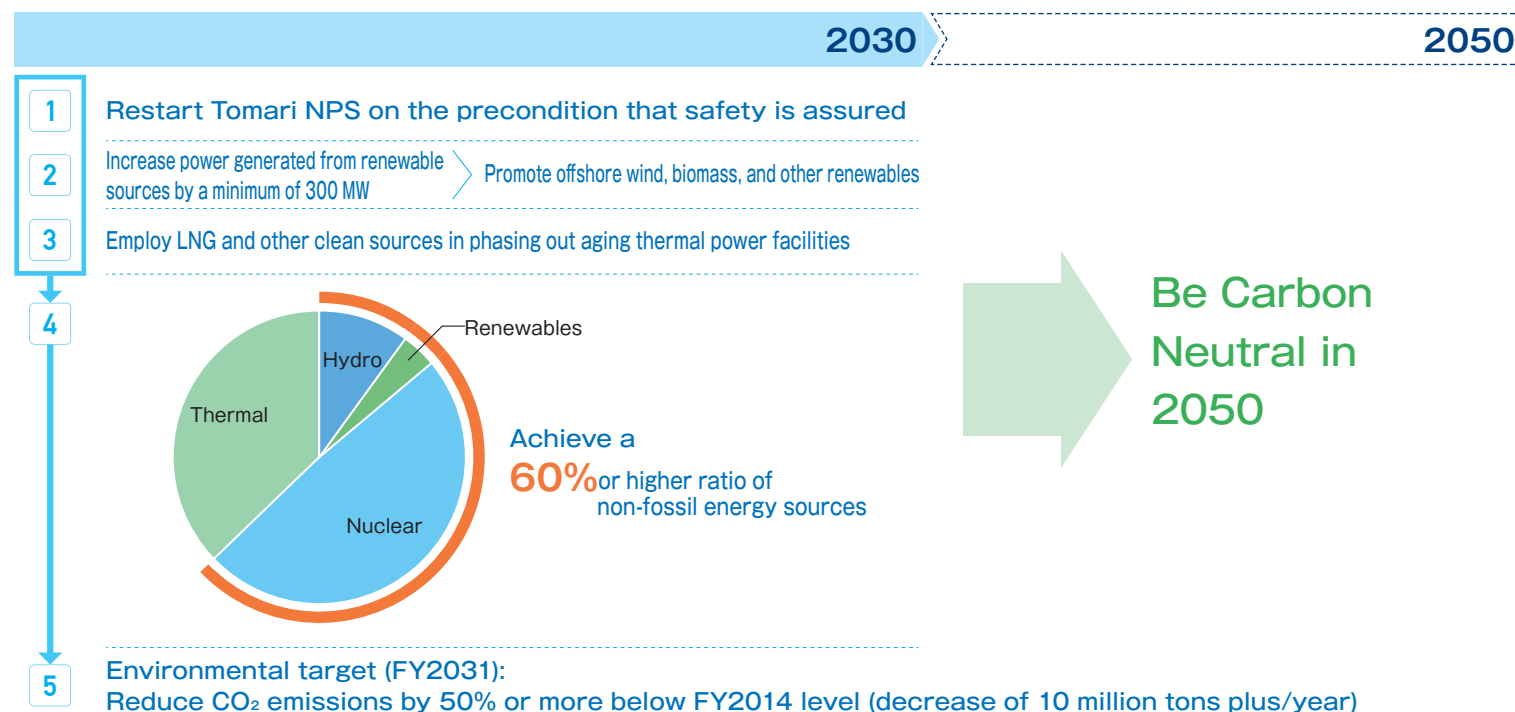
Illustration of future energy demand



HEPCO Group Management Philosophy and Vision



Initiatives through 2030 Source: "HEPCO Group Management Vision 2030" announced in April 2020



before and jointly create new value so as to realize sustainable growth as a total energy services corporate group. We also set environmental targets for realizing a 60% or higher ratio of non-fossil fuel power (hydro, renewables and nuclear) and reducing CO₂ emissions by more than 50% below the FY2014 level.

The greatest key to success in achieving these targets is the restart of Tomari Nuclear Power Station. Currently, the situation in Ukraine and other events have destabilized the energy situation worldwide, leading to concerns about resource procurement risks and prolonged price rises. For Japan which has scant resources and low energy self-sufficiency as well as from the S+3E perspective of simultaneously achieving energy security, economic efficiency, and environmental protection without compromising safety, we fully recognize

how essential it is, on the premise that safety is ensured, to maximize use of nuclear power, which does not produce CO₂ during the generation process but does offer the stability of fuel supplies and prices over the long-term. We will make a concerted effort to restart Tomari Nuclear Power Station as soon as possible on the precondition that safety is assured.

The HEPCO Group Management Vision 2030 defines Phase 1 as the period of time during which Tomari Nuclear Power Station will be restarted. For this phase, we have set a target profit of 23 billion yen in consolidated ordinary income. After the restart of Tomari Nuclear Power Station, Phase 2 will begin. Our goal in this second phase is to increase consolidated ordinary income to at least 45 billion yen annually. The cash flow generated from this income will be invested in new priority businesses and other such projects to generate



further shareholder returns as well as restore equity capital. Although FY2022 consolidated ordinary income rose due to strong wholesale performance and a decrease in repair costs for power generation facilities, the impact of the cold wave in the preceding fiscal year and the rise in fuel prices as well as other factors resulted in consolidated ordinary income decreasing ¥27.3 billion from the previous fiscal year to ¥13.8 billion. In addition, our consolidated capital ratio was 13.7%. Toward realizing our aim of growing revenue, we will aggressively develop our sales activities in our core electric power business. At the same time, to steadily secure income, we will work to thoroughly reduce costs and increase productivity through the promotion of digital transformation as well as the implementation of Kaizen activities throughout our entire group. The cash flow generated through reinforcement of our business foundation will allow us to continue to actively commit and reapportion management resources to decarbonization efforts and other new priority businesses anticipated to grow and, thereby, reach our goal of investing a total of ¥50 billion during the years through 2030.

ESG Initiatives

Our environmental (E) initiatives are geared toward appropriately implementing priority policies in our business aimed at achieving carbon neutrality. Along with restarting Tomari Nuclear Power Station, we will make use of innovative technologies such as carbon capture, utilization and storage (CCUS), hydrogen/ammonia mixed combustion in thermal power generation, as well as adopt and expand renewable energies. In addition, we also anticipate an expansion in electrification as electric power increasingly becomes the dominant form of energy. We will also actively promote utilization of hydrogen manufactured from renewable energies and increase the ratio that HEPCO Group's contribution accounts for of all energy usage.

In a collaborative effort with the central government, Hokkaido prefectural government, local governments, and other companies, the Hokkaido Hydrogen Business Platform was established in July of last year based upon a proposal put forth by the HEPCO Group aimed at speedily constructing a hydrogen supply network in Hokkaido. As of the end of March 2022, 34 companies from both inside and outside of Hokkaido have signed on. The platform links knowledge and technologies held by companies outside Hokkaido with the ideas and needs of companies in Hokkaido to drive synergies and create projects for social implementation. We also entered into a partnership agreement with Green Power Investment Corporation for offshore wind power generation at the Ishikari Bay New Port. Operation of the wind farm is scheduled to commence in FY2024. In addition, we are currently, as part of a NEDO research project, identifying issues to be addressed in terms of technology, economics, systems, and other aspects for constructing a supply chain utilizing surplus power generated from the offshore wind farm for hydrogen manufacture, utilization, transport, and other aspects.

Our aim is to leverage the knowledge we have acquired to construct a supply chain for hydrogen-fueled automobiles and convert trucks supporting logistics in Hokkaido to use carbon-free clean energy. Hydrogen fuel is also an option for railways. There are presently considerable hurdles that need to be overcome to be able to use ammonia, but, in Hokkaido where agriculture is the main industry, it has also been used as a fertilizer. I believe

that we can expect the use of ammonia to expand in the future. The HEPCO Group will mobilize a variety of means and utilize innovative technologies, including CCUS.

With regard to social (S) initiatives, I believe the most important resource of all the diverse business resources that we have is our personnel. Throughout our more than 70-year history as well, the number one driving force for business growth has been each and every one of our employees and the vitality and energy of the people of our community. I believe the HEPCO Group's core human resources are those people who have perseverance and tenacity as well as the ability to see their work through to the end without ever giving up. To create new and unprecedented value, we will also need personnel proficient in digital technologies, who can analyze and make use of data accumulated in our business and who possess the ability to coordinate and execute projects in collaboration with companies and other organizations outside the HEPCO Group. The HEPCO Group has gathered many excellent employees. At each opportunity, I convey to our employees the importance of taking up challenges without fear of failure along with promoting 'health and productivity management,' which places top priority on the safety and health of our employees, so that each and every one of our personnel is able to unleash their abilities to the fullest.

With regard to our governance (G), we transitioned to a company with an Audit and Supervisory Committee in June 2022. We will endeavor work to further enhance oversight functions and transparency of the management process by accelerating decision-making. This will be achieved as the Board of Directors delegates more authority to individual directors. We will also seek to increase the ratio of outside directors on the Board of Directors.

To our stakeholders

In our current FY2023, the sharp rise in fuel and power market prices has resulted in projections of a coming difficult financial situation. Even so, we will strive to restore profitability as soon as possible.

I think there are difficult aspects ahead that need to be overcome, including technical challenges, in order to achieve carbon neutrality by the year 2050, but we will face these resolutely and make sure these steps are realized, then pass the baton to the next generation. Now is the time for us to lay the groundwork. Unless the seeds are sown, no flowers will bloom. Meanwhile, we will strive to reinforce our management foundation by increasing revenue and decreasing expenses along with actively pursuing upfront investment for the future. As we strive to achieve the KPIs that we have set, we will also hold dear the continued trust and appreciation granted us by everyone in our community.



HEPCO Group Value Creation Process

Grounded upon our management philosophy mandating 'respect for humanity, contributions to local communities, and efficient management,' the HEPCO Group recognizes that we cannot develop unless the community enjoys sustained development, and we will fulfill our steadfast mission of supporting the economy of Hokkaido and the lives of our customers.

Management Philosophy

Emphasizing
Environmental,
Social and Corporate
Governance
based on the HEPCO
management
philosophy mandating
'respect for humanity,
contributions to local
communities,
and efficient
management'

INPUTS (Management Resources)

To sustainably enhance corporate value

Manufacturing capital

Power generation facilities: Total output 8,679MW
Transmission line length: 8,453km; distribution line length: 68,359km

Human capital

Employees: 10,226
Engineering personnel: Approx. 69% (HD and NW)

Intellectual capital

Patents, etc. held: 199
Technology and experience relating to power generation development, maintenance, and operation, as well as power supply
Know-how relating to ZEB, ESP, and other energy solutions

Social & relational capital

Emergency partnership agreements entered into: 179 comprising all municipalities in Hokkaido (as of July 2022) (HD and NW)
Registered business partners (material procurement): Approx. 2,400 companies (HD and NW)

Financial capital

Capital 114.2 billion yen | Cash 88.8 billion yen | Interest-bearing debt 1,385.3 billion yen

Natural capital

Fuel consumption (FY2022)
■ Coal: 4,583,000 tons
■ Heavy & light oil: 809,000 kl
■ LNG: 363,000 tons
■ Nuclear fuel material consumed: —kg

Rich nature with high renewable energy potential
■ Wind: Good conditions and long coastline
Potential: 1,680.3 billion kWh (approx. 69 times Hokkaido demand of 28.6 billion kWh)
■ Solar: Vast land area blessed with abundant sunlight
Potential: 437.7 billion kWh (approx. 15 times Hokkaido demand of 28.6 billion kWh)

*Prepared by HEPCO based on "Renewable Energy Potential System (Version 1.0), June 2021 (as of August 31)" published by the Ministry of the Environment

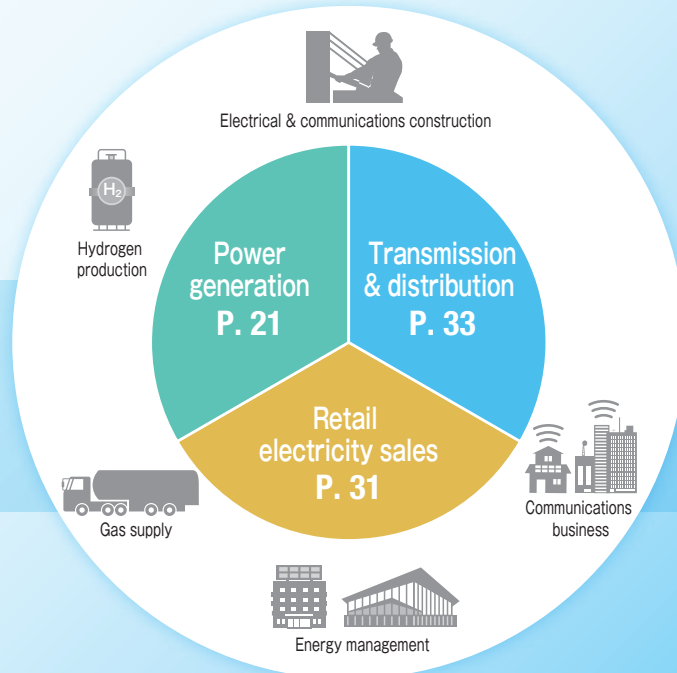
*Quantitative data without a specific time indicated is as of the end of FY2022
*HD: Hokkaido Electric Power NW: Hokkaido Electric Power Network

Business operations

OUTPUTS (Performance)

OUTCOMES (Value creation)

Vision



Reinforcement of corporate governance upholding transparent, fair, prompt and decisive decision-making

Products & services

Electric power demand in Hokkaido
28.6 billion kWh

Electricity sales
Retail sales: 22.1 billion kWh
Wholesale sales: 7.7 billion kWh

Financial performance

Sales
663.4 billion yen
Ordinary profit
13.8 billion yen
Free cash flow
24.6 billion yen

Social & environmental effects

Power generation division CO₂ emissions
14.41 million tons
Industrial waste
857,000 tons

Communities & customers

- Supporting our customers' lives and realizing a sustainable society
- Maintaining a stable supply to fulfill our responsibility as an energy provider
- Contributing to local sustainable development and overcoming challenges through 'co-creation' creating new value with the community

Shareholders & investors

- ROE
2.5%
- Dividend
Per share of common stock
20 yen annually
Total dividend payments 6.5 billion yen
- Interest expenses (amount paid to creditors) 9.5 billion yen

Employees

- Safe and motivating work environment
- Health Management "White 500" organization (FY2023) (3rd consecutive year) (HD and NW)
- Health & Productivity Brand (FY2023) (HD)
- Promoting work-style reforms (Rate of annual paid leave taken: 82.5%) (HD and NW)

Environment

- Amount of CO₂ reduced 4.51 million tons (from FY2014 level)
- Industrial waste recycling rate 90.8%

Light up your future.

Light up your future.

HEPCO will fulfill our core responsibility of supplying energy and support the sustainable development of Hokkaido.

Management
Vision
2030
P. 13

Carbon
Neutral
2050
P. 17

*Quantitative data without a specific time indicated is as of the end of FY2022

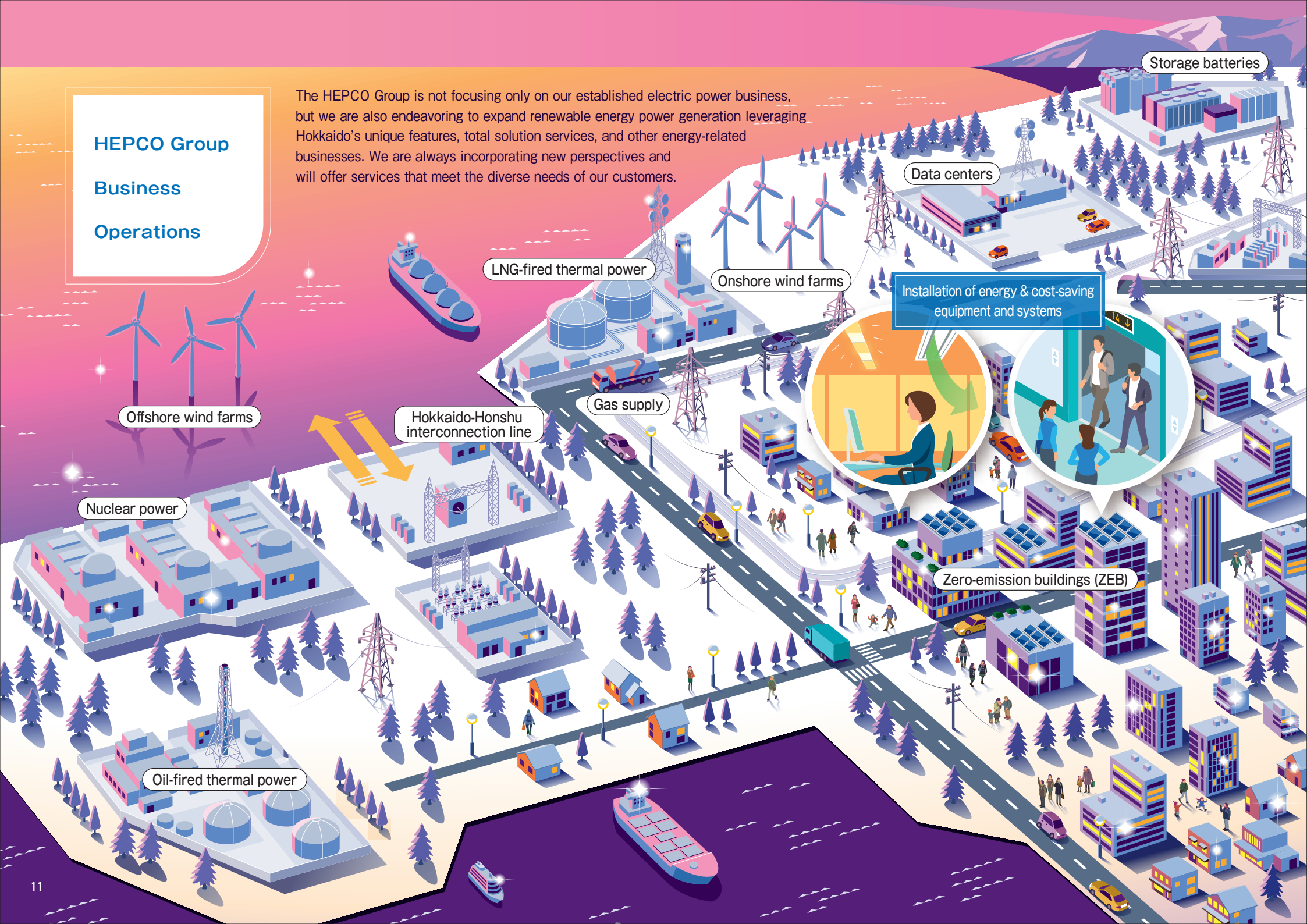
*HD: Hokkaido Electric Power NW: Hokkaido Electric Power Network (if not indicated, then it is consolidated figure)

HEPCO Group

Business

Operations

The HEPCO Group is not focusing only on our established electric power business, but we are also endeavoring to expand renewable energy power generation leveraging Hokkaido's unique features, total solution services, and other energy-related businesses. We are always incorporating new perspectives and will offer services that meet the diverse needs of our customers.



Storage batteries

Data centers

Installation of energy & cost-saving equipment and systems

Onshore wind farms

LNG-fired thermal power

Gas supply

Hokkaido-Honshu interconnection line

Offshore wind farms

Nuclear power

Oil-fired thermal power

Zero-emission buildings (ZEB)



Biomass power generation

Geothermal power generation

Hydropower generation

Energy service provider (ESP)

Electrification for energy & labor savings and greater quality

Energy-efficient comfortable lifestyle for our customers

Hydrogen production

Design & construction of electrical facilities

Solar PPAs

Coal-fired thermal power

HEPCO Group Management Vision 2030

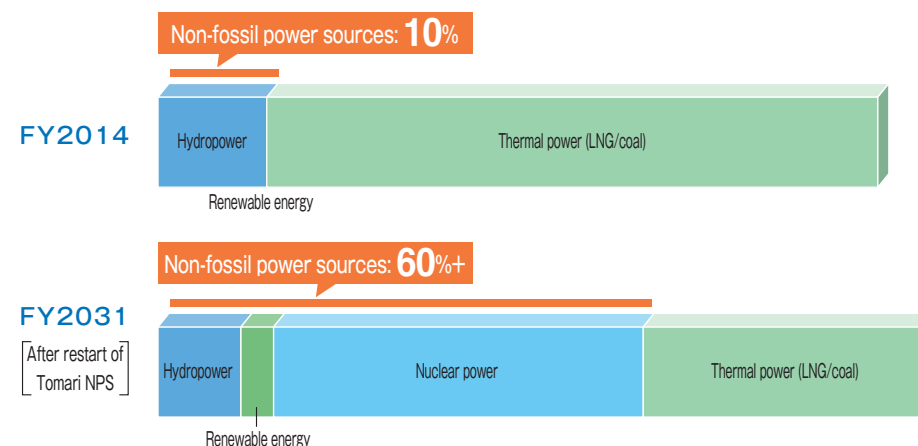
The business environment in which the HEPCO Group operates is seeing intensifying competition as well as a transforming social structure, driven mainly by decarbonization, population decline, digitalization, and diversification of consumer values. The pace of changes affecting our environment is expected to increase further. To ensure we keep up with these changes, we explored our vision for the HEPCO Group in 2030 and compiled that foresight into the HEPCO Group Management Vision 2030.

The restart of Tomari Nuclear Power Station, our main power source, will significantly alter the HEPCO Group's business environment. This step will improve our power source competitiveness and significantly shift emissions toward low carbonization. To this end, we have arranged our business development into the pre-restart Phase I and post-restart Phase II.

Medium- to Long-term Phases and Business Development

	Phase I (before restart of Tomari NPS)	Phase II (after all Tomari NPS units are back online)
Power source mix	<ul style="list-style-type: none"> Use thermal power as the main power source Reinforce safety of Tomari NPS prior to restart 	<ul style="list-style-type: none"> Use thermal power mainly for adjustment Restart Tomari NPS (Unit 3 ► Units 1 and 2) Reduction in demand-supply correlation expenses leads to lower electricity rates Supply low-carbon electric power inside and outside Hokkaido
Increase retail sales and promote electrification	Implement sales strategies and promote total energy solutions	Convert from other sources to electric power and expand electrification into industrial, transportation and other sectors, resulting in greater electric power demand
Expand scope of business domains	Expand scope of business domains to include city gas sales and other businesses	
Provide stable supply and enhance efficiency	Secure stable supply and strengthen resilience while at the same time enhancing efficiency and reducing costs	
Target profit	Consolidated ordinary income: ¥23 billion+/year	Consolidated ordinary income: ¥45 billion+/year

Power source mix envisioned
by HEPCO Group Power
Generation Division

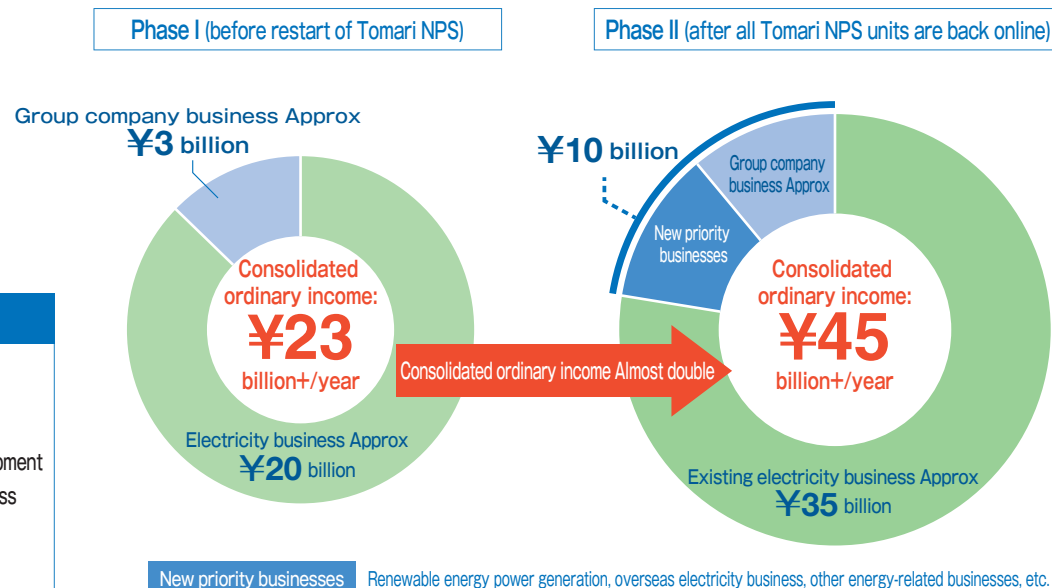
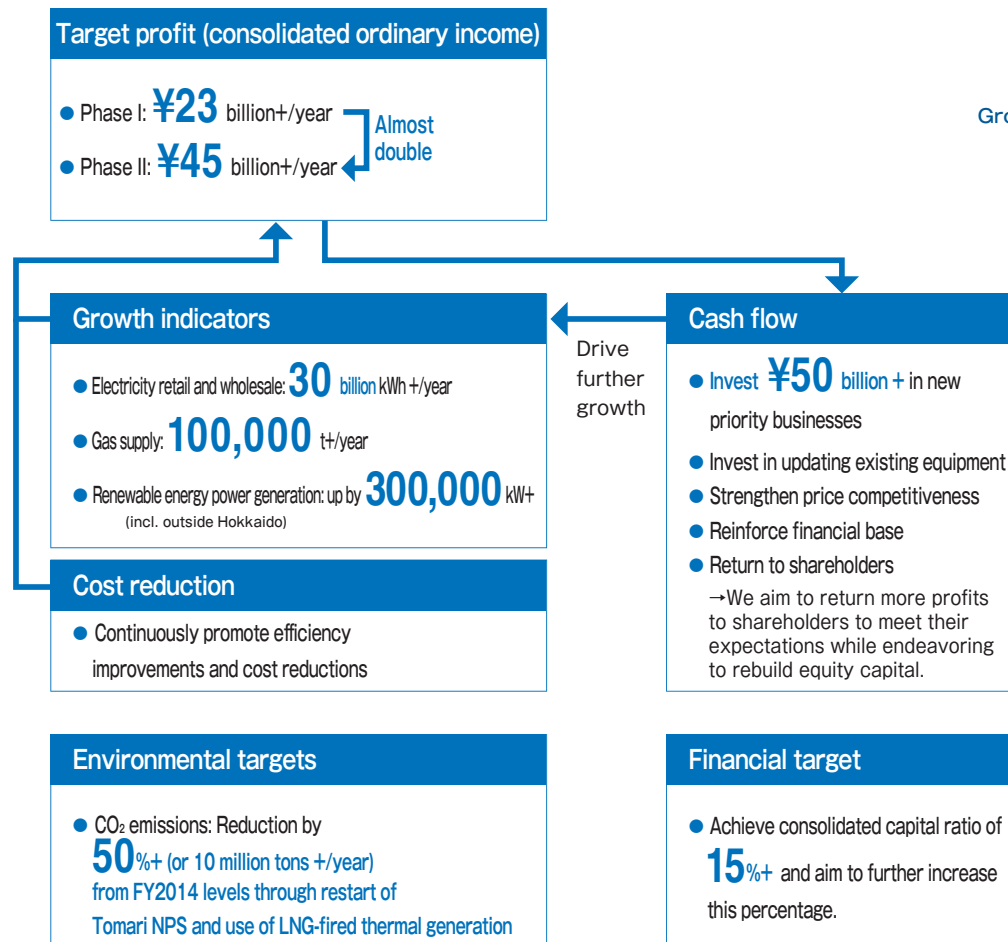


Business Portfolio

In pursuing the initiatives presented in our vision, we will achieve the management targets indicated below by FY2031.

In addition to our established electricity business, we will expand the scope of our business domain to include other energy-related areas, such as renewable power generation, overseas electricity business, and gas supply, which we define as new priority businesses, in order to drive growth of our entire group.

[Management targets to be achieved by FY2031]



HEPCO Group Management Vision 2030 Progress

Profit target (consolidated ordinary income)

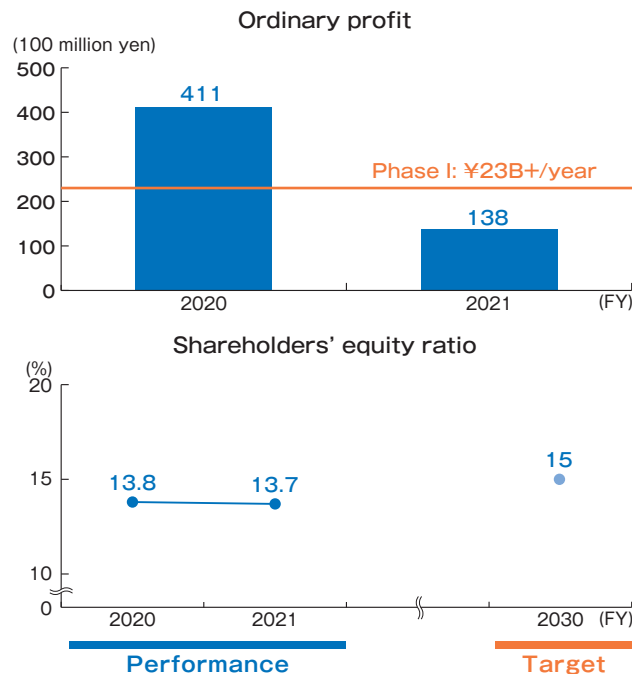
Phase I: ¥23 billion+/year

Phase II: ¥45 billion+/year

Financial target (consolidated capital ratio): **15%+**

FY2022 consolidated ordinary income decreased 27.3 billion yen to 13.8 billion yen year-on-year due mainly to the cold spell in the previous fiscal year and a rise in fuel prices, despite an increase driven by a lower repair costs for power generation equipment, brisk wholesale sales, and other factors.

Consolidated capital ratio was 13.7 at the end of FY2022.



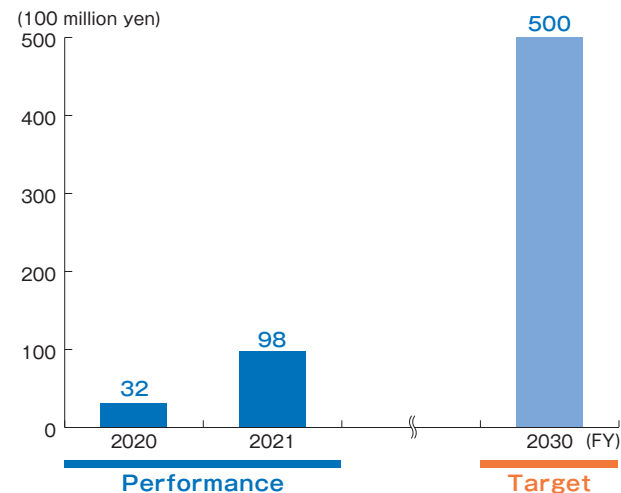
Cash flow

(Investment in new priority businesses)

Total investment of ¥50 billion+

A total of 9.8 billion yen has been invested through FY2022 in new priority businesses, such as renewable energy power generation, overseas electricity business, and energy-related businesses.

With the aim of expanding the scope of our business domains, we will seek to increase profits particularly through investments in renewable energy power generation and other new priority businesses so as to achieve our aim of sustainable growth.

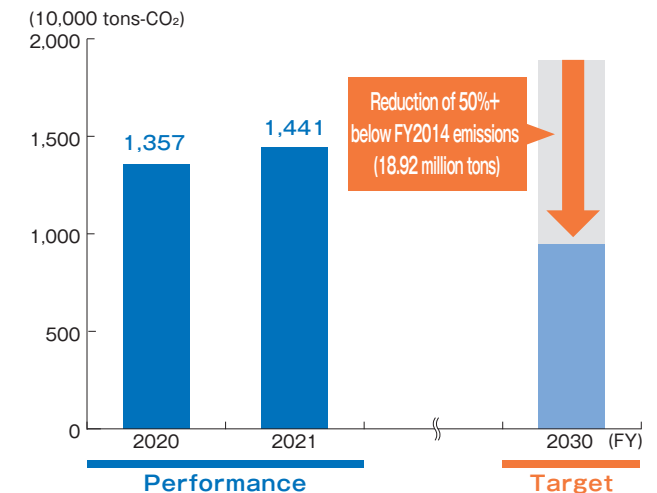


Environmental target (Reduction in CO₂ emissions)

50% or greater reduction from FY2014 levels (10 million plus tons/year decrease)

In comparison to FY2021, CO₂ emissions in FY2022 increased by 840,000 tons to 14.41 million tons. The reason for the increase was the greater amount of oil- and coal-fired thermal power generated as electricity sales rose.

Our aim is to restart Tomari Nuclear Power Station, utilize LNG-fired thermal power, and expand renewable energy installations, among other efforts, so as to reduce CO₂ emissions by 50% or more from the FY2014 level by FY2031.



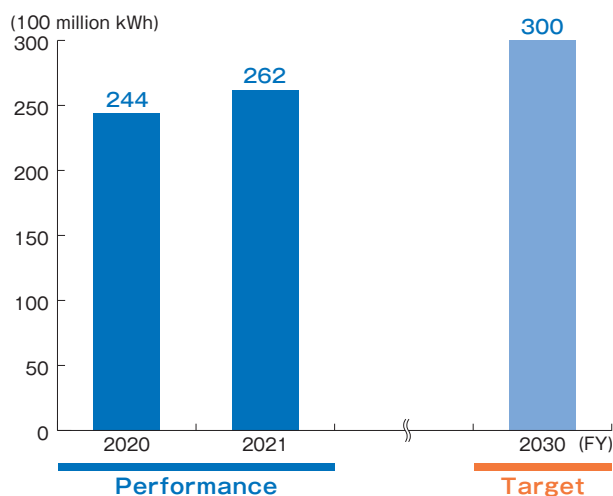
Growth Indicators

Retail and wholesale electricity sales*
30 billion kWh+/year

In FY2022, 26.2 billion kWh of retail and wholesale electricity were sold. While retail electricity sales have tended to decline due to the continuing fiercely competitive market, electricity sales to other utilities have trended upward due to favorable wholesale sales.

We will work to secure contracts by offering more attractive rate plans and package sales combining electricity and gas. We will also work to restart Tomari Nuclear Power Station as soon as possible and sell inexpensive low-carbon electric power both inside and outside of Hokkaido so that we may achieve our aim of 30 billion kWh or more in sales annually.

*Total HEPCO Group electricity sales
(Not including wholesale electricity supplied by Hokkaido Electric Power Network)

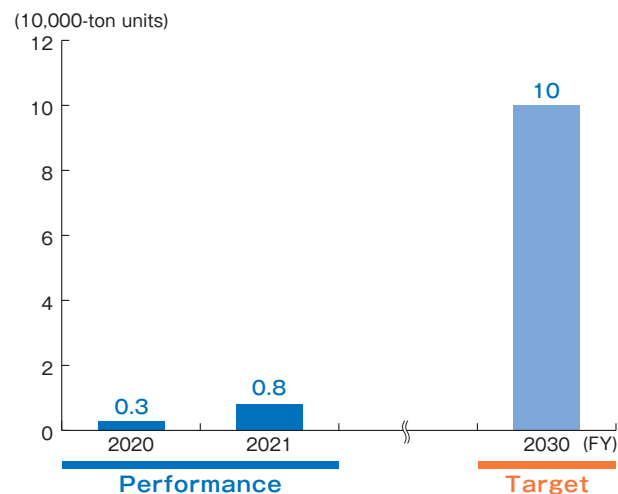


Gas supply business (LNG sales)
100,000 tons+/year

In FY2022, LNG sales through our gas supply business amounted to 8,000 tons for both our city gas and LNG supply businesses.

The city gas business will continue to aggressively market products by offering packages combining electricity and gas.

As for the LNG supply business, many customers are considering converting to LNG gas with its low CO₂ emissions, so we will work to expand the LNG market with fuel conversions for industrial use and not miss any opportunity to make a sale through our marketing activities.

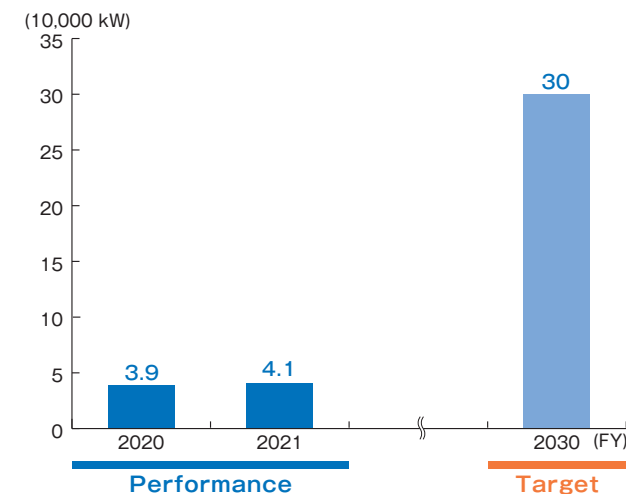


Renewable energy power generation
(incl. outside Hokkaido)*
Increase by over 300,000 kW

Both inside and outside of Hokkaido, solar, biomass and other renewable energy power generation has been installed with 41,000 kW of renewable energy power generation developed through FY2022.

Hokkaido enjoys very high potential and we will actively work to build up this capacity with the aim of increasing renewable energy power generation by 300,000 kW or more by FY2031 through the broad installation and expansion of wind, geothermal, solar, biomass, and other forms of renewable energy power generation.

*Power generation capacity set to be installed since our management vision was announced.
(Includes capacity prior to operations commenced, but not the replacement of existing facilities.)



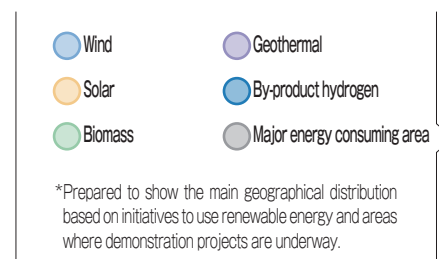
Aiming to be Carbon Neutral by 2050

As a company with deep roots in Hokkaido, HEPCO Group supports the Hokkaido economy and our customers' lives, contributing to both the sustainable growth of our businesses and the realization of a sustainable society.

While further intensifying the initiatives presented in the HEPCO Group Management Vision 2030, we will contribute to development of the region by doing our utmost to meet the challenge of achieving carbon neutrality for all energy use in Hokkaido by 2050.

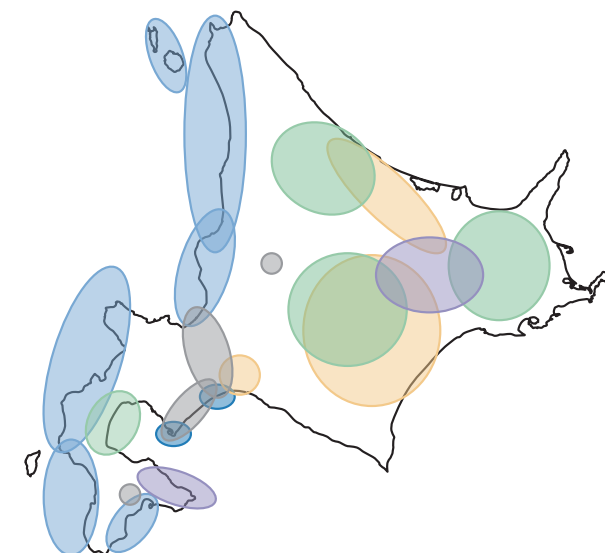
Initiatives Leveraging Hokkaido's Regional Features

In moving forward to achieve carbon neutrality, we believe there are many more ways for us to contribute to decarbonization initiatives in comparison to other regions of Japan and will do so by leveraging Hokkaido's particular characteristics in terms of both supply and demand.



Prepared by HEPCO based on the "Vision to Achieve a Hydrogen Society in Hokkaido" (revised version) published by the Hokkaido Government

[Main geographical distribution of renewable and other energy sources in Hokkaido]



Suitable environment for expanding adoption of renewable energy

On the supply side, we will take advantage of Hokkaido's potential, blessed as it is with some of the most abundant natural energy sources anywhere in Japan, to pave the way for increasing installation of renewable energy power generation with offshore and onshore wind power, solar power, woody and livestock biomass power, geothermal, and other sources beyond what has ever been done before.

Good wind conditions Abundant sunlight	Surrounded by seas	➡ Offshore wind power generation
	Vast land area blessed with abundant sunlight	➡ Onshore wind power generation ➡ Solar power generation
Collaboration with local industry	Forestry	➡ Woody biomass power generation
	Livestock	➡ Livestock biomass power generation
Geothermal resources available		➡ Geothermal power generation

Potential for electrification of energy demand

On the demand side, there is much demand for petroleum-based energy for heating and hot water essential in a cold and snowy climate as well as for transportation energy due to the many municipalities interspersed across this vast and sparsely populated land. The potential energy demand that this region holds may be mobilized for increasing demand for electrification and hydrogen, both of which contribute to carbon neutrality.

Households & business sector (heating and hot water supply)	➡ Energy demand for heating and hot water	➡ Electrification (good potential for electrification especially for heating)
	➡ Energy demand for transport (passengers and freight)	➡ Electrification, hydrogen-based fuels Introduction of electric vehicles (EVs) and fuel cell vehicles (FCVs)
Industrial sector		➡ Convert to electricity as much as possible

HEPCO Group Vision

The HEPCO Group will do its utmost to meet the challenge of achieving carbon neutrality in every energy source in Hokkaido.

- In addition to achieving the HEPCO Group's environmental target for 2030 (reducing CO₂ emissions from our power generation division by more than 50% below FY2014 levels), we aim to achieve "zero CO₂ emissions from the power generation division" over the long term.
- Through expansion of electrification and use of green hydrogen, we will seek to achieve carbon neutrality in Hokkaido, including in forms of energy other than electricity.

We will reduce CO₂ emissions from the power generation division by more than 50% below FY2014 levels by 2030. In the long-term, our aim is to introduce CCUS* and other innovative technologies along with the adoption of measures to achieve zero CO₂ emissions from the power generation division.

Furthermore, we will make use of hydrogen and ammonia produced from renewable energy sources in Hokkaido to meet demand for non-electric power energy in order to reduce CO₂ and thereby contribute to a reduction in emissions throughout the region.

*CCUS (Carbon Capture, Utilization and Storage): Technology to separate and capture CO₂ for reuse or underground storage, etc.

Although Hokkaido's future energy demand is anticipated to decrease due to energy savings, population decline, and other factors, demand for mainly petroleum-based energy will be converted to demand for electric power as promotions highlight the benefits of electrification employing CO₂-free electricity, which will help curb CO₂ emissions and lead to an increase in the amount of electric power supplied.

Moreover, hydrogen and ammonia produced from renewable energies in Hokkaido will provide an alternative supply to meet demand for energy that is difficult to be electrified. This will curb CO₂ emissions and increase HEPCO's contribution in that respect among all energy sources.

Illustration of future CO₂ emission reductions

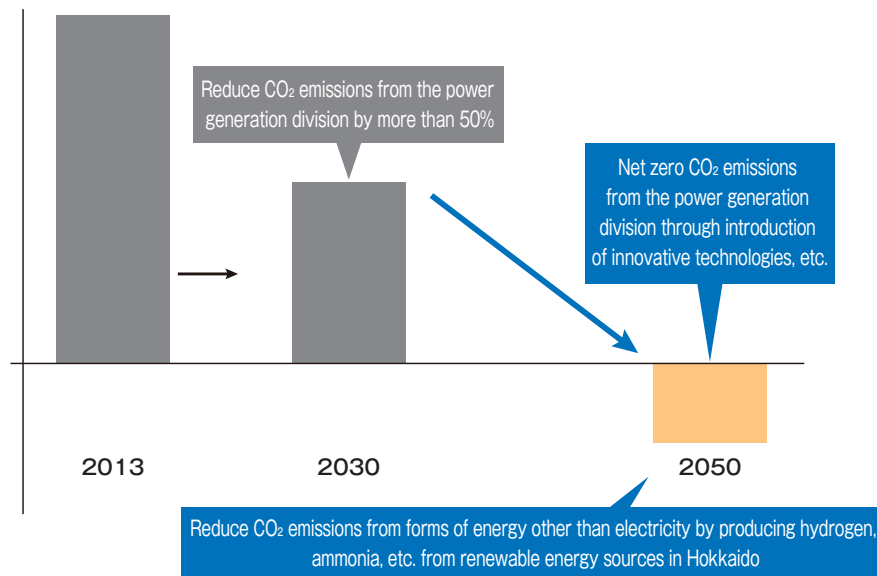
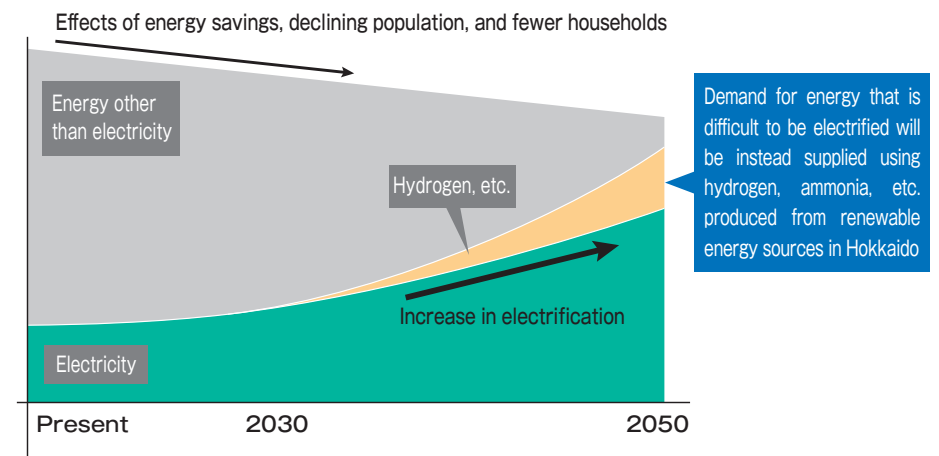
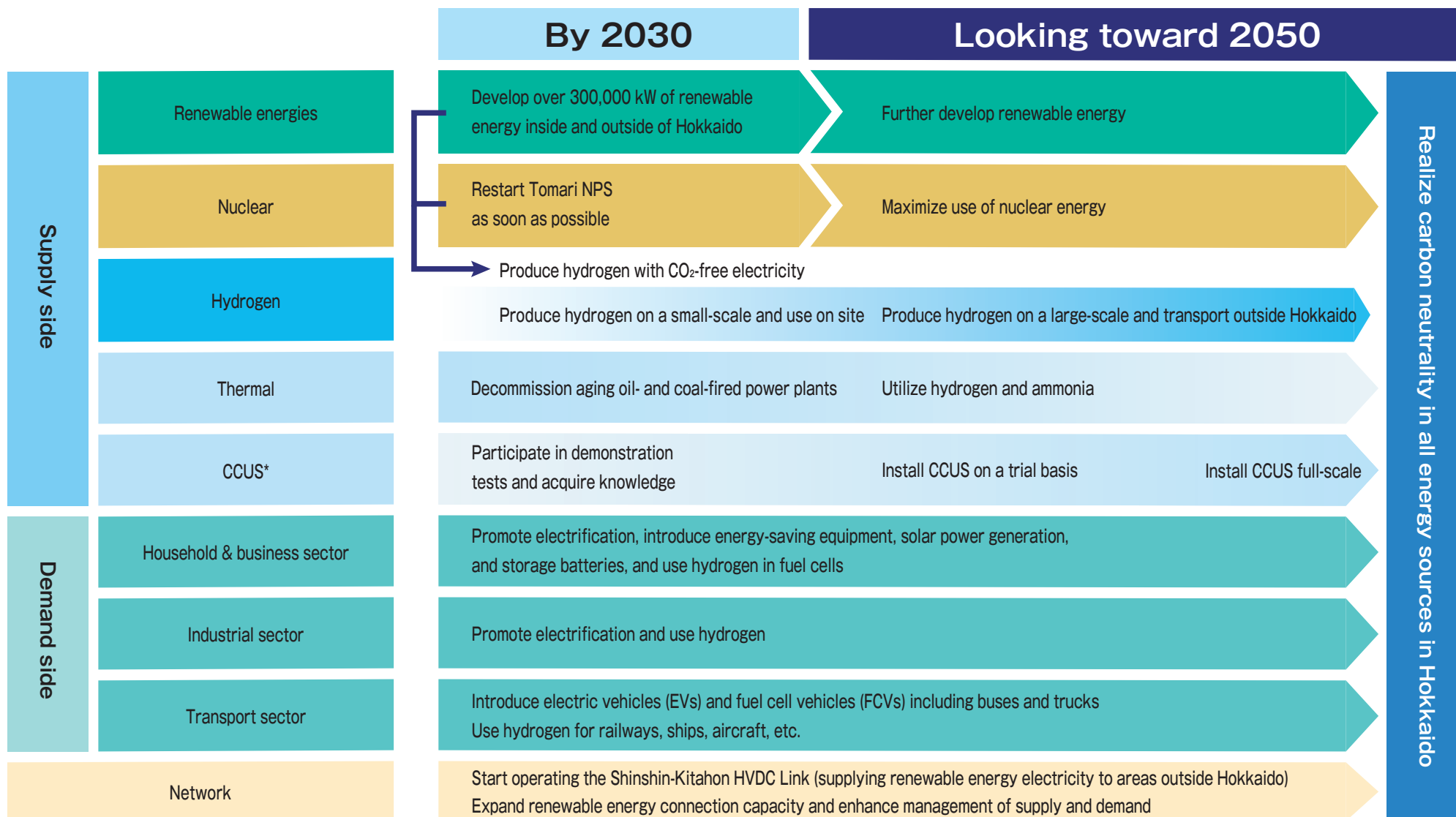


Illustration of future energy demand



Roadmap to Carbon Neutrality by 2050

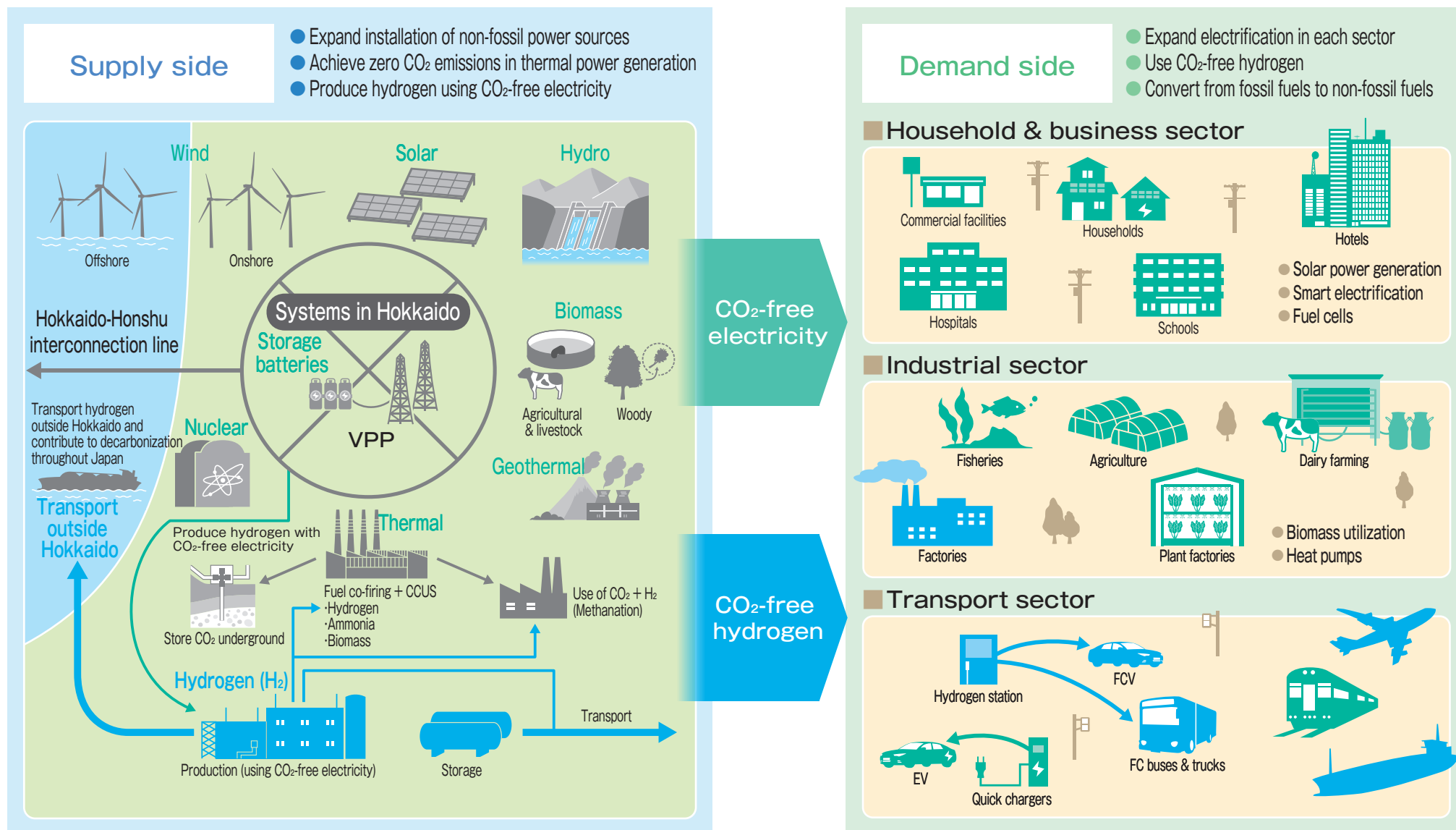
HEPCO Group will make use of innovative technologies and mobilize all available means in addition to measures implemented so far, including expanding the adoption of renewable energy and restarting Tomari Nuclear Power Station.



*CCUS (Carbon Capture, Utilization and Storage): Technology to separate and capture CO₂ for reuse or underground storage, etc.

Illustration of Carbon Neutrality in Hokkaido

Along with fully promoting the installation of non-fossil fuel power generation on the supply side, we will also strive to contribute to decarbonization with hydrogen production and other initiatives. On the demand side, we will work to expand electrification as well as utilize hydrogen and other CO₂-free sources in an effort to convert from fossil fuels to non-fossil fuels.



Power Generation Business

HEPCO's mission is to provide a stable supply of inexpensive electricity while also taking into account global environmental conservation (reduction of CO₂ emissions). To realize this mission, we are aiming to increase the ratio of non-fossil fuel-derived energy on the precondition that Tomari Nuclear Power Station is safely and stably operated. We believe it is important to construct a more balanced power source mix that includes diversifying the types of fuel utilized.

Power source mix

A variety of sources are available for power generation. These include nuclear power that may be operated stably over the long-term without emitting CO₂ during the generation process along with hydropower which is a comparatively stable renewable energy source and similarly does not emit CO₂ in the power generation process. There is also thermal power generation, which has the advantage of easily-adjustable output to make up for variations in demand as well as renewable energy production. Formulation of our power generation plan is based on: (1) the ability to ensure a stable supply of electric power over the long-term, (2) economically efficiency and price stability over the long-term, and (3) consideration for global environmental conservation. We have taken into account combinations of power sources that have a variety of characteristics differing in sustainability and the speed with which output may be adjusted to meet demand which gradually changes over time.

Construction of a well-balanced power source mix meeting the S + 3E requirements

Safety	Energy Security	Economic Efficiency	Environment
Nuclear power generation Ensure a high level of safety as an essential prerequisite for restart Achieve a higher non-fossil power source ratio and reduce CO ₂ emissions Reduce electricity rates after restart	Renewable energies Increase renewable energy generation by 300,000 kW+ (incl. generation outside Hokkaido) as our next-generation major power source Promote offshore wind power, biomass power generation, and other renewable power sources that take advantage of Hokkaido's characteristics Improve the accuracy of wind and solar power generation forecasting and leverage power storage technology	Thermal power generation Use thermal power to maintain the balance between power supply and demand in Hokkaido Advance the construction of Ishikariwan Shinko Power Station and decommission aging oil/coal-fired thermal power stations in order to reduce generation costs and CO ₂ emissions	

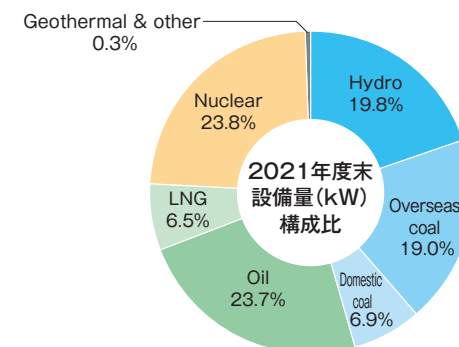
Non-fossil power sources that do not emit CO₂ during power generation

Actual Power Output

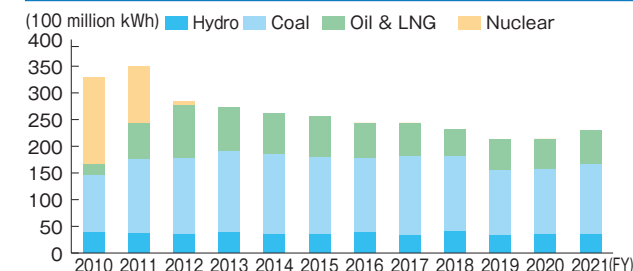
Of the power generated by the HEPCO Group, thermal power accounts for the majority meeting 70 to 80% of demand throughout Hokkaido.

HEPCO's current power source mix balances hydropower, coal-fired thermal power, oil-fired thermal power, LNG-fired thermal power, and nuclear power, and we are seeking to diversify the types of fuel utilized. Going forward as we do our best to achieve carbon neutrality, we will consider the most optimal power source mix for the future and essential for assuring a stable supply, economic efficiency, and global environmental conservation.

We have taken into account how to respond to the phasing out of inefficient coal-fired thermal power as we strive to achieve carbon neutrality, and have set out a plan to decommission by March 2027 the coal-fired and aging Naie and Sunagawa power plants. In addition, we are doing everything we can to restart Tomari Nuclear Power Station, which does not emit CO₂ during power generation, as soon as possible.



Change in power generated



*Figures prior to FY2020 include the amount for outlying islands and figures since FY2021 do not

Power Source Development Plan

In considering how to meet our target of achieving carbon neutrality by 2050, it is necessary to take into account hydrogen and ammonia combustion as well as the adoption of other new technologies for the Ishikariwan Shinko Power Station and subsequent thermal power generation facilities. HEPCO will consider when to introduce such technologies while also considering the status of our current thermal power generation future demand and supply projections.



FY2023 Power Source Development Plan (HEPCO)

	Power generation facility	Output (10,000 kW)	Start date*	Date of operation start, acquisition/transfer, or suspension/decommissioning
Under construction	Kyogoku Unit 3 (Pumped storage hydropower)	20	September 2001	FY2032 or later*2
	Shintoku (Hydropower)	2.31	April 2019	June 2022
In preparation for construction	Ishikariwan Shinko Unit 2 (LNG-fired thermal)	56.94	March 2027	December 2030
	Ishikariwan Shinko Unit 3 (LNG-fired thermal)	56.94	March 2032	December 2035
Acquisition*3	Oono (Hydropower)	0.15	–	April 2022
Transfer*3	Ainumanai (Hydropower)	(0.2)	–	May 2023
	Oono (Hydropower)	(0.15)	–	June 2023
	Isoyagawa Daiichi (Hydropower)	(0.24)	–	May 2024
	Isoyagawa Daini (Hydropower)	(0.125)	–	August 2024
	Nanae (Hydropower)	(1)	–	December 2024
Suspended or decommissioned	Onbetsu Units 1 & 2 (Oil-fired thermal)	(14.8) (Decrease of 7.4 × 2 units)	–	Pending (to be decommissioned)
	Naie Units 1 & 2 (Coal-fired thermal)	(35) (Decrease of 17.5 × 2 units)	–	March 2027 (to be decommissioned)
	Sunagawa Units 3 & 4 (Coal-fired thermal)	(25) (Decrease of 12.5 × 2 units)	–	March 2027 (to be decommissioned)

FY2023 Power Source Development Plan (ほくでんエコエナジー)

	Power generation facility	Output (10,000 kW)	Start date*	Operation start
Under construction (Output increase)	Abuta (Hydropower)	2.079 (+0.129)	September 2018	December 2022
	Akubetsu (Hydropower)	0.702 (+0.052)	April 2022	August 2024
	Teshibetsu (Hydropower)	0.243 (+0.018)	April 2022	June 2024

*1 For HEPCO, the start date is the notification date pursuant to Article 48 of the Electricity Business Act. For HOKUDEN ECO- ENERGY Co., Ltd., the start date is the date when construction work commenced on site.

*2 Operation start date postponed to "FY2033 or later" rather than the initial "FY2032 or later" time period stated in the FY2022 Energy Supply Plan.

*3 The hydroelectric power business will be transferred and acquired following implementation of the Hydroelectric Power Station Alliance Business in Southern Hokkaido (October 28, 2021 press release).
Ono Power Station will be acquired from Hokuden Eco-Energy Co., Inc. and transferred to Donan Suiryoku Hatsuden LLC. together with four other power plants.

Power Generation Nuclear Power

Overview of HEPCO's Nuclear Power Station

Name	Tomari Nuclear Power Station		
Location	Horikappumura, Tomari Village, Furuu District, Hokkaido		
	Unit 1	Unit 2	Unit 3
Rated electric power output	579,000kW	579,000kW	91,200kW
Reactor type	Light-water moderated, light water cooled, and pressurized water		
Start date*	August 1984	August 1984	November 2003
Commercial operation start date	June 1989	April 1991	December 2009



Overview of Tomari Nuclear Power Station

Tomari Nuclear Power Station is located on the coast of Tomari village, which is on the west side of Hokkaido. Units 1 through 3 have a combined output of 2.07 million kW. These are pressurized water reactors (PWR).

Since Unit 1 went online in 1989, the station has had a cumulative capacity factor through the end of FY2011 of over 80%. Operating performance has been good, surpassing the national average (approx. 70%). Tomari Nuclear Power Station has made a solid contribution enabling HEPCO to supply inexpensive and stable electric power.

After the Great East Japan Earthquake in 2011, all units of the station were shut down in order to inspect the facility for compliance with the new regulatory requirements. Currently, we are diligently working to accommodate the compliance review so that the station may be restarted.

Role of Nuclear Power Generation

Nuclear power generation offers fuel supply stability and long-term cost stability. It is the key baseload power source that contributes the most to achieving carbon neutrality as it is carbon free and technically established.

With the surge in fuel prices and other events making the global energy situation increasingly unstable, nuclear power is very important for a country with scant resources from the perspective of S+3E, which concurrently realizes energy security, economic efficiency, and environmental protection



on the precondition that safety is assured. The importance of nuclear power is further increasing. In addition, nuclear power is generated from the heat produced when uranium fuel undergoes nuclear fission. Just as with solar power and other renewables, no CO₂ is emitted during the power generation process, so it is an outstanding way to produce power from the perspective of abating global warming.

Tomari Nuclear Power Station's Impact on Reducing CO₂

Although the effect may vary depending on the underlying conditions, when provisional calculations were made based on certain conditions*, the CO₂ emissions reduction effect from the restart of all Tomari Nuclear Power Station units would be on the order of 8 million tons of CO₂.

*Calculated by multiplying the level of power generated assuming the Tomari Nuclear Power Station has a capacity factor of 80% by the power transmission and distribution loss rate (5%) and HEPCO's average emissions factor for all power sources (0.549kg-CO₂/kWh (FY2022 level)).

Tomari Nuclear Power Station Today

Tomari Nuclear Power Station Units 1 through 3 are currently undergoing a review by the Nuclear Regulation Authority to determine their compliance with the new regulatory requirements.

We will take the lessons learned and experiences endured during the accident at Fukushima Daiichi Nuclear Power Station, Hokkaido Eastern Iburi Earthquake and other natural disasters, apply the advice and opinions of research institutes, third-party organizations, community residents and our customers, as well as collect, assess and utilize risk information to continue to rigorously evaluate and improve HEPCO's own activities in our tireless endeavor not only to sincerely comply with the review and enhance safety, but also to achieve world-class excellence in safety in our aim to make Tomari a power station that people can trust.

*1 Assessment of effectiveness of basic design policy and measures as relates to severe accident or similar event response measures

*2 Description of detailed design of facilities and other equipment necessary for measures for severe accident or similar event response that are based upon permission to amend the reactor license (ex. pump specifications and number of units)

*3 Procedures for operating and managing facilities as well as a system of measures for severe accident or similar event response

Principal review items and HEPCO's responses

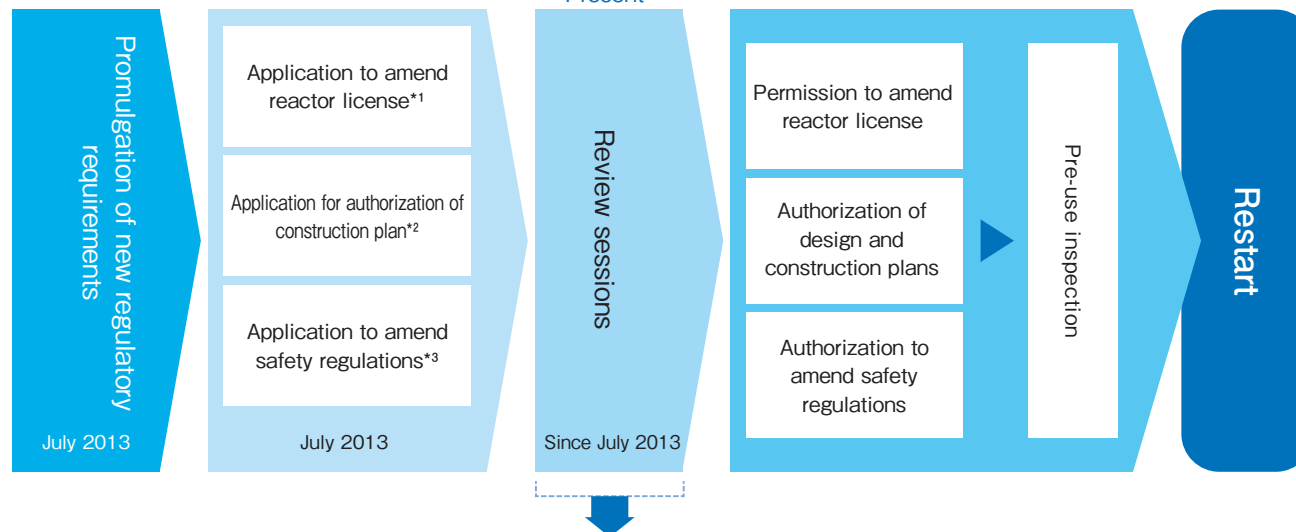
In July 2013, HEPCO filed an application with the Nuclear Regulatory Authority, requesting permission to amend the reactor licenses for Units 1, 2 and 3 at Tomari Nuclear Power Station in order to undergo the review examining compliance with the new regulatory requirements.

Subsequently, priority was awarded to Unit 3 and HEPCO has cooperated with the review. In the review sessions held so far, we have provided explanations about earthquakes and tsunami countermeasures as well as seismic fault assessments within the site, severe accident measures at the plant, and other aspects.

We will cooperate with the review examining earthquakes, tsunami, and other such natural events as well as formulating reference ground motion and reference tsunami with the aim of restarting Tomari Nuclear Power Station as soon as possible on the precondition that safety is assured. Along with the reference ground motion and tsunami to be formulated for the plant facilities, we will be conducting an assessment of such effects.

We will continue to make a collective effort to comply with the review so that restart of the units may be achieved and to provide a stable supply of electric power as well as reduce the burden on our customers by lowering electricity rates and, furthermore, achieve our aim of carbon neutrality.

Steps of the new regulatory requirement compliance review



Review items		Review response timeline (▽Key review session) as of Sept. 30, 2022							
		~2015	2016	2017	2018	2019	2020	2021	2022
Earthquakes & tsunami	Site seismic fault assessment		▽May Explanation given of geological structures of the site	Volcanic ash survey	Chronological assessment of geological formations			July▽ Assessed to be generally valid	
	Seismic ground motion assessment			▽July Assessment of seismic motion assuming an active fault off the northwestern coast of Shakotan Peninsula (Seismic motion formulated with an identified source)				October▽ Assessed to be generally valid	▲1 January Assessed to be generally valid
	Reference tsunami assessment	▽August 2015 Explanation given about raising the reference tsunami height (6.95m→12.63m)							▽May Assessed to be generally valid
Plant facilities	Facilities subject to design basis	Jul. 2013~ Oct. 2014	Jul. 2016~ Oct. 2016	▽March Compiled materials submitted			Explanation given on the status of preparations for restart	August▽ Compiled materials submitted	▽October Compiled materials submitted
	Earthquake and tsunami-resistant design policy	Explanation given about configuring the seawall as a tsunami protection installation accompanying the higher reference tsunami height	July▽	▽September (interviews) Changes shown to the seawall design (bedrock-supported structure)				▽September Explanation given of design concepts	▽March Explanation given of design policy

Safety Improvements

Functions fundamental for ensuring the safety of a nuclear power plant are to “shut down” the reactors, “cool” the fuel, and “contain” radioactive materials. When the accident occurred at the Fukushima Daiichi Nuclear Power Station in March 2011, the reactors were successfully shut down, but inundation resulting from the tsunami made it impossible to cool the fuel, and, ultimately, the function for containing radioactive materials was lost.

HEPCO has promoted a variety of safety measures to enhance the safety of Tomari Nuclear Power Station. Even so, we are continuously working to further reduce the risk of a severe accident, not just limit our work to the safety measures implemented so far. This is based on our strong resolve never to allow an accident like the one at Fukushima Daiichi Nuclear Power Station to happen again.

Sharing the value that safety is our top priority

HEPCO's top management has visited the power station to further impart to our personnel that safety is our top priority and encourage everyone to share in this value. Through messages conveyed at meetings and informal gatherings with power station and contractor personnel, HEPCO has vigorously strived to instill a greater awareness that placing top priority on safety is at the foundation of all issues that HEPCO management addresses. These activities will be continued in the future as well.



President's briefing and talking directly with station personnel

Improving skills and maintaining technical capabilities of Tomari NPS personnel

In order to implement a more decisive and staunch response when a severe accident arises, HEPCO has systematically instituted a diverse range of training programs to maintain and improve our response capabilities. Tomari NPS personnel have been dispatched to thermal power stations and restarted nuclear power stations where they have engaged in activities which enhance their knowledge and improve their skills. They have gained maintenance experience and know-how about the operation of thermal power plants, which will better prepare them for restarting Tomari Nuclear Power Station.



Training using alternative ways of supplying water to continually cool fuel

Reinforcing communication activities

HEPCO has launched the “HEPCO Energy Campaign” in 20 municipalities within the Shiribeshi district. This campaign communicates a variety of energy-related information that includes safety measures in place at Tomari Nuclear Power Station, the need for a diverse mix of energy sources, and the status of renewable energy adoption. In the future as well, we will continue to engage in activities where we communicate face-to-face with people in these communities.



Communication activity

Deployment of 2,120m fire belt

A fire belt is maintained so that, if a forest fire breaks out around the power station, it will not spread to areas inside the power station premises.

Deployment of 14 emergency power supply units outdoors

In preparation for a situation where power station emergency power is lost, a total of 14 units comprising both alternative emergency generators (permanent equipment) and mobile alternative power-generating vehicles (mobile equipment) have been deployed.

Deployment of 14 water pumping vehicles

In preparation for a situation where permanent pumps supplying water are unusable, 14 mobile water pumping vehicles have been deployed.

Installation of seawall (Design policy currently under review)

From the standpoint of further enhancing safety, the effect of liquefaction caused by an earthquake of the foundation where a seawall is installed has been taken into account. A new seawall will be installed with a structure directly mounted onto hard bedrock.

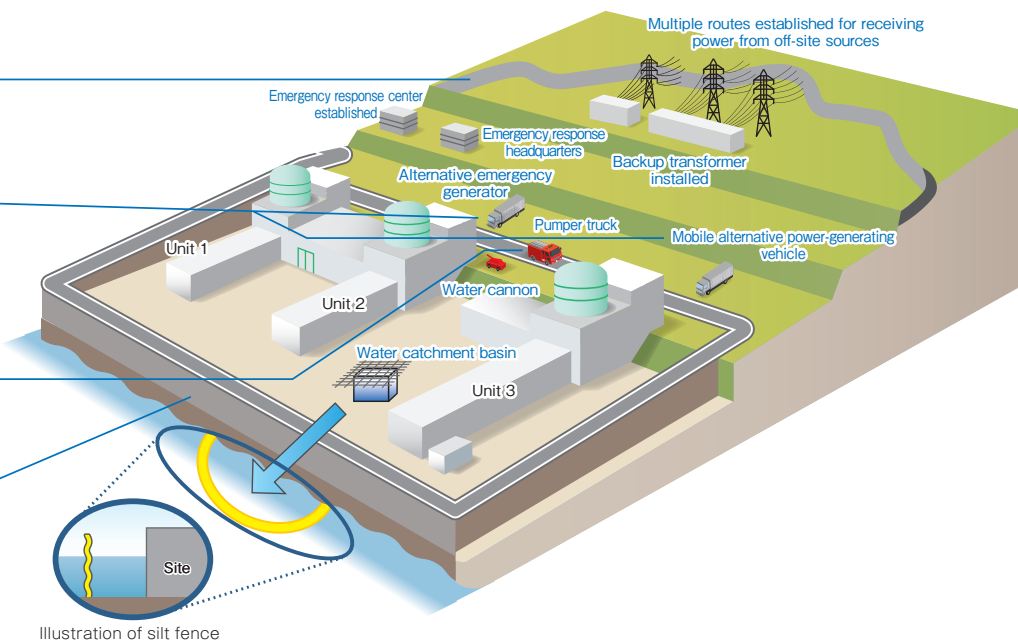


Illustration of silt fence

Power Generation Thermal Power

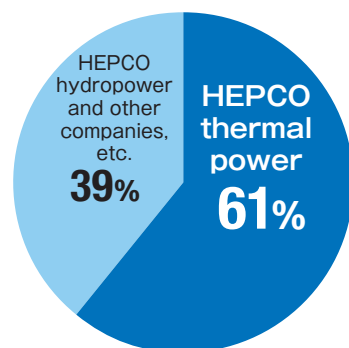
HEPCO's thermal power generation business contributes to the development of Hokkaido and we have strived to stabilize operation and reduce costs by scaling up power sources, improving thermal efficiency, as well as employing variety of creative devices and methods.

After the 2011 Great East Japan Earthquake, the Tomari Nuclear Power Station units were successively shut down. This has led to an increase in the amount of power generated by our thermal power stations, which currently play an important role in supplying electric power throughout Hokkaido.

Also, in February 2019, operation commenced of the Ishikariwan Shinko Power Station, which is our first LNG-fired plant, and we have been striving to diversify the types of fuel used as well as decentralize our power sources.

In recent years, as the adoption of renewable energies has expanded, the role of power sources capable of adjusting to output fluctuations has also increased, which means that the stable operation of our thermal power stations is now even more essential.

Ratio of supply capability in Hokkaido (FY2022)



*Symbols in diagrams indicating type of power station fuel.
(Legend)
● : Domestic coal
● : Overseas coal
● : Heavy oil, etc.
● : LNG



Date Power Station (Heavy oil)
Unit 1 350,000kW (Operation started in November 1978)
Unit 2 350,000kW (Operation started in March 1980)



Shiriuchi Power Station (Heavy oil)
Unit 1 350,000kW (Operation started in December 1983)
Unit 2 350,000kW (Operation started in September 1998)



Ishikariwan Shinko Power Station (LNG)
Unit 1 569,400kW (Operation started Feb. 2019)



Sunagawa Power Station (Domestic coal)
Unit 3 125,000kW (Operation started in June 1977)
Unit 4 125,000kW (Operation started in May 1982)
*Scheduled to be decommissioned in March 2027



Naie Power Station (Domestic coal)
Unit 1 175,000kW (Operation started in May 1968)
Unit 2 175,000kW (Operation started in February 1970)
*Operation suspended in March 2019 and scheduled to be decommissioned in March 2027



Onbetsu Power Station (Light oil)
Unit 1 74,000kW (Operation started in May 1978)
Unit 2 74,000kW (Operation started in May 1978)

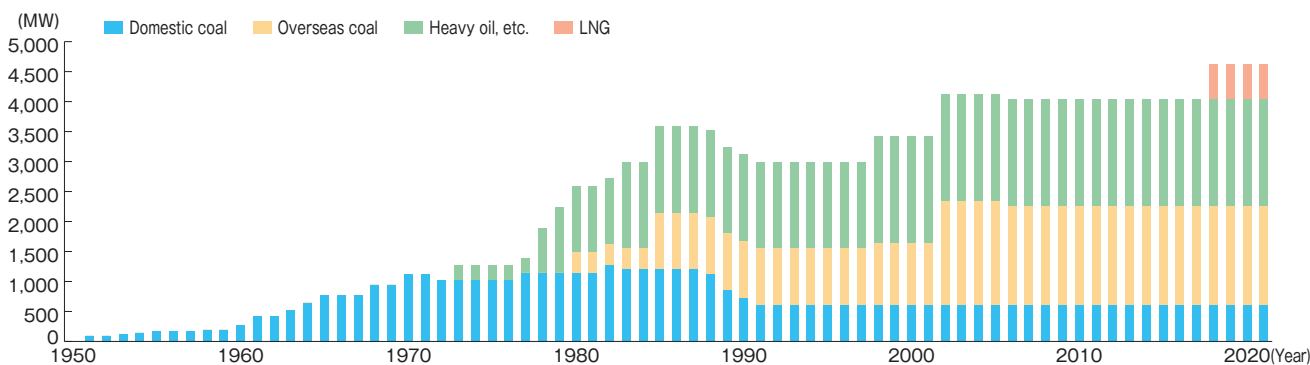


Tomakomai Power Station (Heavy crude oil & natural gas)
Unit 1 250,000kW (Operation started in November 1973)



Tomato-Atsuma Power Station (Overseas coal)
Unit 1 350,000kW (Operation started in October 1980)
Unit 2 600,000kW (Operation started in October 1985)
Unit 4 700,000kW (Operation started in June 2002)

Principal thermal power generation facilities Change in capacity



Thermal Power Decarbonization Initiatives

Japan's 6th Strategic Energy Plan sets out the policy of making renewable energy the major power source in the aim of achieving carbon neutrality by 2050. To that end, it is necessary that thermal power generation fulfill a role in supply adjustment capacity to make up for fluctuations in renewable energy output and that progress be achieved in decarbonizing thermal power itself.

New technologies need to be introduced to decarbonize thermal power generation. Currently, we are reviewing the adoption of CCUS and ammonia mixed combustion for our thermal power generation facilities.

Also, we will take into consideration trends and other developments in technological innovation regarding hydrogen mixed combustion, hydrogen production, methanation*, and so on, and address such technologies in working toward our aim of achieving carbon neutrality by 2050.

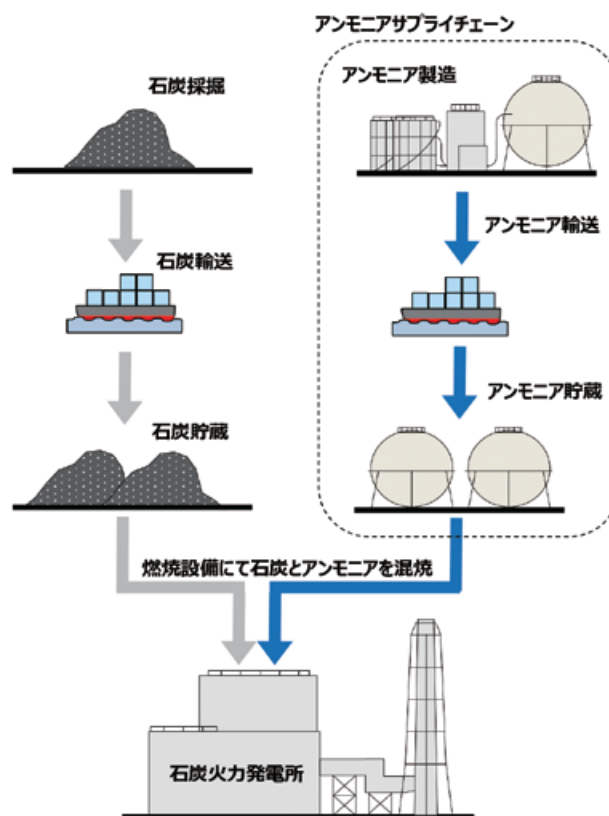
*Synthesis of methane from CO₂ and hydrogen

Ammonia Mixed Combustion in Coal-Fired Thermal Power Stations

Because ammonia does not emit CO₂ during combustion, it is an effective low carbon technology for mixed use in coal-fired thermal power plants. We will be reviewing ammonia mixed combustion for adoption through the period until approximately 2030.

To implement ammonia mixed combustion, the construction of a fuel ammonia supply chain (production, transportation and storage) as well as the conversion of combustion facilities are both issues that need to be addressed. Therefore, along with gathering the latest information about these aspects, we will proceed to identify other challenges as well as review measures to deal with such issues.

Illustration of ammonia mixed combustion

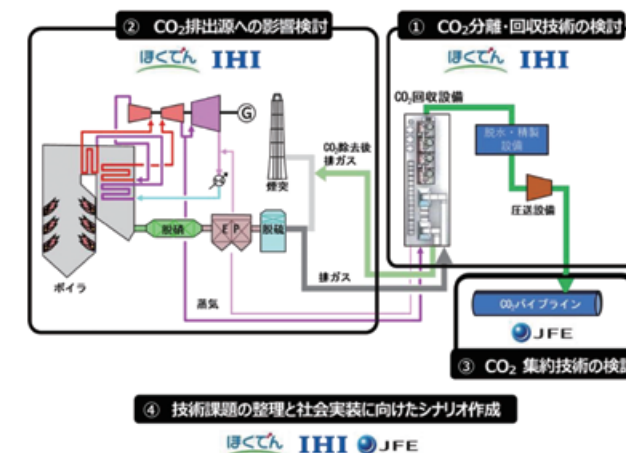


CCUS research, development and verification (NEDO research project)

CCUS technology, which captures, stores, and uses CO₂ emitted from thermal power stations, is an effective decarbonization technology. Together with IHI and JFE Engineering, HEPCO has been commissioned to undertake the "NEDO Research Project for Thermal Power Plant CO₂ Separation, Capture, and Pipeline Transport" (Term: 2021~2023). We are currently studying CO₂ separation and capture technology for the Tomatoh-Atsuma Power Station and sorting out issues to be addressed for practical application of this technology.

We will be closely watching the results of research projects, CCUS technology development trends, and other related aspects as we continue to proceed with a review aimed at adopting CCUS.

Illustration of the NEDO research project investigation

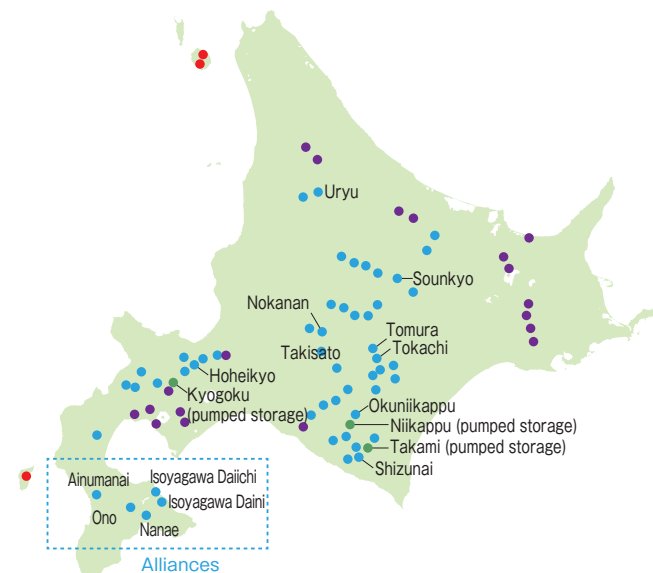


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Power Generation Renewable Energies

HEPCO Group Hydroelectric Power Stations (as of July 1, 2022)

- : HEPKO hydroelectric plants
55 plants with total output of 1,655,970kW
(● 3 pumped storage plants with total output of 800,000kW)
- : Hokkaido Electric Power Network hydroelectric plants
3 plants with total output of 415kW
- : Hokuden Eco-Energy hydroelectric plants
19 plants with total output of 62,765kW



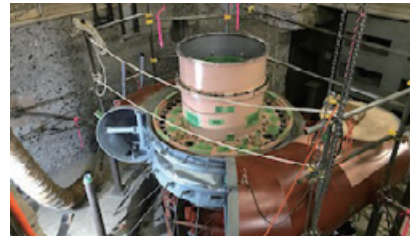
Power Generation Hydroelectric Power

Hydroelectric power is a clean energy that does not emit CO₂ during the generation process and, of the different types of renewable energies, it affords the capability to stably generate power over the long-term. Of the different types of hydroelectric power, the ordinary (run-of-river) type that controls water flow is expected to serve as a baseload power source with the pumped storage-type fulfilling the role of an adjustable power source.

While there are some aging power stations, these types of hydroelectric power generation will contribute to achieving carbon neutrality through their use over the long-term as work is performed to replace aging facilities, update components, and perform other such tasks.

Aging facility maintenance, replacement, and component updates

For aging power plants, we are performing extensive repairs and replacements as well as updating hydraulic turbines and other components. We will be adopting high-efficiency water turbines to increase output as well as the amount of power generated. In addition, we are also working to increase output by effectively utilizing untapped hydroelectric power and make use of this source over the long-term as we seek to reduce CO₂ emissions and contribute to achieving carbon neutrality.



Retrofitting a casing at Sounkyo Power Station



Retrofitting a hydraulic turbine at Sounkyo Power Station

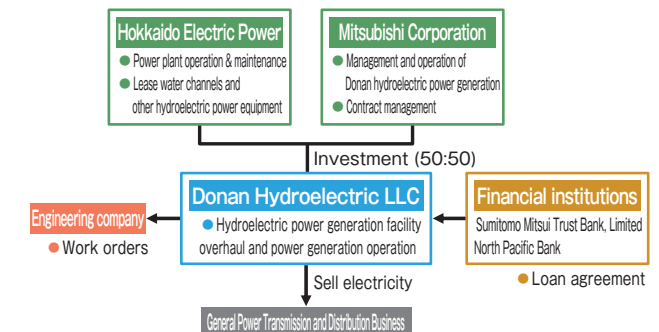


Retrofitting a generator at Sounkyo Power Station

Hydroelectric power plant alliance in Southern Hokkaido

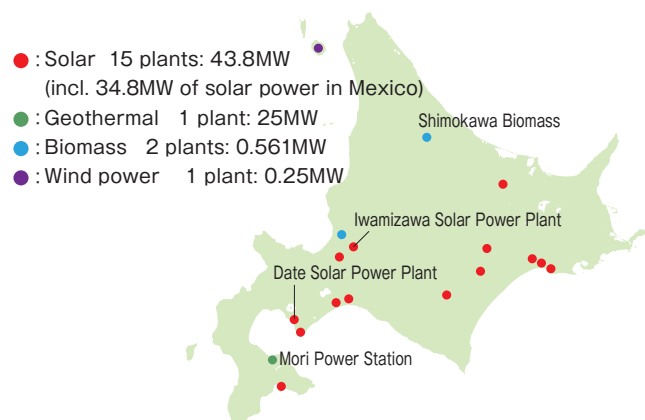
In November 2021, HEPKO established Donan Hydroelectric LLC, a joint venture with Mitsubishi Corporation to promote more efficient replacement and long-term stable plant operation by combining the knowledge about hydroelectric power generation which HEPKO has built up with Mitsubishi Corporation's expertise in renewable energies acquired both domestically and internationally.

Donan Hydroelectric LLC will replace five power plants (Nanae, Isoyagawa Daiichi, Isoyagawa Daini, Ainumanai, and Ono), which are located in the southern region of Hokkaido, one at a time and start generating power.



Toward Expanding Adoption of Renewable Energies

The HEPCO Group has already installed approximately 1.79 million kW (as of September 2022) of hydroelectric, geothermal, solar, biomass, and other types of renewable energies. We are actively working to further increase adoption of renewable energies in order to sustainably grow our business and realize a sustainable society.



Hokkaido accounts for approximately 30% of Japan's potential offshore wind power, roughly 55% of its onshore wind power, and about 15% of the nation's geothermal power. This region is very blessed with natural energy resources.

Potential wind and geothermal power in Hokkaido

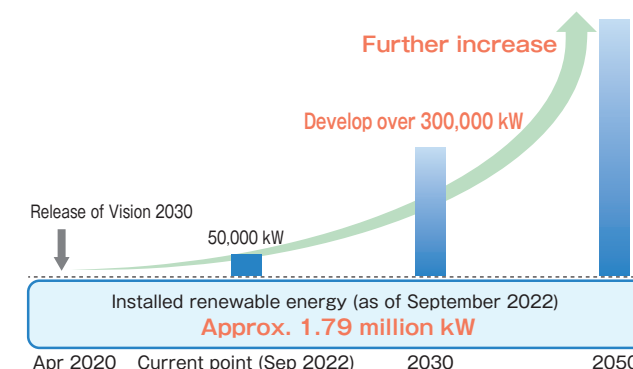
	全国 (万kW) (①)	北海道 (万kW) (②)	割合 (%) (②/①×100)
Offshore wind farms	112,023	31,944	28.5
Onshore wind farms	28,456	15,622	54.9
Geothermal power	1,037.5	147.5	14.2

Excerpt and partial revision of "2019 Report Commissioned on the Consolidation and Public Disclosure of Basic Information on Zoning as Concerns Renewable Energies" published by the Ministry of the Environment

To more efficiently and promptly implement our renewable energy power generation business, we established the Renewable Energy Development Department in May of this year. Hokkaido has excellent renewable energy potential capacity. We have been broadly promoting the adoption and expansion

of renewable energy power whether it be wind, geothermal, solar, biomass, or another form. First, we will work to achieve as soon as possible the goal set out in our Management Vision of increasing renewable energy power generation by 300,000 kW or more by FY2031 (including areas outside of Hokkaido), and actively strive thereafter to augment that capacity.

Target for renewable energy capacity and actual installation since release of the HEPCO Group Management Vision 2030 in April 2020



TOPICS

Issuance of HEPCO Green Bonds

HEPCO has issued Hokkaido Green Bonds, which are corporate bonds limiting the use of funds procured to development and other operations relating to renewable energy.

These Green Bonds were evaluated for their eligibility and confirmed to comply with green bond standards by DNV Business Assurance Japan, a third-party evaluation organization. These bonds were awarded the highest rating GA1 by R&I Green Bond Assessment, a division of Rating and Investment Information, Inc.

HEPCO's green bond issues diversify and stabilize financing and help us to promote our efforts to achieve carbon neutrality.

Overview of HEPCO Green Bonds

	第1回債	第2回債
条件決定日	November 26, 2021	July 8, 2022
発行日	December 2, 2021	July 14, 2022
社債種別	普通社債(一般担保付)	普通社債(一般担保付)
発行額	5 billion yen	5 billion yen
発行年限	10 years	10 years
利率	0.330%	0.789%
取得格付	A (R&I)	A (R&I)
調達資金の 用途	水力・太陽光の再生可能エネルギーの開発、建設、運営、改修に対する新規投資およびリファイナンスに充当	水力・地熱の再生可能エネルギーの開発、建設、運営、改修に対する新規投資およびリファイナンスに充当

Status of financing allocation and environmental impact (as of March 31, 2022)

			First bond issue
Proceeds			5 billion yen
Amount allocated			5 billion yen
		For refinancing	4.08 billion yen
Unallocated balance			—
Allocated for	Installed capacity	Hydroelectric	1,719MW
		Solar	43.8MW
	Annual CO ₂ emission reduction (FY2022)	Hydroelectric	1,840,791 t-CO ₂ /y
		Solar	669 t-CO ₂ /y

*The status of the allocation of funds from the second bond issue and their environment impact will be published in the next HEPCO Group Report.

*Facility capacity is indicated for each type of renewable energy that HEPCO Group generates.

*The amount of CO₂ emissions reduced annually is calculated using the annual amount of power generated for each type of renewable energy multiplied by the CO₂ emission factor.

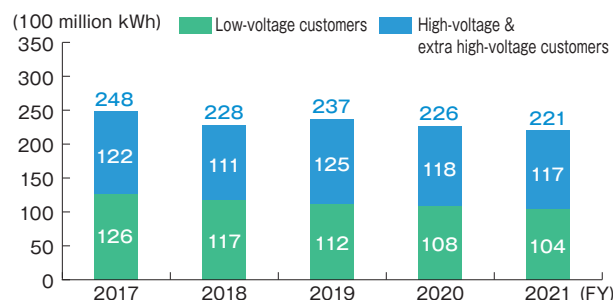
Electricity Retail Sales

HEPCO is based in Hokkaido where we provide products and services with electric power at the core. In 2016, we also began selling electric power in the Greater Tokyo Metropolitan area as well.

Since full liberalization of the electricity system, our electricity sales have tended to decrease due to a very competitive market as well as the effects of the pandemic. While HEPCO's share in the Hokkaido area has continued to fluctuate among high-voltage and extra high-voltage customers, we have seen a declining trend among low-voltage customers. So that customers continue to select HEPCO, we will endeavor to improve new products and services by leveraging alliances with other industries, proposing solutions and conducting additional marketing campaigns, and strive to secure contracts not only for electricity but also city gas.

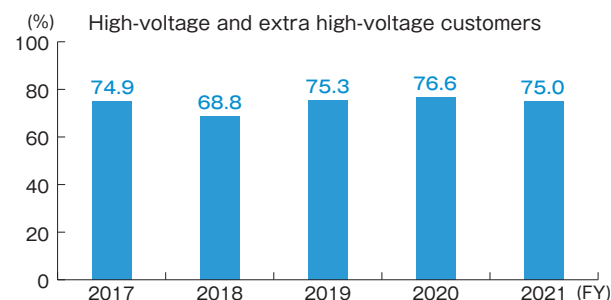
With the aim of achieving carbon neutrality by 2050, we will be proactive in expanding services for smart electric homes, which lead to energy savings and CO₂ reductions, as well as launching services that make use of solar power generation and electric vehicles.

Change in electricity sales



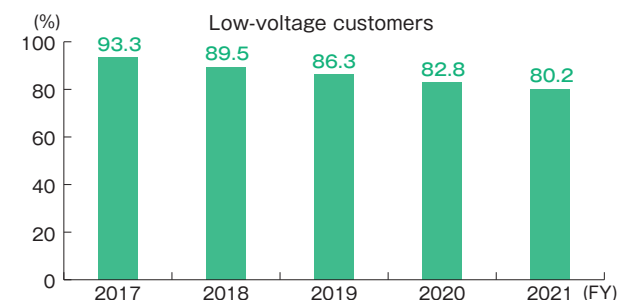
*Figures for FY2021 and later exclude electricity sales by Hokkaido Electric Power Network.

Change in HEPCO share in Hokkaido area (kWh)*



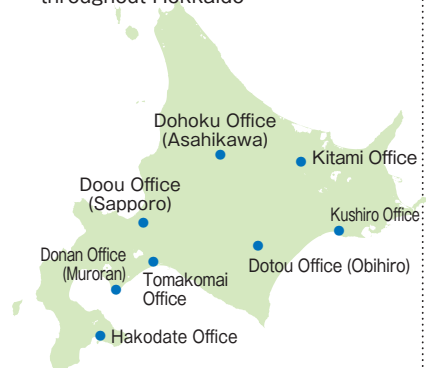
*Nationwide: Average share (kWh) in the supply areas of former general electricity utilities

*Calculated based upon electric power transaction reports published by the Electricity and Gas Market Surveillance Commission



Electricity sales area hubs

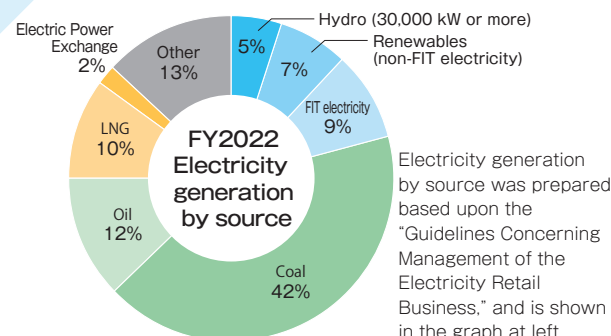
Eight hubs established throughout Hokkaido



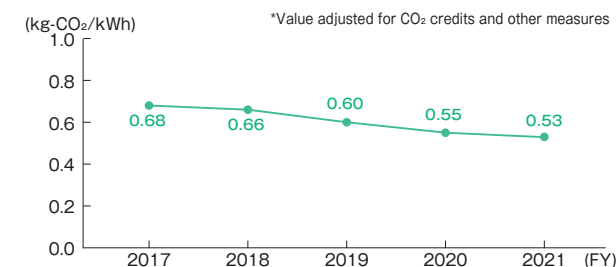
Electricity also supplied in the Greater Tokyo Metropolitan area



Change in our mix and CO₂ emissions factor in HEPCO's retail electricity sales business



Electricity generation by source was prepared based upon the "Guidelines Concerning Management of the Electricity Retail Business," and is shown in the graph at left.



CO₂ emissions factor is calculated based upon the Act on Promotion of Global Warming Countermeasures and the emissions factor for FY2022 is 0.533kg-CO₂/kWh.

Key Initiatives

As the business environment in which the HEPCO Group operates changes from moment to moment due to more intense competition in the retail electricity and gas markets, efforts to achieve carbon neutrality by 2050, and transformation of our social structure, we have set forth a three-pronged sales strategy of “recouping our share in the retail electricity market” by launching marketing activities focused on consumer needs, “enhancing consumer profitability” through sales of products and services focusing on the energy sector, and “taking up new challenges” including efforts to assist with community development. We are currently rolling out a variety of initiatives.

Recouping retail electricity market share

Package sales of gas and electricity

In October 2020, HEPCO started selling gas to customers who use city gas in the central Hokkaido region. With package sales combining electricity and gas, we will recoup our retail electricity market share.

In addition, we will strive to enhance services and refine our rate menu so that a broad range of customers will select HEPCO for their energy needs.



Zero-CO₂ emission rate plan

We have available the Carbon F Plan, which makes it possible for customers to contribute to the environment.

This rate menu offers service using 100% renewable energies and is effectively carbon free, making use of non-fossil certificates which are certifying that the electricity is derived from renewable energy power sources (hydroelectric power and other sources that the HEPCO Group has).

In addition to this plan, we also have available plans that specify electric power will be supplied from renewable energy sources.

Enhancing customer profitability

Flat Solar, HEPCO's solar power installation service

This service is available to customers building a new house, who would like to install a solar power generating system without having to defray the initial cost.

HEPCO has a range of options to choose from, including storage batteries, ECO-CUTE, and EV recharging systems.

[Four Benefits]

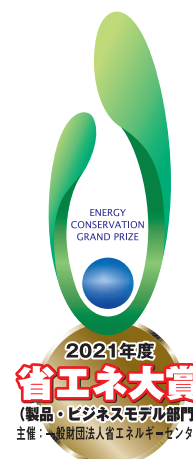
- (1) No initial cost
System may be used for a “flat” fee (affordable fixed charge)
- (2) Zero repair cost if system breaks down
- (3) Electricity may be used even during a service interruption
- (4) Transferable with zero charge after 10 years



ZEB consulting

Together with Hokuden Sogo Sekkei Corporation, HEPCO is one of the top companies in Hokkaido providing ZEB (net zero energy buildings), supporting installation from planning and design through post-completion analysis and operational improvement.

HEPCO's “Cold Region ZEB Promotion Project for Hokkaido” received the Chairman's Award from the Energy Conservation Center, Japan.



New challenges

Alliances with new regional electric power companies

HEPCO has partnered with Abashiri Electric Power, a new regional electric power company launched by Abashiri City, and NGK Insulators, Ltd. to supply electric power to public facilities and other establishments within the city. HEPCO will strive to support Abashiri Electric Power's efforts to realize carbon neutrality as well as using locally produced renewable energy from solar power generation for local consumption in Abashiri City.

Sales of Uchu Denki

HEPCO is striving to contribute to revitalization of the regional economy as well as develop Hokkaido Spaceport in Taiki Town by offering customers the opportunity to use Uchu Denki (Space Electricity) provided by Hokuden Cocrea.



Power Transmission and Distribution Business

Overview of Hokkaido Electric Power Network Co., Ltd.

Hokkaido Electric Power Network's principal business is general power transmission and distribution and we will continue to keep bright lights shining on Hokkaido forever based on our mission of "stably supplying good quality and inexpensive electricity." We continue to transmit electric power to every corner of this vast land of Hokkaido where electric power demand is 29 billion kWh. We are also responsible for power generation on outlying islands.

Distribution System		Power Generation Facilities (Outlying islands)	
Transmission line route length	8,453km	Hydropower stations	3 w/ 0.4MW capacity
Number of support structures	45,367	Thermal power stations	4 w/ 17MW capacity
Substations	401 w/ 24,314MVA capacity	Breakdown	
Distribution line route length	68,359km	Internal combustion	4 w/ 17MW capacity
Number of support structures	1,485,653	Total	7 w/ 17MW capacity

流通設備・発電設備:2022年3月31日現在

Corporate Vision

Maintain a stable supply

Maintaining our mission of supporting this lifeline, we will further enhance the technical capabilities that we have built up and reliably deliver good quality electricity at a low cost to every corner of Hokkaido.

Grow through value creation

We will incorporate new ideas and technologies and grow as a company continually seeking out challenges as we continue to create new value that enriches the lives of our customers.

Earn the community's trust

We will ensure neutrality and fairness in business operations to further reinforce the relationship of trust we enjoy with members of the community.

Business Environment in Hokkaido

Over the past 10 years, electric power demand has substantially decreased in Hokkaido. Also, recent years have seen intensifying natural disasters, necessitating countermeasures for facilities and equipment to a greater extent than in the past.

Decrease in demand

Demand for electric power has been pushed lower due to the faster population decline in Hokkaido compared to the rest of the country, along with the evolution of energy conservation and energy savings, plus the impact of the pandemic.



Aging equipment and facilities

In order to handle the increase in new and updated materials anticipated to be produced in the future, systematic work implementation is necessary, including equalizing work quantities.



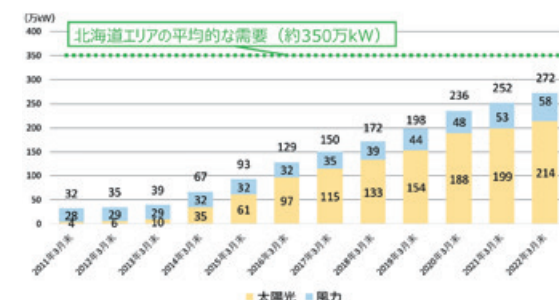
Intensifying natural disasters

When a significant natural disaster strikes, it is important to promptly communicate information about service interruptions in close partnership with municipalities and relevant organizations.



Expanding renewables and other decentralized power sources

The amount of interconnected solar and wind power has increased to approximately 80% of average demand in the Hokkaido area.

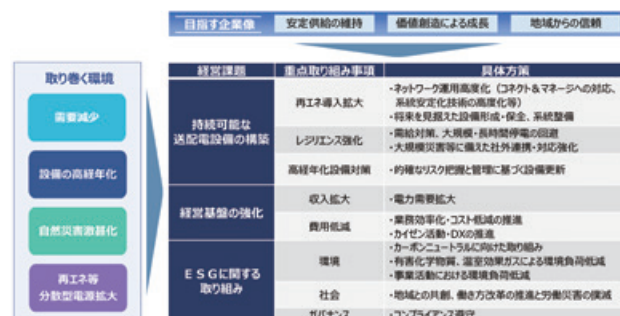


Power Transmission & Distribution Business Key Initiatives

Prioritizing challenges to be addressed

We have set priorities to be addressed based upon management challenges that take into account our corporate vision and surrounding environment.

Based upon the substantially enhanced efficiency achieved through previously implemented initiatives, we will work to update our transmission and distribution equipment and strive to deliver to our customers safety and security as well as comfort in their lives.



Suitable environment for expanding adoption of renewable energy

In order to fully leverage the renewable energy potential in Hokkaido, HEPCO is striving to maintain grid stability by mitigating changes in voltage and frequency due to output fluctuations. We are achieving this by reinforcing the HVDC link between Hokkaido and Honshu as well as making use of system storage batteries and other equipment.

[Reinforcing the Hokkaido-Honshu HVDC link (Shinshin-Kitahon)]

The scale of the power grid in Hokkaido is small, requiring that technical limitations be overcome in terms of regulating demand and supply as well as frequency so that more renewable energy may be adopted.

One initiative that will further contribute to expanding renewable energies has already been launched. This is the construction to augment a route, the same as the Shin-Hokkaido-Honshu HVDC Link, by 300,000 kW (Shinshin-Kitahon).

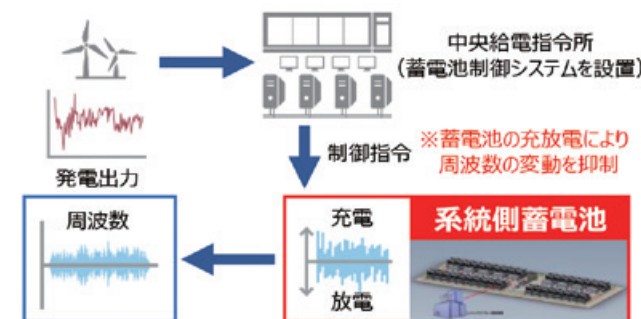
<工事概要>

交直流変換所	北斗変換所交直流変換設備 30万kW増設 今別変換所交直流変換設備 30万kW増設
直流送電線	250kV架空1回線増設 (北斗~吉岡 CH77km) 250kV地中1回線増設 (吉岡CH~電飛CH 24km) 250kV架空1回線増設 (電飛CH~今別 21km)
交流送電線	275kV架空1回線一部増強 [東北電力ネットワーク工事] (今別幹線 青森~今別幹線No.124鉄塔 39km)
その他	北斗変換所 STATCOM新設 システム改修



[Utilizing system storage batteries]

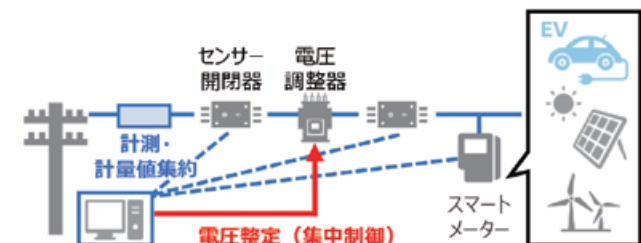
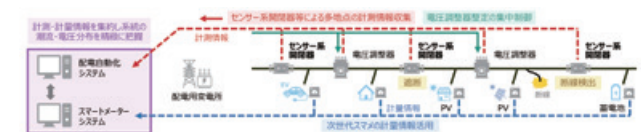
Solar and wind output is influenced by the weather. These fluctuations must be balanced with adjustable capacity using hydroelectric and thermal power. A lack of the capacity to adjust for fluctuations poses a challenge for further expanding the system in Hokkaido. One way of making up for the shortfall in adjustment capacity is to install system storage batteries.



[Enhancing the power distribution network]

Before the expansion of interconnections to renewable energies, current from substations to terminals accounted for a substantial portion, so distribution line voltage and current have been controlled through substations. When the amount of renewable energy interconnections is increased, it will be essential to regulate voltage based upon measurement data drawn from equipment installed along distribution lines.

We are working to introduce sensor switches and other next-generation devices to make use of centralized controls to adjust voltage and then identify sections where an accident has occurred in order to restore power as soon as possible after a service interruption.



Complying with the New Transmission Wheeling Rate System

Forecast for wheeling service and other revenue

In preparation for commencement of the new transmission wheeling rate system (revenue gap system) in FY2024, we have developed a business plan for the coming five years and submitted, on July 25 to the Ministry of Economy, Trade and Industry, documentation on revenue forecasts anticipating what is needed for implementing the new system.

The new transmission wheeling rate system is introduced pursuant to the Act for Partial Amendment of the Electricity Business Act and Other Acts for Establishing Resilient and Sustainable Electricity Supply Systems. It will reconcile greater cost efficiency with securing investment necessary for general power transmission and distribution operators as well as increase the resiliency of transmission and distribution equipment and convert renewable energy into a core power source.

Hokkaido is well suited for renewable energies. While the adoption of renewables is expected to further increase in the future, transmission and distribution facilities are also aging. Hokkaido Electric Power Network will advance initiatives to construct a next-generation network that balances stable supply with expanded adoption of renewables in the aim of achieving carbon neutrality by 2050. We will strive to reliably manage our operations to live up to the expectations of retail businesses, power producers, and customers at the receiving end of our electric power network facilities.

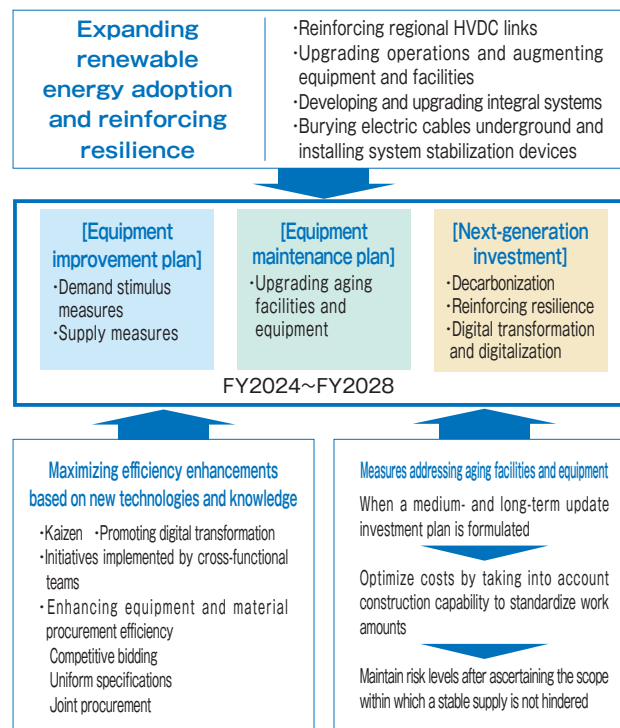


Formulating our investment plan

Our equipment improvement plan reflects a cost-benefit assessment that was conducted to augment a push-type system that will be compatible with new demand, renewables as well as other new and added power sources, low available capacity systems, and progressively aging facilities and equipment.

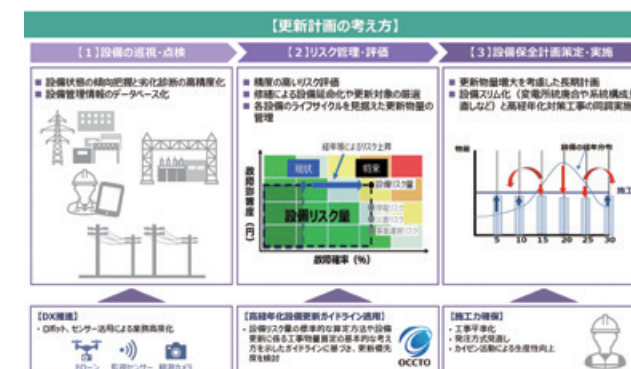
Our equipment maintenance plan is based on a quantitative assessment of failure risks calculated in accordance with updated guidelines for aging facilities and equipment. The plan reflects retrofitting that takes a medium- and long-term perspective, taking into account work priorities and construction capabilities gained from data consolidated during patrols and inspections.

Next-generation investment is reflected in the plan, particularly in terms of specific measures contributing to decarbonization, resilience reinforcement, digital transformation enhancing operational efficiency, and upgrades.



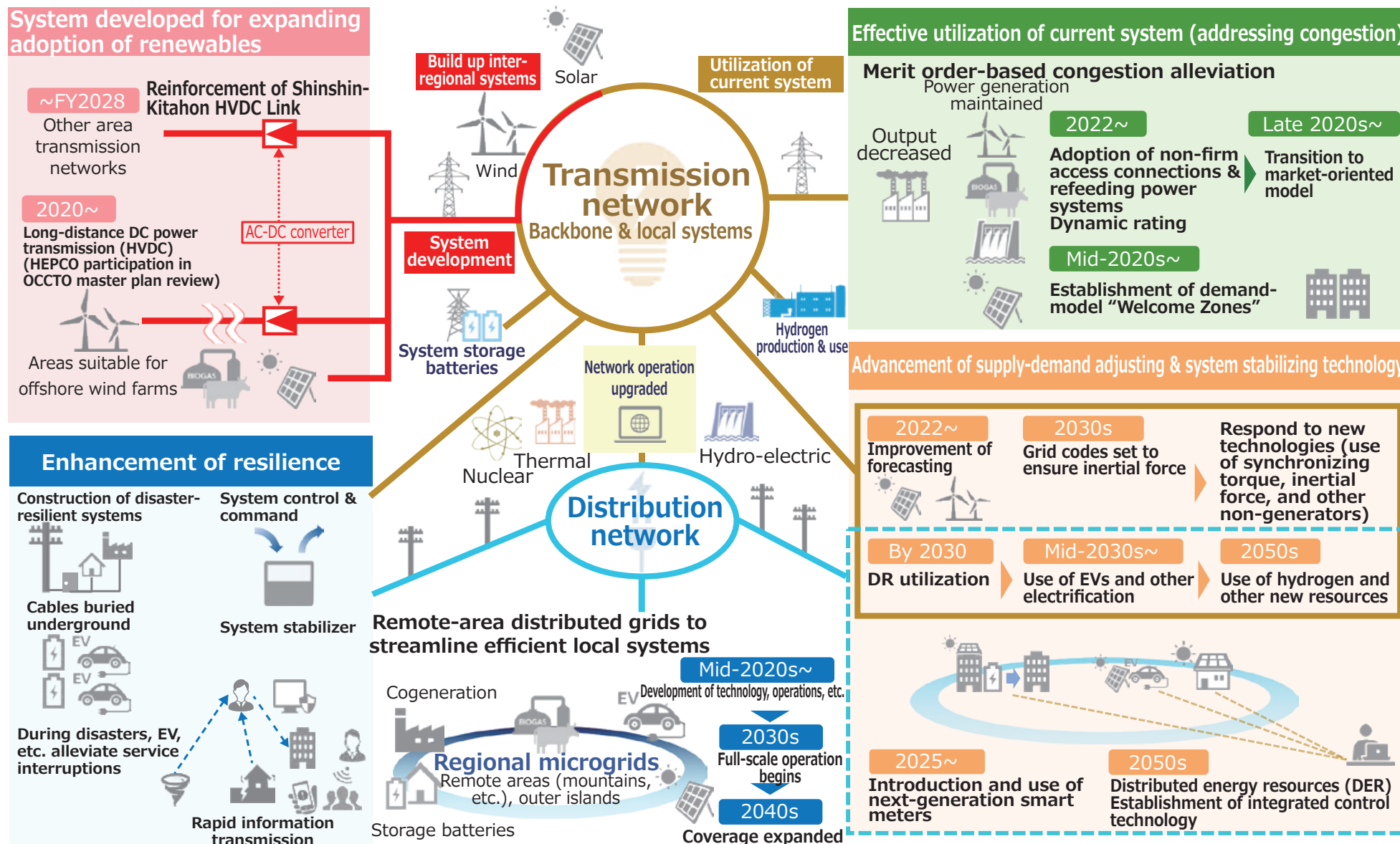
Measures addressing aging facilities and equipment

We will ensure a stable supply of electric power by systematically conducting work on countermeasures in a way that takes into account the capability to perform the work necessary during peak times, which will retrofit aging equipment.



Our Vision~Construction of Next-Generation Electric Power Network~

We will steadily proceed to execute our business plan starting with priority items. We will realize a next-generation electric power network by further expanding adoption of renewable energies to be decarbonized, reinforcing resilience to avoid substantial and long-term service interruptions, and utilizing digital technologies to enhance convenience of the power transmission and distribution network.



Peripheral Businesses

Illustration of Future Hydrogen Use in Hokkaido

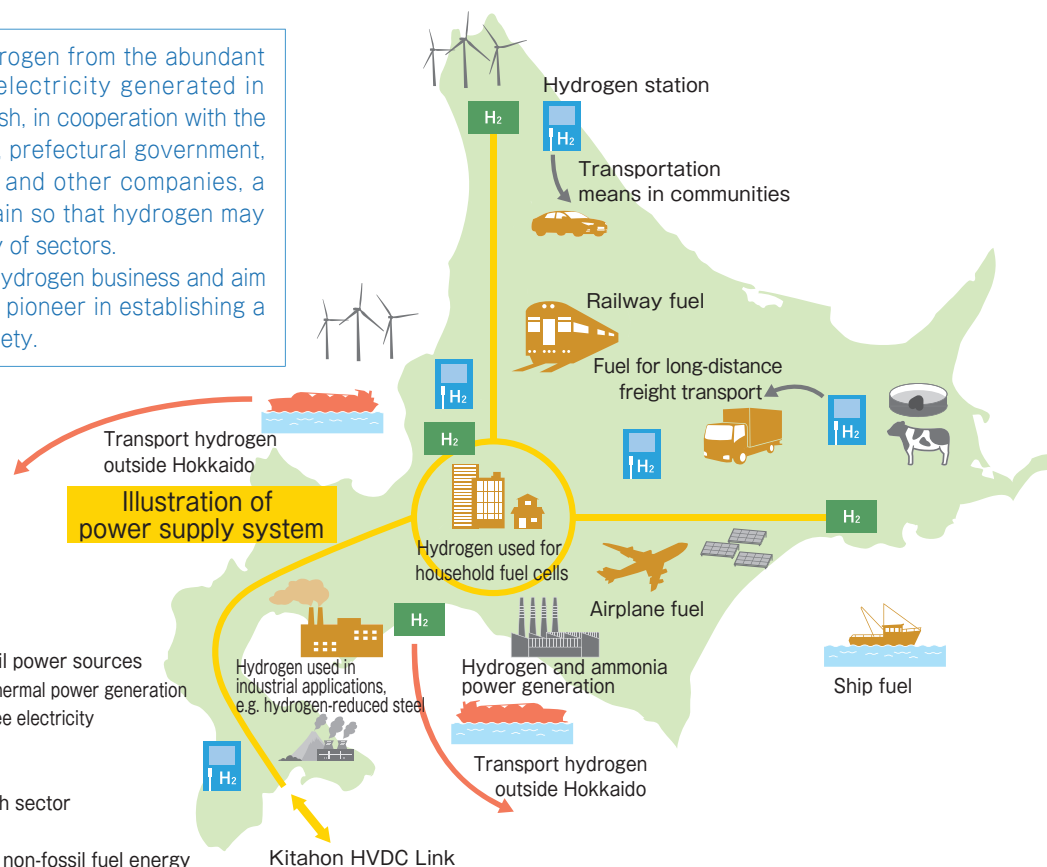
- We will produce hydrogen from the abundant renewable energy electricity generated in Hokkaido, and establish, in cooperation with the national government, prefectural government, local municipalities, and other companies, a hydrogen supply chain so that hydrogen may be utilized in a variety of sectors.
- We will promote our hydrogen business and aim for Hokkaido to be a pioneer in establishing a hydrogen-energy society.

Supply side

- Expand adoption of non-fossil power sources
- Achieve zero CO₂ emissions in thermal power generation
- Produce hydrogen using CO₂-free electricity

Demand side

- Expand electrification in each sector
- Use CO₂-free hydrogen
- Convert fossil-fuel energy to non-fossil fuel energy



Hydrogen Utilization Hokkaido Aims to Pioneer the Hydrogen-Energy Society

Hydrogen Initiatives for Achieving Carbon Neutrality

Hokkaido has abundant renewable energy reserves. This region is also expected to expand adoption of renewable energies in the future as we move toward achieving carbon neutrality.

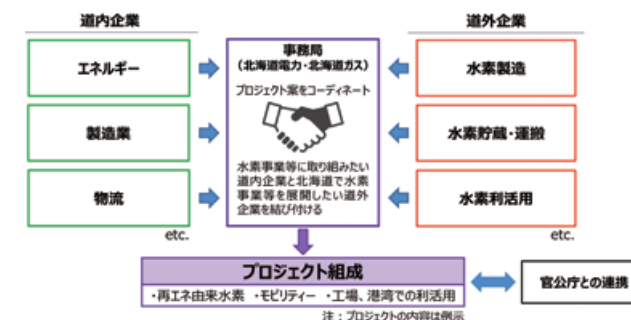
Surplus renewable energy power and the absorption of output fluctuations are issues that need to be addressed in order to expand renewables while maintaining a stable supply of electric power.

Partnering with the national government, prefectural government, local municipalities, and other companies, we will produce hydrogen using electric power from the abundant renewable energy in Hokkaido and implement initiatives to construct a hydrogen supply chain, which will be used in a variety of sectors, with the aim of making Hokkaido a hydrogen-energy society pioneer.

Hokkaido Hydrogen Business Platform

The Hokkaido Hydrogen Business Platform was established based upon a proposal put forth by HEPCO in July 2021 with the aim of accelerating construction of a hydrogen supply chain and having Hokkaido be a future pioneer in utilizing domestically-produced green hydrogen.

This platform brings together the ideas and needs of companies in Hokkaido with the knowledge and technology of companies outside Hokkaido to create a synergy that will develop activities for project creation leading to social implementation.

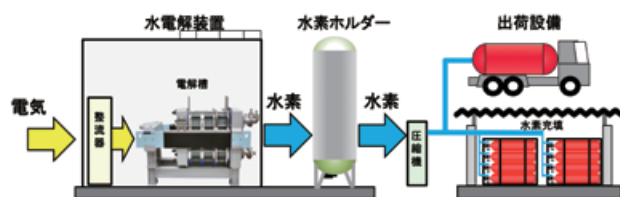


Participating companies: 35 (as of August 31, 2022)

Installation of Hydrogen Generators

Producing hydrogen to absorb surplus electric power and output fluctuations from renewable energies will help to further expand adoption of renewables and promote more widespread use of hydrogen, which will in turn decarbonize energy use.

With operation set to commence in March 2023, we anticipate that, after the project is up and running, it will be able to absorb output fluctuations as renewable energy is installed. Performance will be assessed using a variety of operational patterns, and we will establish operational and maintenance technologies for cold regions and proceed to engage in diverse reviews and studies so as to realize a hydrogen-energy society in the future. (Selected for the 2022 Supplementary Budget: Support Program for Installation of System Storage Batteries, etc. to Accelerate Adoption of Renewable Energies)



Overview of hydrogen generator

Item	Specifications
Device	Hydrogen generator ・Type: Polymer Electrolyte Electrolysis Cell (PEEC) ・Capacity: 1MW class Ancillary equipment (Power receiving & transforming system, hydrogen holder, and offloading system)
Operation start date	March 2023 (tentative)
Location	1-17 Benten, Tomakomai City, Hokkaido
Hydrogen production volume	Max. 200Nm ³ /h (equivalent to 3 Toyota Mirai refuelings)

Research on Hydrogen Supply Chain Utilizing Surplus Electric Power from Ishikariwan Shinko Offshore Wind Farm

Together with other companies*, HEPCO is conducting research on hydrogen supply chains utilizing surplus electric power generated at the Ishikariwan Shinko Offshore Wind Farm, which is under construction at the Ishikari Bay New Port.

We will identify issues to be addressed in terms of technology, challenges, and systems across the entire supply chain and promote the production of hydrogen using surplus electric power as well as implementation of the concept of local production for local consumption. (Selected for FY2022 NEDO Project)

*Green Power Investment, Nippon Steel Engineering, Imoto Lines, AIR WATER, and Kyocera Communication Systems



Research on Constructing Hydrogen Utilization Model in Region Around the New Chitose Airport

Jointly with other companies*, we are defining roles that hydrogen can fulfill and its effectiveness, as well as studying the possibility of using renewable energies to cover demand for hydrogen at the airport.

There is demand for heat at the New Chitose Airport for mobility including utility vehicles and public transportation in the surrounding area as well as for the passenger terminal buildings, airport facilities, and adjacent hotels. There is also the possibility of utilizing hydrogen for aircraft fuel in the future.

If the feasibility assessments conducted as part of this study enable commercialization of this model, a ripple effect is expected with an increase in renewable energy connections and widespread use of hydrogen throughout Hokkaido moving outward from the airport starting point.

(Selected for FY2023 NEDO Project)

*Mitsubishi Corporation, Mitsubishi Research Institute, Hokkaido Airports, Nikken Corporation, and Toshiba Energy Systems & Solutions Corporation



*Photo courtesy of Fukushima Hydrogen Energy Research Field
 (Implemented part of the NEDO project "Development of Technologies for Realizing a Hydrogen Society Item 1: Development of Hydrogen Energy System Technology")

HEPCO Group Projects

HEPCO Group is also engaged in the installation of electrical facilities and projects involving information communication. We see unity in fulfilling our customers' needs and the diverse challenges that society faces, such as facility construction as renewable energy installations are expanded, data centers built as digital transformation evolved, as well as the cloud services provided and other IT projects. We are amalgamating the technological capabilities of the HEPCO Group to advance such projects.

Increase in Orders for Renewable Energy-Related Construction: Focusing Also on Wind Power Generation and Storage Batteries

It is essential that renewable energy installations be expanded to achieve carbon neutrality. In Hokkaido which has been referred to as a "treasure trove of renewable energy," Hokkaido Electrical Construction Co., Inc. has demonstrated its technical capabilities built up over many years. We are currently receiving many construction project orders for the whole spectrum of electrical facilities, including installation of wind power generation and large-capacity storage batteries.

Wind Power Generation

Hokkaido is a land well-suited for wind power generation and such installations are planned to be further set up in many localities. Leveraging our wealth of experience in electrical construction, we are marketing solutions that appropriately meet our customers' needs, such as projects to install substations as well as transmission lines essential for wind power generation facilities.

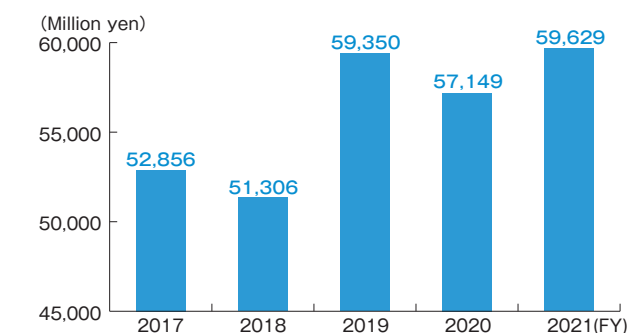
Storage Batteries

There are great expectations for storage batteries to stabilize renewable energy electric power and provide an emergency power source available for business continuity plans and other such measures, so an increase in installation of such systems is also expected in the future. We have accepted orders for a range of storage battery facility projects.

Regional Microgrids

There has been an increase in projects to construct regional microgrids (systems using renewable energy to help supply electric power in limited community areas), which local municipalities in Hokkaido are planning. We will marshal our technical capabilities enabling us to construct a variety of facilities and systems so as to increase orders for such projects.

Hokkaido Electrical Construction Co., Inc.'s Sales



Further Developing and Expanding IT Services: Opportunities for Rolling out 5G and Advancing Digital Transformation

The evolution of information communication technology and services is further accelerating thanks to the rollout of the fifth-generation mobile network (5G).

Our modern society also handles enormous amounts of data every day. Data usage has increased dramatically, which has also increased the need for optical fiber networks and mobile carrier circuits. Along with this, the scale and quality demanded of data centers and platform services has also risen, and this is increasing new business possibilities.

Hokkaido Telecommunication Network Co., Inc. (HOTnet) has steadily moved forward with initiatives that appropriately capture

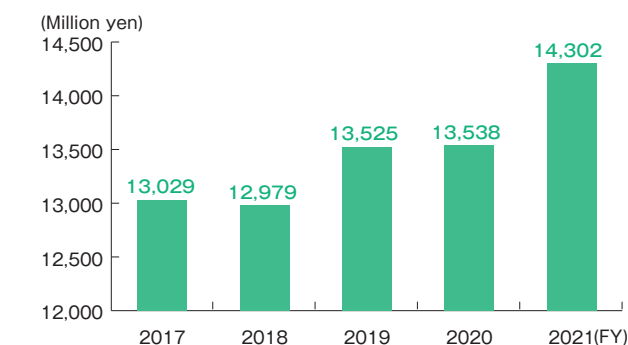
social trends, such as the digital transformation evolution and dramatic changes in the business environment. This has allowed us to provide comprehensive solutions for jointly creating value with customers.

More specifically, in 2017, STEP Sapporo Data Center opened to facilitate comprehensive solutions leveraging its data center.

Sapporo has been turned into a hub for protecting customers' IT assets and enhancing business continuity due to the low impact that natural disasters have had on the location.

There has been an upward trend in customers making use of the data center and sales have steadily risen.

HOTnet Sales



Seeking to Enhance Efficiency and Reduce Costs

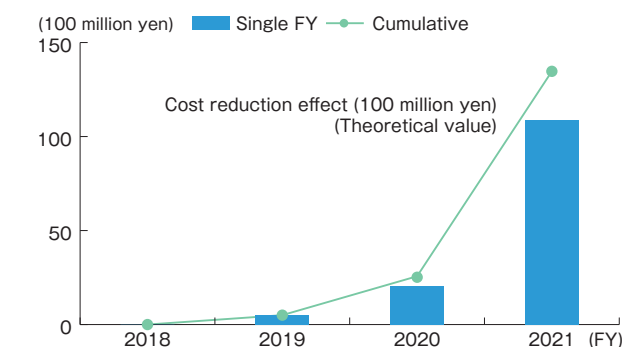
We will advance measures to drastically increase efficiency and further reduce costs to ensure cost competitiveness so as to prevail over our competitors even before restarting Tomari Nuclear Power Station.

Promoting and Expanding Kaizen

We are promoting Kaizen across the board in our operations with the goal of increasing productivity fourfold.

Along with promoting Kaizen initiatives internally, we are also increasing the number of such projects and further promoting these reforms among our group companies.

Groupwide, over 2,000 Kaizen projects have been launched so far, steadily building up the effects of cost reductions.



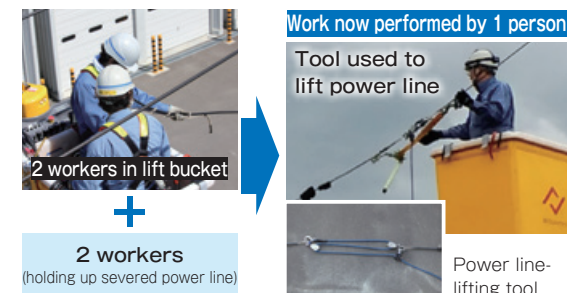
*Figures represent the combined cost reduction effect for Hokkaido Electric Power and Hokkaido Electric Power Network

Examples of Kaizen Projects

[Kaizen of Directly-Managed Restoration of Service Interruptions]

There are on the order of 200 jobs annually to restore high-voltage power line breaks, which involve workers in high places handling heavy power lines. The amount of man hours spent on this type of task generally is 64 minutes multiplied by four people. Thanks to Kaizen measures, such as the development of a power line-lifting tool and improved work environment, this work can now be performed in 31 minutes by one person.

Along with enhancing operational efficiency and improving quality, we are also striving to speed up the time it takes to restore service.



Promotion of Digital Transformation (DX)

The HEPCO Group defines digital transformation as “corporate restructuring through operational innovations utilizing digital technology and a mindset shift to continually take up the challenge that changes present.” We will prioritize the promotion of digital transformation as a pillar of our measures to strengthen our management foundation. Our aim is to achieve this group management target.

Case Study (Demonstration)

Enhanced efficiency of power station operations by utilizing four-legged robots, drones, head-mounted displays, etc.

Our aim is to increase operational efficiency by automating four-legged robots and drones to conduct patrols.

We will use head-mounted displays to share site conditions in real time and provide remote work support to raise the level of on-site operations.



















In February 2022, we became the first company in Hokkaido to receive a Digital Transformation (DX) Certification.

The DX certification program is a national certification initiative that certifies companies are ready to make use of digital technologies to transform their business (DX-Ready) and is based on the Act on Facilitation of Information Processing.



HEPCO Group ESG Initiatives

HEPCO Group emphasizes Environmental, Social and Corporate Governance (ESG) based on our management philosophy mandating 'respect for humanity, contributions to local communities, and efficient management.' We regard those items below as ESG priorities (material matters) and are rolling out specific initiatives to address these while, at the same time, earnestly grappling with SDG social challenges.

	Priorities	Key initiative	Relevant SDGs
E <i>Environment</i>	Steadily advance initiatives for achieving carbon neutrality by 2050	Address global and local environmental issues	    
S <i>Social</i>	Co-create with communities Maximize employee potential	Provide products and services integrating electricity Earnestly meet the expectations of local residents, shareholders, and investors Engage in transparent and fair transactions with business partners Create a safe and motivational work environment for employees	         
G <i>Governance</i>	Ensure thorough compliance Disclose information about business activities in a timely and appropriate manner Proactively communicate with stakeholders		



Sustainable Development Goals: SDGs

Declaration of 17 goals for poverty, hunger, energy, climate change, and other areas that were adopted at the UN Summit in September 2015 and are slated to be achieved by 2030.

Process for designating ESG material matters

Step 1

Along with looking back to examine previous management initiatives, key points are identified which are necessary for promoting management focused on ESG.

Step 2

ESG priorities (material matters) are consolidated based upon the identified points.

Step 3

Management policies, including ESG priorities (material matters), are discussed by the Executive Committee which is comprised of executive officers, and views exchanged with outside directors.

Step 4

Board of Directors determines management policy, including ESG priorities (material matters).

ESG Highlights

[Guide to concern symbols] H: Hokkaido Electric Power N: Hokkaido Electric Power Network
G: HEPCO Group

E Environment

		Concern	FY2021	FY2022	Unit
CO ₂ emission factor [adjusted]		H	0.549	0.533	kg-CO ₂ kWh
CO ₂ emissions [adjusted]			1,241	1,176	10,000 t-CO ₂
Direct greenhouse gas emissions (Scope 1)		HN	1,280	1,410	10,000 t-CO ₂
Indirect greenhouse gas emissions (Scope 2)			0.1	0.1	10,000 t-CO ₂
Other indirect greenhouse gas emissions (Scope 3)			355	448	10,000 t-CO ₂
Thermal efficiency		H	42.2	41.4	%
Transmission/distribution loss		N	5.8	6.1	%
Industrial waste generated		G	80.9	85.7	10,000 t
Final industrial waste disposal amount			4.9	7.9	10,000 t
Industrial waste recycling rate			93.9	90.8	%
SOx emission intensity	Group-wide	G	0.58	0.55	g/kWh
	Thermal	H	0.55	0.51	g/kWh
NOx emission intensity	Group-wide	G	0.42	0.46	g/kWh
	Thermal	H	0.46	0.50	g/kWh

G Governance

	Concern	FY2021	FY2022	Unit
No. of directors [number of which are outside directors]	H	12(2)	11(2)	Persons
No. of corporate auditors [number of which are outside corporate auditors]		5(3)	5(3)	Persons
Ratio of outside directors		29.4	31.2	%
Women directors		2	2	Persons
Ratio of women directors		11.7	12.5	%
Board of Directors' sessions		15	14	Sessions
Average ratio of directors attending		98.8	98.7	%
In-house compliance survey response rate	HN	99.1	99.4	%
No. of compliance hotline inquiries		34	20	Inquiries
CSR awareness survey response rate		96.5	96.2	%

S Social

	Concern	FY2021	FY2022	Unit
No. of employees / gender ratio	Total	5,412 (100.0)	5,357 (100.0)	Persons (%)
	Men	4,938 (91.2)	4,877 (91.0)	Persons (%)
	Women	474 (8.8)	480 (9.0)	Persons (%)
Average age	Total	39.6	39.5	Age
	Men	39.5	39.5	Age
	Women	40.2	40.0	Age
Average years of service	Total	18.8	18.7	Years
	Men	18.8	18.6	Years
	Women	19.4	19.1	Years
No. of new graduates hired / gender ratio	Total	107 (100.0)	152 (100.0)	Persons (%)
	Men	94 (87.9)	130 (85.5)	Persons (%)
	Women	13 (12.1)	22 (14.5)	Persons (%)
No. of mid-career hires / gender ratio	Total	45 (100.0)	22 (100.0)	Persons (%)
	Men	41 (91.1)	20 (90.9)	Persons (%)
	Women	4 (8.9)	2 (9.1)	Persons (%)
Ratio of mid-career hires		29.6	12.6	%
Ratio of employees with disabilities	G	2.38	2.48	%
No. of non-Japanese employees	HN	2	2	Persons
Senior rehires	HN	80	58	Persons
Job separation rate	HN	1.3	1.1	%
No. of managers / gender ratio	Total	658 (100.0)	691 (100.0)	Persons (%)
	Men	644 (97.9)	677 (98.0)	Persons (%)
	Women	14 (2.1)	14 (2.0)	Persons (%)
Ratio of women managers		2.1	2.0	%
Paid leave days taken		16.6	16.5	Days
Rate of annual paid leave taken		83.5	82.5	%
Rate of childcare leave (short term) used	HN	16.4	25.6	%
No. of employees taking family care leave		0	3	Persons
No. of work-related accidents		17	23	Incidents
Work-related injury frequency rate		0.09	0.18	(%)
Employees injured		17	24	Persons
Contractor/contracted personnel injured		10	12	Persons

Addressing Climate Change (TCFD*)

HEPCO Group recognizes that addressing climate change has a direct effect on our business enterprise. Based on this understanding, we analyze risks and opportunities as well as disclose information about climate change in accordance with the TCFD framework.

In our analysis of risks and opportunities, we take into account trends in Japan's climate change measures as well as recent developments both domestically and internationally as we reassess a variety of aspects. Considering climate change challenges and improving information disclosure promotes dialogue with our stakeholders and builds corporate value. These efforts will also contribute to development of a sustainable society.

*The Task Force on Climate-related Financial Disclosures (TCFD) is a working group created by the Financial Stability Board (FSB) whose members include central banks, financial regulatory authorities and other entities of major nations.
In June 2017, the TCFD presented its recommendations for financial disclosure along with a framework for voluntarily disclosing information that will enable financial institutions and other such entities to appropriately assess the risks of climate change and other factors on companies.

Strategy

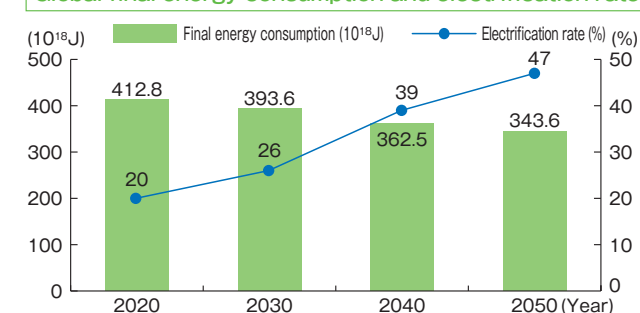
When considering climate change opportunities and risks, we reference relevant data from the International Energy Agency (IEA) and Intergovernmental Panel on Climate Change (IPCC).

In aiming toward a low or carbon-free world, there is an emphasis on reducing and decarbonizing the energy supply side as well as electrifying the demand side and converting to highly-efficient energy use. This aligns with the direction of our initiatives as we take up the challenge to achieve carbon neutrality on both the supply and demand sides.

Reference scenarios

1.5°C scenario (IEA)	IEA report data was referenced when analyzing transition risks and opportunities. Projections show expanded electrification of demand, heat pump technology, and other innovations will enhance energy efficiency and, by extension, promote energy savings, which will contribute to a low-carbon and carbon-free society.
4°C scenario (IPCC)	The results of projections analyzed by the Sapporo District Meteorological Observatory and based on the IPCC scenario were referenced for recognizing physical risks. It is anticipated that annual occurrences of short-time heavy rainfall (50mm per hour: rainfall similar to a waterfall in intensity) will increase in the future. It is recognized that this will lead to changes in future weather patterns.

Global final energy consumption and electrification rate



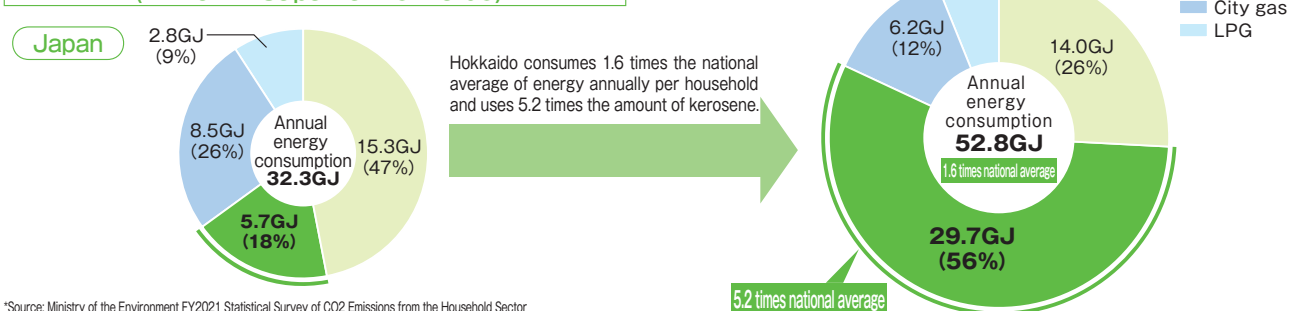
*Prepared by HEPCO with reference to the IEA's "World Energy Outlook 2021."
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Potential for expanding electrification in Hokkaido

According to estimates by national research institutes, Hokkaido's population will likely decrease in the future. Nevertheless, if we focus on energy consumption in Hokkaido's household sector, we see that energy for heating and other uses makes the region highly dependent upon petroleum-derived energy compared to the rest of the nation. As such, Hokkaido has enormous potential for increasing electric power demand through greater electrification.

On the energy supply side, we see the greatest challenge in working to achieve carbon neutrality in all forms of energy in Hokkaido by fully promoting the adoption of non-fossil fuel power sources and other initiatives impacting both supply and demand.

Annual household consumption of energy by type (GJ) (FY2021: Japan & Hokkaido)



*Source: Ministry of the Environment FY2021 Statistical Survey of CO2 Emissions from the Household Sector

Climate-related risks and opportunities

The situation in Ukraine has threatened energy security around the world. This risk has prompted countries to reinforce their energy security and increase the importance of renewables, nuclear power, and other non-fossil fuel power sources highly effective for decarbonization. If we consider Hokkaido's geographical characteristics with municipalities spread out across a vast cold and snowy region, it is evident that much energy is required for heating and moving around. Hokkaido is very dependent upon petroleum-derived energy. On account of this, we believe that, in the interest of achieving carbon neutrality in Hokkaido, it is important to convert demand for petroleum-derived energy to demand for electric energy and switch to hydrogen and ammonia produced from renewables in Hokkaido in order to meet demand difficult to convert to electric power. We feel that such efforts will lead to greater opportunities in the future.

Risks		
	Short- to medium-term	Long-term
Transition risks	Policy & legal	Increase in regulation of and change in policies addressing CO ₂ emissions
	Technological	Lower prices for current technologies Delay in recouping investment in new technologies
	Market	Decline in competitiveness of products and services as customers become increasingly aware of the environment in relation to electricity
	Reputational	Insufficiently addressing ESG affecting financing
Physical risks	Acute	More severe and frequent natural disasters
	Chronic	Weather pattern changes and other factors affect stability of income and expenditures

*Short- and medium-term: up to 10 years; long-term: over 10 years
Items having a significant impact are indicated with a green border

Opportunities		
	Short- to medium-term	Long-term
Energy efficiency Products & services	Transition demand for heating and other activities, which is highly dependent on petroleum-based energy, to electric power, promote adoption of electric vehicles to increase demand for electricity, and supply CO ₂ -free hydrogen to meet demand that is difficult to electrify	
Energy sources	Promote offshore wind power, biomass power generation and other renewable energies leveraging Hokkaido's abundant potential, promote use of nuclear power, and transition to low-carbon and carbon-free thermal power as innovative technologies are commercialized	
Market	Issue green bonds and other innovative financing instruments to diversify and stabilize financing	
Resilience	Ensure dominance of electricity and increase demand by enhancing reliability through quick restoration after a service interruption	

Measures (including initiatives under consideration)

[Supply-side initiatives]

- Expand adoption of renewable energies, restart Tomari NPS as soon as possible, decommission aging oil- and coal-fired power plants, make use of hydrogen and ammonia, install and adopt CCUS and other innovative technologies
- Produce hydrogen using CO₂-free electricity

[Demand-side initiatives]

- Convert other thermal sources to electricity and expand electrification in industry, transportation, and other sectors
- Use fuel cells to promote use of hydrogen

[Network]

- Construct the Shin-shin Kitahon HVDC Link, expand renewable energy connections, upgrade demand and supply operations, and make other efforts to supply CO₂-free electricity to areas inside and outside of Hokkaido
- Form distribution systems to protect against natural disasters and other risks, and swiftly restore service after an interruption
- Form partnerships with relevant outside organizations to work together at times of disaster

[Other]

- Disclose information about ESG initiatives in a timely and appropriate manner
- Consider green bonds and various other financing methods

Indices and targets

HEPCO Group has set out a roadmap toward our goal of achieving carbon neutrality across the energy spectrum in Hokkaido by 2050. We also have set targets for our efforts and announced our performance toward reaching those targets. The HEPCO Group will make use of innovative technologies and mobilize all available means in addition to the measures taken so far, including increasing the adoption of renewable energy and restarting Tomari Nuclear Power Station.

HEPCO's CO₂ emission reduction target (FY2031)

- Reduce CO₂ emissions by more than 50% (10M t+) below FY2014 levels

HEPCO's CO₂ emission reduction target (FY2051)

- Realize carbon neutrality in all energy sources in Hokkaido

pp. 17-20

The Roadmap to Carbon Neutrality by 2050 is on the following page.

- Roadmap to Carbon Neutral 2050

p.19

Environmental indices and targets are presented on the following pages.

- HEPCO Group Management Vision 2030 targets and performance

pp.13-16

- Environmental management targets and performance

p.48

- ESG Highlights

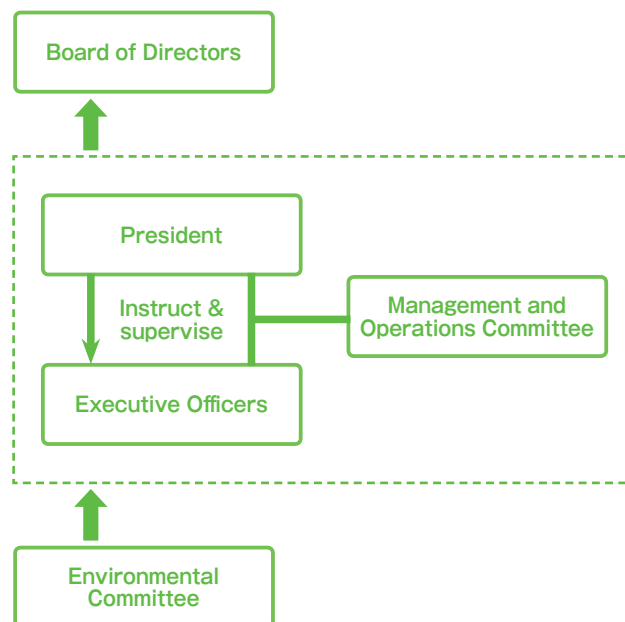
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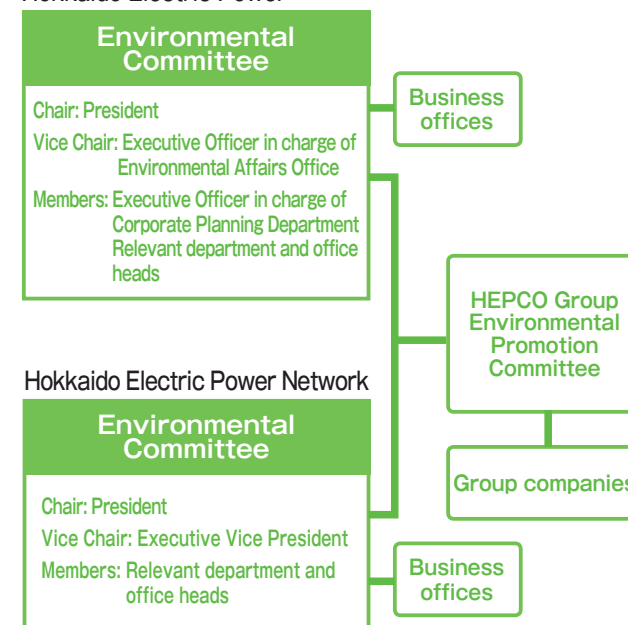
Governance

Our Environmental Committee, whose meetings are chaired by the presidents of HEPCO and Hokkaido Electric Power Network, deliberates a full range of environmental issues, including climate change. Moreover, the Board of Directors makes decisions on the execution of business-critical items, including those related to climate change.



[Environmental Management Framework]

Hokkaido Electric Power



Environmental Committee meeting in progress

Proactively Working on Solutions to Global and Local Environmental Issues

Initiatives to Reduce Our Environmental Footprint

In 2004, HEPCO Group enacted the HEPCO Group Environmental Policy to commit ourselves companywide to bolstering our response to climate change and promoting establishment of a sound material-cycle society.

Subsequently, as progress has been made globally on measures to address climate change, we set our commitment for realizing carbon neutrality throughout the entire HEPCO Group. Due to these and other significant changes that took place in terms of environmental challenges and our management environment, we revised the HEPCO Group Environmental Policy to take into account such circumstances.

Based on our new Environmental Policy, we will also contribute to achieving the Sustainable Development Goals (SDGs).

Environmental Policy Revision Points

- The revision aligned the policy with the HEPCO Group's position of doing our utmost to face the challenge of realizing carbon neutrality across all energy sources in Hokkaido by 2050 in addition to achieving the environmental target set out in the HEPCO Group Management Vision 2030 (reducing CO₂ emissions from the power generation division by 50% or more from the FY2014 level).
- We recognize that rigorously controlling PCBs, asbestos, and other hazardous chemical substances used in electrical equipment as well as reducing our environmental footprint in terms of air and water quality, etc., both efforts that we have been actively implementing, are important challenges, and we will continue to commit ourselves to these efforts.
- Based on the concept of a circular economy, the Environmental Policy demonstrates our aim to promote the efficient resource use as well as consumption and establish a sustainable sound material-cycle society.
- In order to maintain, far into the future, the rich natural resources of the tourist industry as well as the agricultural, forestry, and fisheries industries that are Hokkaido's core sectors, the Environmental Policy clearly stipulates that we will promote our business activities in a manner that considers biodiversity.
- The Environmental Policy expresses our willingness to expand ESG investment focusing on the environment, society, and corporate governance, as well as address advances made in disclosing environmental information as represented by the TCFD framework, and further bolster our dialogue with stakeholders.

[HEPCO Group Environmental Policy] (Revised December 2021)

Environmental philosophy

We, the HEPCO Group, recognize that environmentally friendly initiatives are vital to achieving a sustainable society and that reducing our environmental impact is important in all fields and aspects, including addressing climate change issues and implementing measures for regional environmental conservation.

As a corporation rooted in Hokkaido with its abundant and rich nature, we will strive to reduce the environmental impact associated with our business activities and preserve the natural environment while also pursuing sustainable business growth and realizing a sustainable society by contributing to the regional economy with a stable supply of inexpensive energy.

Environmental Guidelines

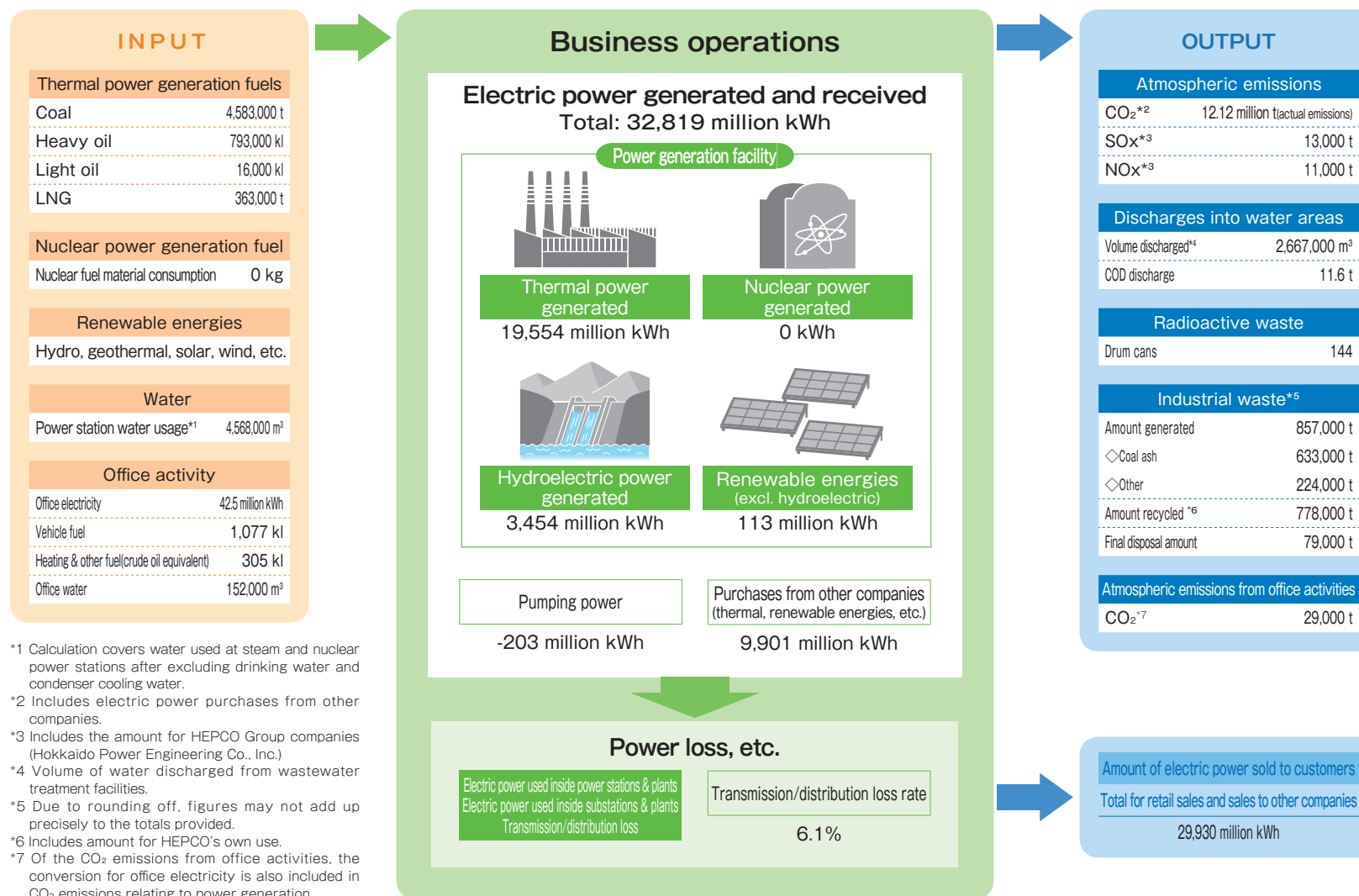
- 1. Contribute to global warming countermeasures and carbon neutrality**
Contribute to the decarbonization of energy supply and demand by expanding adoption of renewable energy, utilizing nuclear power generation and innovative technologies, promoting electrification, and implementing other measures.
- 2. Promote regional environmental conservation**
Reduce the environmental impact associated with business activities and rigorously manage hazardous chemical substances.
- 3. Contribute to creation of a sound material-cycle society**
Endeavor to consume fewer resources, reuse the resources that we have, and recycle resources used in our business operations, and contribute to establishing a sound material-cycle society.
- 4. Consider biodiversity**
Identify and assess the environmental impact of business activities and give consideration to biodiversity.
- 5. Disclose environmental information and promote dialogue**
Proactively disclose environmental information and promote dialogue with stakeholders.



Resources committed in business activities (inputs) and discharge of environmentally- burdensome substances (outputs)

In HEPCO's business operations, many resources are input to produce electric power. At the same time, CO₂, waste and other substances that place a burden on the environment are output. HEPCO is proactive in our stance toward improving power generation efficiency, reducing environmental air pollutants, recycling waste and other activities that enable us to effectively utilize our finite resources and reduce our footprint on the environment as much as possible.

FY2022 Achievements



*1 Calculation covers water used at steam and nuclear power stations after excluding drinking water and condenser cooling water.

*2 Includes electric power purchases from other companies.

*3 Includes the amount for HEPCO Group companies (Hokkaido Power Engineering Co., Inc.)

*4 Volume of water discharged from wastewater treatment facilities.

*5 Due to rounding off, figures may not add up precisely to the totals provided.

*6 Includes amount for HEPCO's own use.

*7 Of the CO₂ emissions from office activities, the conversion for office electricity is also included in CO₂ emissions relating to power generation.

Environmental indices and future targets (HEPCO Group)

In seeking to realize the HEPCO Group Environmental Policy, we have set key areas to be prioritized as environmental management matters, established targets, and regularly check our progress in achieving these priorities.

In FY2023, to accelerate our initiatives for realizing carbon neutrality and a circular economy, we established new targets for CO₂ emission reduction, promoting the adoption of electric vehicles, and plastic recycling.

Evaluation index



*1 Calculated based on the Greenhouse Gas Emissions Accounting, Reporting, and Disclosure System pursuant to the Act on Promotion of Global Warming Countermeasures.

*2 Values reflect adjustments and other corrections associated with CO₂ credits, non-fossil fuel value certification purchases, and Feed-in Tariffs (FIT) for renewable energy sources.

*3 Figure covers industrial waste generated by HEPCO and electric power supply-related businesses of HEPCO Group companies.

*4 Figure does not include power station and substation power consumption, transmission/distribution loss, or other electric power used when supplying electricity.

*5 Items counted: The procurement rate is indicated for environmentally-friendly copy paper, printed materials (excluding flyers, posters and pamphlets), OA equipment and clothing products which vendors publish in their catalogs or other such publications. Copy paper is only counted for HEPCO Group companies.

				FY2021 Achievements	FY2022			FY2023 target	
				Target	Performance	Score			
Contribute to global warming countermeasures and carbon neutrality	Curb CO ₂ emissions	CO ₂ emission factor** [kg-CO ₂ /kWh]		Unadjusted 0.601 Adjusted** 0.549	Reduce as much as possible	Unadjusted 0.549 Adjusted** 0.533	☺️	Reduce as much as possible ▶To achieve the target for the entire electricity business, HEPCO will make the utmost effort to reduce our CO ₂ emission factor by utilizing nuclear power on the premise that safety is assured, making use of renewable energy and LNG-fired thermal power, offering energy-saving and CO ₂ reducing services to customers, and implementing other efforts.	
		CO ₂ emissions from power generations divisions throughout HEPCO Group [10,000 t-CO ₂ /year]		1,357	—	1,441	—	Reduce as much as possible ▶By FY2031, reduce CO ₂ emissions by 50% or more (equivalent to 10 million tons or more/year) below the FY2014 level (18.92 million t-CO ₂) [New target established for FY2023]	
	Curb Non-CO ₂ greenhouse gas emissions	SF ₆ recovery rate (Calendar year) [%]	At time of equipment inspection	99	Raise to 97 or higher	99	☺️	Raise to 97 or higher	
			At time of equipment removal	99	99 or higher	99	☺️	99 or higher	
	Increase adoption of electric vehicles (EVs)	Initiatives to increase adoption of EVs		Started proposing EV leases for local municipalities	—	Set up EV consultation service, EV charging spots at HEPCO Head Office, and successfully implemented other efforts		—	Consider and implement measures to increase adoption of EVs[New target established for FY2023]
		Number of company-owned EVs adopted (excluding specialized vehicles, etc.)		—	—	10		—	Promote as much as possible ▶Adopt 100 or more EVs by FY2028[New target established for FY2023]
	Promote energy-savings for offices (vehicles)	Adoption of low-emission vehicles [%]		82.1	Increase as much as possible	81.7		☹️	— (Management index transitioned to "Number of EVs adopted" in FY2023)
Promote local environmental conservation	Prevent air pollution	SOx emission intensity [g/kWh]		0.58	Reduce as much as possible ▶Strive to appropriately operate flue gas desulfurization and denitration devices, among other efforts, in order to reduce SOx and NOx emissions (emission intensity)	0.55	☺️	Reduce as much as possible ▶Strive to appropriately operate flue gas desulfurization and denitration devices, among other efforts, in order to reduce SOx and NOx emissions (emission intensity)	
		NOx emission intensity [g/kWh]		0.42		0.46	☺️		
	Promote PCB treatment	Weight of treated trace-level PCB-contaminated pole transformers [t] (number of transformers)		1,015 (6,034)	Make sure transformers treated by end of FY2027	389 (2,480)		☺️	Make sure transformers treated by end of FY2027
Contribute to creation of a sound material-cycle society	Increase industrial waste recycling rate	Industrial waste recycling rate**3 [%]		93.9	Approx. 95	90.8 (The rate of recycling coal ash, which accounts for the greatest portion of the waste, declined from the preceding fiscal year, so the recycling rate for all industrial waste also declined.)	☹️	Approx. 95	
		Coal ash recycling rate [%]		93.5	Approx. 95	89.1 (Due to inclement weather and other effects during winter, shipments of coal ash by ship were temporarily held up and the amount for final disposal increased.)	☹️	Approx. 95	
	Promote plastic resource recycling	Initiatives to reduce waste plastic emissions, increase recycling, etc. (including cleanup activities)		—	—	—		—	Promote reduction of waste plastic emissions, increased recycling, etc. [New target established for FY2023]
Promote office environmental activities	Promote office energy savings and resource conservation activities	Office electricity usage**4 [1 million kWh]		57.4	Reduce as much as possible	57.9	☺️	Reduce as much as possible	
		Office water usage [10,000m ³]		20.7	Reduce as much as possible	20.5	☺️	Reduce as much as possible	
		Green procurement rate**5 (office supplies, etc.) [%]		95.2	93	94.8	☺️	93	
		Amount of copy paper purchased per employee [sheets/person] (amount of copy paper purchased company-wide [million sheets] (A4 equivalent))		8,323 17.3% reduction (87.4)	10% reduction in amount of copy paper purchased per employee (compared to FY2019)	7,413 26.4% reduction (75.8)	☺️	20% reduction in amount of copy paper purchased per employee (compared to FY2019)	

Global Warming Countermeasure Initiatives

CO₂ Emission Reduction Initiatives

HEPCO Group is committed to reducing CO₂ in both supply and demand by expanding adoption of renewable energy, restarting Tomari Nuclear Power Station soon and operating it stably on the precondition that safety is assured, promoting installation of heat pumps, other high-efficiency electrical appliances and electric vehicles, as well as communicating information to the public about energy conservation.

In addition to these targeted initiatives through 2030, we are also doing our utmost to produce and utilize hydrogen with CO₂-free electricity, as well as employ other innovative technologies so that we may realize net zero CO₂ emissions by 2050.

CO₂ emissions

Although CO₂ emissions have tended to decrease thanks to operation of the highly-efficient LNG-fired Ishikariwan Shinko Power Station which emits less CO₂ and the discontinuation of aging coal-fired thermal power plants, CO₂ emissions have been on the rise since FY2021 due to an increase in the amount of power generated by thermal power as electricity sales have risen, among other factors.

We are currently making a concerted effort to restart Tomari Nuclear Power Station on the presupposition that safety is assured. Once it is restarted, we project a reduction in CO₂ emissions by more than 50% from their FY2014 level by FY2031 in combination with the effect derived from promoting renewable energy power generation as well as using LNG for thermal power.

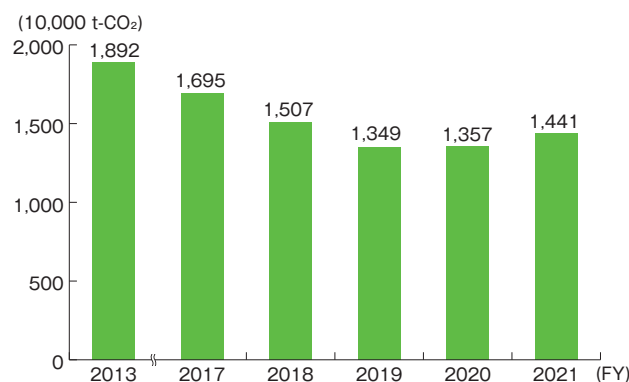
FY2031 target

- Reduce CO₂ emissions by more than 50% below FY2014 levels(Decrease of 10 million tons plus per year)
- Increase installed renewable energy power generation capacity by over 300,000 kW
 - ・Promote offshore wind power, biomass generation, and other renewable power sources that take advantage of Hokkaido's distinctive features

Description of Initiatives

Supply-side initiatives	Utilize nuclear power upon the fundamental premise that safety is assured
	Expand adoption of renewable energies
	Utilize low-CO ₂ emitting LNG-fired thermal power stations
	Decommission aging oil- and coal-fired power plants
Demand-side initiatives	Promote adoption of heat pumps and other high-efficiency electric devices and electric vehicles
	Offer energy-saving diagnoses
	Increase adoption of ZEB
	Offer PPA services

HEPCO Group power generation division emissions



FY2051 target

- Realization of carbon neutrality in all energy sources in Hokkaido pp.17-20
 - ・We will intensify the targeted initiatives through FY2031, mobilize whatever means necessary, including leveraging innovative technologies, as we do our utmost to meet the challenge of achieving net zero CO₂ emissions.

Description of Initiatives

In addition to the targeted initiatives through 2030, we will mobilize whatever means necessary, including leveraging innovative technologies.

Supply-side initiatives	Utilize renewable energy power sources and other CO ₂ -free electricity to produce hydrogen
	Burn hydrogen and ammonia for thermal power generation
	Fully adopt CCUS* technology
Demand-side initiatives	Utilize hydrogen produced with CO ₂ -free electricity

*CCUS (Carbon Capture, Utilization and Storage): Technology to separate and capture CO₂ for reuse, underground storage, etc.

Electric Power Council for a Low Carbon Society Initiatives

As members of the Electric Power Council for a Low Carbon Society comprised of electric power companies nationwide, HEPCO and Hokkaido Electric Power Network both promote effective global warming countermeasures.




The Council maintains as its foundation the pursuit of an optimal energy mix from the standpoint of S+3E, which aims to simultaneously achieve a stable energy supply, economic efficiency, as well as environmental preservation on the precondition that safety is assured. Council members thoroughly implement global warming countermeasure initiatives in keeping with the mode of their respective business operations.

Greenhouse Gas Emissions Across Supply Chains

The following details greenhouse gases emitted across the HEPCO and Hokkaido Electric Power Network supply chains in FY2022.

We are striving to appropriately identify and control not only direct, but also indirect greenhouse gas emissions.

Amount of Greenhouse Gas Emissions (FY2022)

Scope	Emissions (10,000 t-CO ₂)
Scope 1 Direct greenhouse gas emissions 	1,410
Scope 2 Indirect greenhouse gas emissions from use of electricity and heat supplied by other companies 	0.1
Scope 3 Other indirect greenhouse gas emissions (Category 2) · Capital goods: 0 (Category 3) · Fuels and energy activities not included in Scope 1 or 2: 448 	448

*Scope 3 is calculated with reference to the Ministry of the Environment's "Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ver.3.0)." Only Categories 2 and 3 have been calculated due to the certainty of the calculation specifications.

Support for Local Environmental Conservation

HEPCO Group power plants are built after preliminary investigations have been conducted and estimates prepared of the impact that such construction will have on the environment. We then select equipment and methods for minimizing our environmental footprint. We have also entered into pollution prevention agreements with local governments near our thermal, geothermal and nuclear power stations so that we also strive to prevent pollution by continuously monitoring gas and water discharges while the stations are operating. Moreover, in accordance with environmental laws and regulations, we dispose of hazardous chemical substances and faithfully survey amounts of chemical substances used. These activities enable us to operate our business in harmony with Hokkaido's nature as well as its living environment.

Key environmental protection measures applied during power station construction

	Examples
Terrestrial environment	<ul style="list-style-type: none"> Restrictions on areas where the topography can be altered or logging carried out Reduction of on-site work by assembling large machinery at the plant site Measures for protecting rare insects, birds of prey, and other fauna Greening activities that take into consideration the surrounding natural vegetation
Water environment	<ul style="list-style-type: none"> Selection of construction methods that do not disturb the habitat or homes of living creatures Prevention of adverse impact on water quality by treating water to be discharged (pH, SS^{*1})

Key environmental protection measures applied during thermal power station operation

	Items monitored
Atmospheric environment	<ul style="list-style-type: none"> Sulfur oxide (SOx) · Nitrogen oxide (NOx) Particulate matter
Water environment	<ul style="list-style-type: none"> Wastewater quality (pH, COD^{*2}, SS, etc.) Temperature differential between condenser cooling water intake and discharge

*1 SS: Suspended Solids (amount of particulate matter 2 mm in diameter or smaller that is suspended in or floating on water)
*2 COD: Chemical Oxygen Demand (conversion of the amount of oxidizing agent necessary for decomposing organic matter to the amount of oxygen)



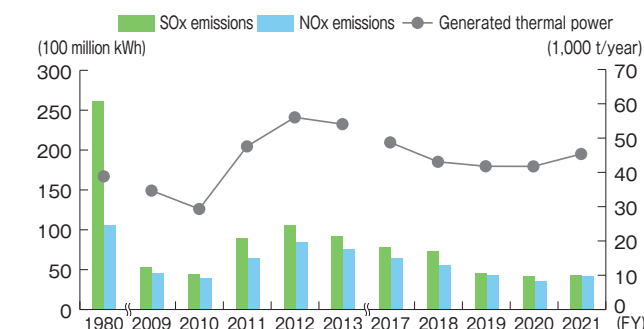
Preliminary survey of marine organisms around a proposed power station site

Air pollution prevention measures

[Change in sulfur oxide (SOx) and nitrogen oxide (NOx) emissions]

Flue gas desulfurization and denitrification systems have been installed at thermal power stations and these have reduced SOx and NOx emissions.

After the Great East Japan Earthquake, the amount of thermal power generated increased along with the prolonged shutdown of Tomari Nuclear Power Station and this caused the level of SOx and NOx emissions to rise. However, since FY2020 when a LNG-fired thermal power station was introduced that does not emit SOx and generates low NOx emissions, emissions are down to about the same level as that prior to the earthquake.



[Research on assessing performance of thermal power station environmental protection systems]

HEPCO developed a sulfur oxide remover (desulfurizing agent) which effectively utilizes coal ash, and this agent has been used in the dry desulfurization system at Tomato-Atsuma Power Station Unit 1 (overseas coal). Because the properties of coal ash have become more varied as the types of coals for thermal power generation have diversified further, HEPCCO has been working to construct a performance assessment system as well as clarify the factors causing desulfurization performance to fluctuate in order that we may stably maintain desulfurization performance into the future.

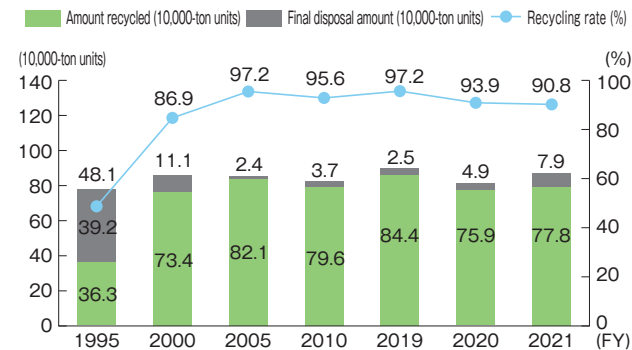
In addition, HEPCCO is also working on chemical analysis and material assessments, which include assessing catalyst performance to project when the NOx removal catalyst should be replaced, as well as acquiring other knowledge that will contribute to stable operation of our various environmental protection systems.

Initiatives for realizing a sound material-cycle society

Environmental pollution has intensified on a global scale with an increase in pollution due to marine plastic waste and the loss of biodiversity.

To address such issues, we have added to our 3R efforts, which call for reducing waste as well as reusing and recycling materials, to include efforts aimed at transitioning to a circular economy in which the input and consumption of resources is curtailed while also being effectively utilized.

Change in amount of industrial waste generated and recycled



Status of industrial waste recycling* (FY2022)

Industrial waste		Amount generated (t)	Amount recycled (t)	Recycling rate (%)
Coal ash	FGD gypsum	633,301	563,998	89.1%
	Debris (scrapped concrete poles, etc.)	146,740	146,740	100.0%
Other than coal ash	Sludge (wastewater treatment sludge, etc.)	51,890	48,510	93.5%
	Scrap metal	7,151	4,327	60.5%
	Heavy and crude oil ash	5,536	5,308	95.9%
	Waste plastic	2,380	2,380	100.0%
	Other (waste oil, glass waste, etc.)	918	610	66.5%
Total		856,635	777,927	90.8%

*Including group companies

HEPCO achieved
90.8% recycling rate

[Plastic recycling, etc.]

Plastics are used in many places including power generation equipment, transmission and distribution systems, and buildings.

Especially, power distribution lines, exceeds the distance of the Earth's circumference (approx. 40,000 km), utilize much plastic in the wire coating material, insulation covering, and other uses.

Hokkaido Electric Power Network strives to thoroughly separate plastics used for power distribution, of which 200 to 300 tons are discharged annually, according to product type and material. We have recycled 100% of this plastic.

We will work to improve these efforts throughout the entire HEPCO Group by applying good practices and forming alliances throughout the group.

Information Disclosure Pursuant to Plastic Resource Recycling Promotion Act

In accordance with the Act on Promotion, etc. of Recycling Plastic-Related Resources (Plastic Resource Recycling Promotion Act) which took effect in April 2022, we publicly release figures about our emissions performance for industrial waste comprised of plastic products during the previous fiscal year as part of our duty as a waste-generating business. In FY2023, two companies in the HEPCO Group were categorized as large waste-generating businesses (generating 250 tons or more during the preceding fiscal year). In line with the HEPCO Group targets, we will contribute to promoting plastic recycling in Japan.

Targets relating to emission reductions, recycling, etc.

HEPCO Group FY2023 target (environmental management target)	Promote the reduction and recycling of waste plastic emissions
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Status emissions, recycling, etc. of plastic product industrial and other waste (FY2022 figures)

Company	Emissions (t)	Amount recycled or processed (t)
Hokkaido Electric Power	25	24
Hokkaido Electric Power Network	291	260
Hokkai Electrical Construction	791	118

*Only the three companies with considerable emissions are listed. Figures detailing performance of the entire HEPCO Group may be viewed on the HEPCO website.

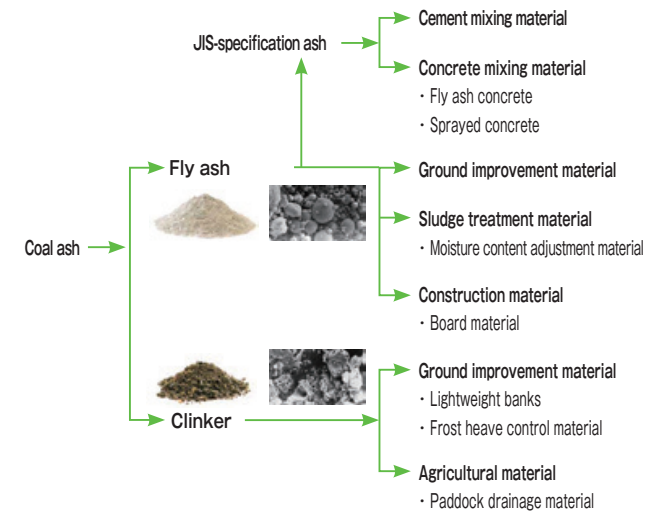
[Effective utilization of coal ash]

Coal ash emitted from coal-fired thermal power plants accounts for over 70% of the industrial waste generated by HEPCO Group.

To further promote coal ash recycling, we set up a special group, the Coal Ash Recycling Promotion Office, which together with entire HEPCO Group has worked to expand the effective use of coal ash.

Coal ash has been effectively used mainly as a raw material for cement, roadbeds, concrete spray, and other uses.

Ways coal ash is effectively utilized



Initiative for reusing utility pole advertising signboards

Hokuden Kogyo has been working to reuse signboards employed for utility pole advertising on Hokkaido Electric Power Network's distribution power poles. Because the 'reuse signboards' effectively reduce the CO₂ (5 kg per board) emitted when a new signboard is produced, we are promoting more widespread use of these signboards to create a sound material-cycle society and achieve carbon neutrality.



Chemical controls

To realize a sustainable society, we are appropriately managing and disposing of hazardous chemical substances as we strive to reduce our environmental footprint.

[PCB neutralization]

In accordance with relevant laws and regulations, HEPCO Group securely stores and manages PCBs at our business facilities in Hokkaido. We have completed the outsourcing of disposal of high-level PCBs from all transformers and condensers to the Japan Environmental Storage & Safety Corporation's Hokkaido PCB Treatment Office to be completed within a set time period.

In addition, we will also properly treat and dispose of high-level PCBs and low-level PCBs not used for transformers or condensers.

Storage status of PCBs and other waste (FY2022)

Waste material	High-concentration PCBs	Low-concentration PCBs
Insulating oil (kl)*1	0 kl	4 kl
Transformers (units)	0	35
Condensers (units)	0	37
Rags and other contaminated objects (kg)	0 kg	2,921 kg
Small- and medium-sized machinery, etc. (units)*2	15	114
Fluorescent lamp ballast (units)	669	-

*1 Amount stored in drum cans

*2 Bushings, instrument transformers, circuit breakers, relays, etc.

HEPCO Tomakomai Recycling Center

In Tomakomai City, we set up a low-level PCB detoxification facility certified by the Ministry of the Environment. Since August 2017, we have been treating and disposing of our own PCB-contaminated medium-sized and large equipment.



[Addressing asbestos issues]

Facilities with asbestos sprayed coatings are periodically checked for safety, and promptly removed or other abatement measures taken as necessary.

In addition, molded objects, which contain non-friable asbestos, are replaced with non-asbestos products when repairs are made or other maintenance performed.

Main uses of asbestos in buildings and facilities (FY2022)

Waste material	Location and usage
Spray containing asbestos	Used as acoustic absorbent material, thermal insulation and fireproof material in buildings 2 buildings
Construction material	Used in fireproof boards, flooring and other materials for buildings Contained in construction materials used prior to August 2006. After that date, products containing asbestos have not been used.
Soundproofing material	Soundproofing material for transformers (transforming facilities) 55
Asbestos cement pipe	Pipe material for underground lines (power transmission facilities) Route length: approx. 3.0 km
Thermal insulating material	Power generation facilities (thermal power) Volume of remaining asbestos-containing products: approx. 2,600 m ³ (approx. 7% of total)
Cushioning material	Suspension insulators for power transmission and other facilities Number of remaining asbestos-containing products: approx. 608,000 (approx. 23% of total)
Thickening material	Overhead power lines Length of lines to which corrosion preventive compound has been applied: approx. 184.0km (approx. 2.3% of total overhead power line length)
Sealant & joint sheets	Power generation facilities (thermal & nuclear) Number of remaining asbestos-containing products: (Thermal) approx. 26,300 (approx. 28% of total) (Nuclear) approx. 34,200 items (approx. 62% of total)

[Appropriate management of specified chemical substances (compliance with PRTR Act)]

In accordance with the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act), HEPCO verifies the quantities of specified chemical substances released or transferred. HEPCO notifies the Japanese government when we handle a specified or larger quantity of any of these designated chemical substances.

PRTR Act Notifications (FY2022)

Substance	Notifying plant		Environmental emissions		Quantity transferred	Use or source
	Number of plants	Type	Atmosphere	Water area		
Dioxin	1	Other	0.01mg-TEQ	0	0	Waste incinerator
Toluene	1	Thermal	3,600 kg	0	0	Fuel for generating power
Hydrazine	1	Thermal	0	2.3 kg	0	Boiler feedwater treatment agent
Methylnaphthalene	4	Thermal	889 kg	0	0	Fuel for generating power
	1	Nuclear				

*With the exception of dioxins, totals have been tabulated for substances with an annual volume of 1 ton or more (0.5 t or more for specified Class 1 Designated Chemical Substances) (two significant digits).

Environmental relations

HEPCO participates in community events and other forums where we interact and dialogue with our customers to communicate information about energy issues and our environmental initiatives.

In March 2021, we presented our efforts to address environmental issues during the Sapporo City-sponsored Biodiversity & Carbon-Free Society Webinar.



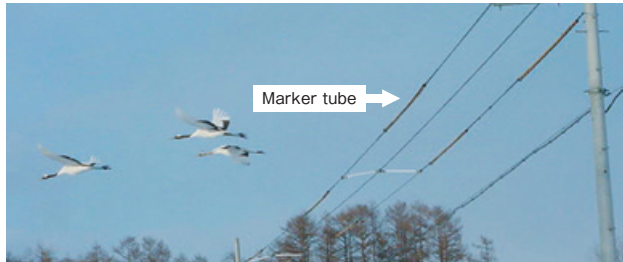
Initiatives for preserving biodiversity

HEPCO Group has strived to operate our businesses in harmony with the nature of Hokkaido, a region blessed with a magnificent land and diverse wildlife.

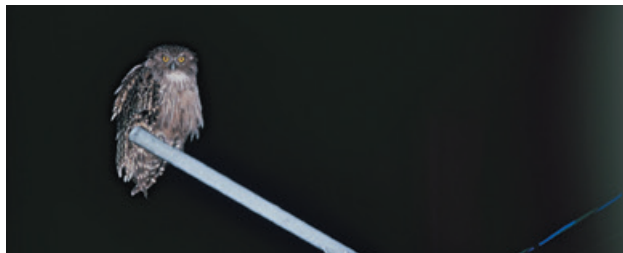
We will fulfill our responsibility of stably supplying electric power while also giving consideration to conserving biodiversity.

[Prevention of accidents where birds are electrocuted by power transmission & distribution facilities]

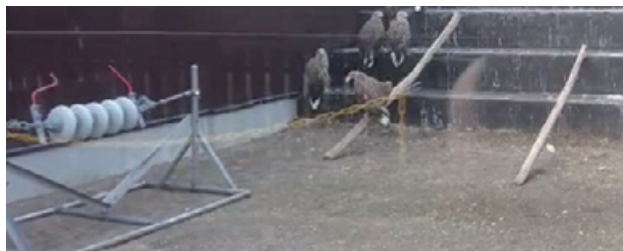
In cooperation with relevant government agencies and experts, we have installed marker tubes so that wildlife recognize power lines and avoid colliding with them as well as perches which guide birds to places safe from electrocution.



Tancho flying by power lines on which marker tubes have been placed



Blakiston's fish owl resting on a perch



Experiments conducted with experts (brackets painted red to make them more visible)

[Biodiversity conservation during construction]

When constructing new electrical facilities, we have taken appropriate environmental conservation measures based upon environmental impact forecasts and monitoring. We have also developed countermeasure systems that mitigate the impact on the ecosystem caused by existing electrical facilities.

To keep any impact on the ecosystem to a minimum even when constructing hydroelectric power plants, we have maintained the flow of rivers and appropriately surveyed and monitored wildlife as part of our efforts to preserve the ecosystem.



Biological survey underway



Identified salmon and brook trout (released after confirmation)

[Regional initiatives]

HEPCO Group entered into the Company Afforestation Agreement with Hokkaido. As part of this partnership, we have planted trees to reforest areas that were previously pastures, maintained and restored watershed cultivation functions, and conserved biodiversity.

From the standpoint of developing and supporting the people responsible for the forestry of tomorrow in Hokkaido, we asked students of Hokkaido Prefectural North Forest Development Academy, which opened as the first school in Hokkaido specializing in forestry studies, to select the seeds to be planted from those beneficial to insects from the standpoint of biodiversity and seeds that have a deep connection with Ainu culture, and we invited them to propose planting methods suitable for reforestation.

The place where the trees were planted, was named HEPCO & North Forest College Co-Creation Forest. We are actively working to create new forests as the HEPCO Group works together with the Academy.



Signing ceremony with the Governor of Hokkaido



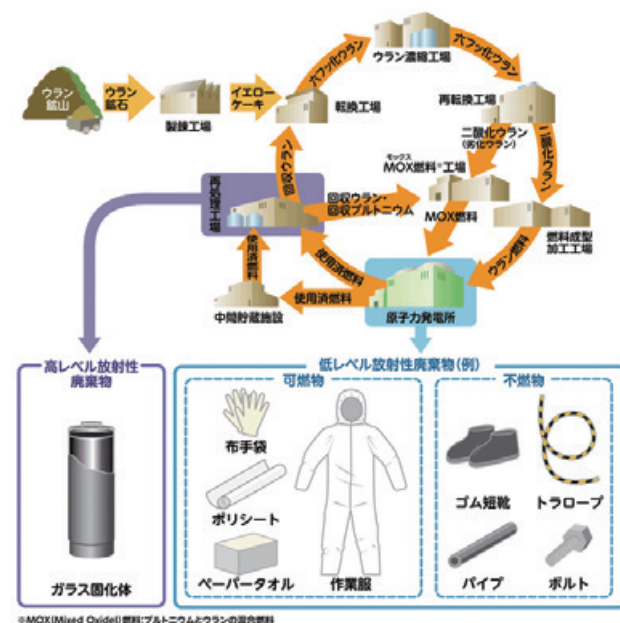
Workers planting trees in the HEPCO & North Forest College Co-Creation Forest

Radioactive Waste

[What is Radioactive waste?]

Radioactive waste is broadly categorized into low-level radioactive waste, which has a low level of radioactivity generated during operation of a nuclear power plant and other processes, and high-level radioactive waste, which has a high level of radioactivity remaining and is unable to be reused in reprocessing spent fuel.

For disposal, radioactive waste is sorted appropriately according to its radioactivity level, properties, type of radioactive material, and other characteristics. Radioactive waste is strictly controlled, practically processed, and disposed of on the principle that it is the responsibility of the entity generating the radioactive waste to deal with it.

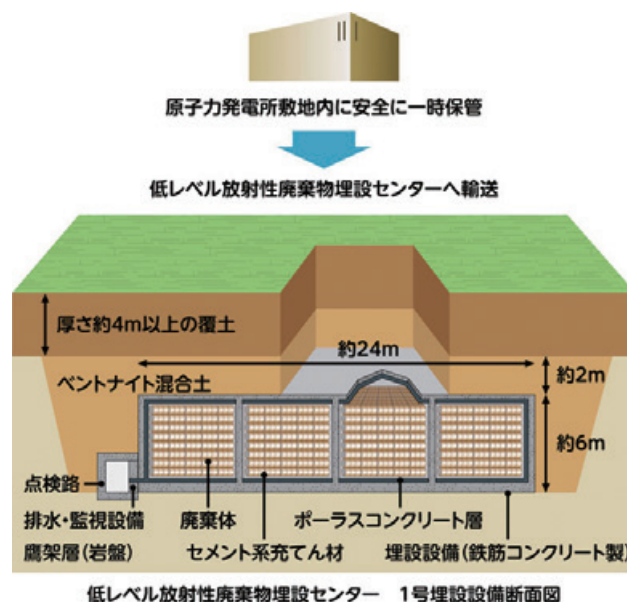


※MOX(Mixed Oxide)燃料:プルトニウムとウランの混合燃料

[Low-level radioactive waste]

Low-level radioactive waste generated by a nuclear power plant includes gaseous, liquid, and solid waste. At the Tomari Nuclear Power Station, solid waste equivalent to 12,854 drum cans is in storage as of the end of FY2022.

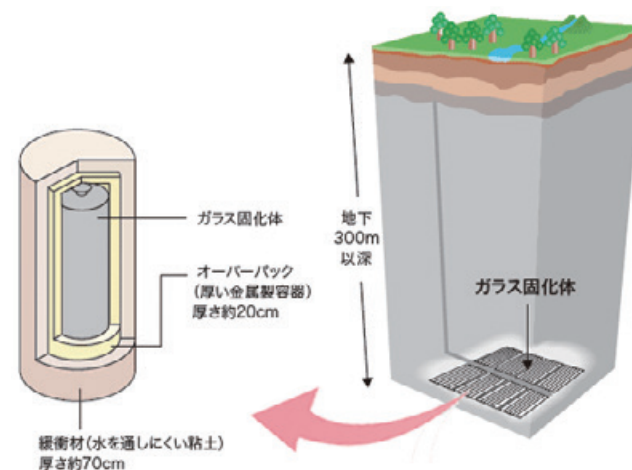
After the waste stored in the drum cans is kept in a storage shed on the premises of the nuclear power station, it is transported to Japan Nuclear Fuel Limited's Low-Level Radioactive Waste Disposal Center in Rokkasho Village, Aomori Prefecture where it is disposed of by burying it in a concrete pit.



[High-level radioactive waste]

High-level radioactive waste refers to vitrified waste. This is highly-radioactive waste liquid, which is left over as it is unable to be reused in the reprocessing spent fuel, mixed with molten glass and allowed to harden.

After hardening it in a stable form (vitrification), it is cooled and kept in an aboveground facility for between 30 and 50 years, after which it is ultimately disposed of in deep stable bedrock deeper than 300 m underground (geological disposal). The Nuclear Waste Management Organization of Japan (NUMO), which has been authorized by the state, takes care of such disposal projects.



HEPCO Group's Basic Human Rights Approach

HEPCO considers respect for human life and dignity to be part of our management philosophy, and we operate our business as we safeguard the human rights of our employees, customers, and others both inside and outside our company.

The HEPCO Group CSR Standards of Conduct, Compliance Code of Conduct, and Service Regulations declare that every individual's human rights and personality are to be respected. HEPCO is endeavoring to foster a workplace culture grounded in this philosophy of respect for human life and dignity. We provide ample opportunities to educate and enlighten our employees in a manner that further enhances understanding and awareness about human rights issues.

Diversity Promotion

Responding to Changing Work Environments and Diversifying Personnel Needs

Approach to Promoting Diversity

HEPCO recognizes that the different experiences, skills, sensibilities, and diverse perspectives as well as values of our personnel can transform into strengths enabling our company to sustainably grow as we extend the domain in which we do business, and we are advancing initiatives that promote diversity.

Human Rights Initiatives

Initiatives for Employees and Respect for International Norms

Human Rights Initiatives Based on International Norms

In recent years, interest about responsibility for human rights has heightened globally. Following the Japanese government's development of the "National Action Plan on Business and Human Rights" in 2020, we realized that we need to address this issue more extensively. Not limiting ourselves to our current efforts, this fiscal year, we will draft and release a human rights policy for the HEPCO Group that is based upon the "National Action Plan on Business and Human Rights" and international norms. We will promote human rights initiatives in accordance with international standards.

Human Rights Initiatives for Employees

(1) Education and Enlightenment

HEPCO established the Human Rights Education & Promotion Council to encourage greater awareness about human rights issues. We strive to educate and foster awareness among our employees about human rights challenges.

[Education and greater awareness]

- Activities to enlighten and promote awareness among all employees during human rights week (annually in December)
- Education and greater awareness at all levels of HEPCO's corporate hierarchy

(2) Promotion of work style reforms

HEPCO promotes the following initiatives so that we maintain an environment which motivates our employees and allows them to continue to work in good health.

(1) Working hour initiatives and goals

- Consistently hold the amount of overtime that all employees perform to no more than 80 hours per month
- From the standpoint of promoting health management as well as work-life balance, keep overtime work to no more than 60 hours per month
- Achieve an average percentage of paid annual leave that our employees take per year of 100% (20 days)

(2) Status of development of various working systems

April 2018	<ul style="list-style-type: none"> Extended applicable period of time for nursing care leave and shortened working hours for childcare (until end of fiscal year: when child is third grade in elementary school) Introduced flextime for child and nursing care Revised number of days of leave granted to new employees (first year: 15 days→20 days) Added to and expanded reasons allowing employees to make use of accumulated leave (childcare, illness, injury, etc.) Extended period of time when employees may take marriage leave, increased number of days awarded for maternity leave (5 days)
January 2019	Introducing of a working interval system (9 hours or more)
April 2020	Introducing an hour increment leave system
October 2020	Introducing work-at-home system
April 2021	<ul style="list-style-type: none"> Expanded work-at-home system (available not just for child and nursing care, and increased the number of times applicable (up to twice per week)) Introduced system of shortened working hours for self-treatment (working hours may be shortened up to two hours if repeated or continued treatment is necessary for illness)
April 2022	<ul style="list-style-type: none"> Expanded requirements for taking hourly leave (also may be taken during staggered working hours and shift work) Extended applicable period of time for shortened working hours for childcare, accumulated leave (taking care of a child), and nursing care leave (until child starts junior high school)

Promoting advancement of women

In order to create a workplace environment where our diverse human resources are able to fully showcase their abilities regardless of gender and take an even more active role, HEPCO Group established the Women's Advancement Study Team, an in-house group that has implemented a variety of initiatives, including exchanging views with other personnel within the company and collecting information externally.

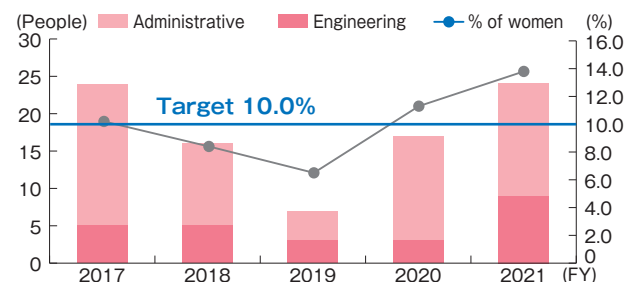
[Key Targets Based on the Act on Promotion of Female Participation and Career Advancement in the Workplace (established in FY2021)]

(1) Increase the percentage of women among all hires (including mid-career) to **10% or more**

(Status of achievement and initiatives)

Information sessions, roundtable discussions, and other events have been held for women students, resulting in an uptake in the percentage of women among new hires, which reached **13.8%** in FY2022.

Change in percentage of women among new hires (separated for administrative and engineering)



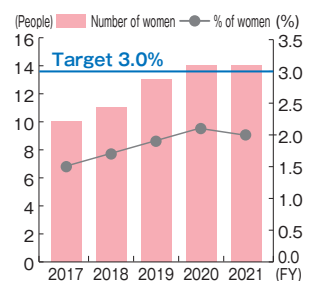
(2) Increase the percentage of women managers (section chief or higher) to **3% or more**.

(Status of initiatives)

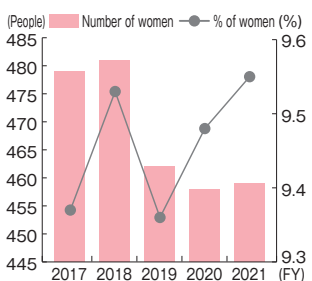
·Due to the nature of our business and the high ratio of engineering personnel of which few employees are women, the percentage of women managers was **2.0%** in FY2022.

·On the other hand, with the increase in the percentage of women among new hires in recent years, the ratio of women among our employees has steadily risen.

Change in percentage of women managers (section chief or higher)



Change in percentage of women employees (excluding rehires)



We will continue to provide career education and other guidance for women employees while also maintaining an environment that supports our employees in balancing their work and home life so they are able to demonstrate their capabilities to the fullest in the different stages of their lives.

(Examples of seminars held)

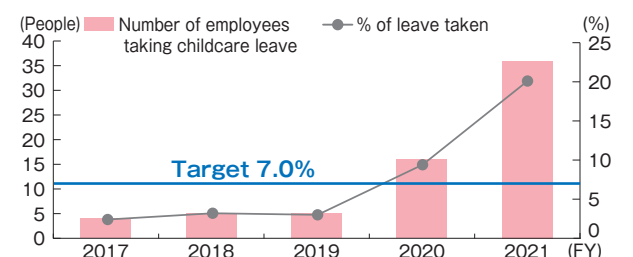
- Working mother meetings (since FY2018)
- Women manager participatory seminars (since FY2022)
- Career advancement meetings (since FY2023)

(3) Increase the percentage of men employees taking childcare leave to **7% or more**.

(Status of achievement and initiatives)

·Development of a system assisting employees with balancing their work and home life has helped increase the percentage of men employees taking childcare leave. In FY2022, this figure reached **20.1%**. (Reference: Percentage of women taking childcare leave was 100% in FY2022)

Change in the percentage of men employees taking childcare leave



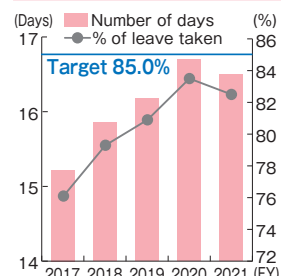
(4) Increase the percentage of leave taken to **85% or more**.

(Status of initiatives)

·HEPCO has emphatically promoted workstyle reforms so that we may offer a workplace environment where all our employees find it comfortable to work. This has resulted in an increasing percentage of employees taking leave. In FY2022, this percentage was **82.5%**.

·We will continue to work to further improve this figure by reducing working hours by further promoting Kaizen and other efforts to enhance operational efficiency, advancing work style reforms that include initiatives to realize diverse work and time-off styles, as well as launching campaigns encouraging employees to take leave.

Change in annual percentage of available paid leave taken



Advancing the participation of people with disabilities

To provide a welcoming environment for people with disabilities to work and support everyone in maintaining their independence and participating in society through their work, HEPCO Group has strived to expand opportunities throughout our entire group for people with disabilities to work. Since 2009, we have continually surpassed the statutory quota rate and, as of June 2022, the percentage of people with disabilities among all employees was 2.48%.

One of these measures offering more opportunities for employment has been the establishment of HOKUDEN ASSOCIA in 2007 (acquiring certification as a special subsidiary in 2009). The company contracts to provide printing, bookbinding, captioning, and other services for companies both inside and outside the HEPCO Group.

HOKUDEN ASSOCIA has been proactive in welcoming interns and tours from special needs schools as well as other educational institutions in addition to providing job coaching to help people with disabilities learn business skills, adjust to their workplaces, and promote greater advancement for people with disabilities. Since 2011, HOKUDEN ASSOCIA has been certified as a "company providing job assistance to people with disabilities" by the Governor of Hokkaido.



Producing captions for television programs



Welcoming a tour from a special needs school



Promoting employment of older persons

Out of the necessity to prepare for the day when the age composition of our employees is higher as well as comply with the spirit and particulars of the Act Concerning Stabilization of Employment of Older Persons, HEPCO introduced a reemployment system in April 2013, under which all employees who wish will be employed up to the age of 65, in principle.

In addition, we have enhanced and improved our personnel system so that, beginning April 2018, people who possess high-level expertise, in particular, will have their employment extended up to the age of 70, so they may pass along skills and knowledge acquired over their long careers, thereby supporting our younger employees in acquiring such competencies.

Promotion of hiring on an as-needed basis (hiring experienced personnel)

HEPCO hires personnel as needed (experienced personnel) so that we may secure talented individuals, including experts in a variety of fields. This enables us to expand as a total energy services company into other business fields and areas.

Particularly, during the past three years, we have doubled the number of management class employees hired (section chief or higher) to 12 with an eye toward promoting personnel to be at the core personnel responsible for facilitating reforms. As we continue to review personnel assignments enabling our employees to make the best of their knowledge and skills in their careers, we will work to increase "as-needed" hiring from current levels.

Health and Safety

Investing in our human capital to share with each and every person a fulfilling life and motivation to work

Promotion of health and productivity management

The health and productivity management initiatives that HEPCO actively promotes are our commitment to investing in people (human capital). The physical and mental health of all of our employees also fosters sustainable growth.

To that end, we implement health measures designed to enable our employees and their families to share in a fulfilling life and the motivation to work. With the aim of extending this to our customers' companies and supply chains, we are contributing to the creation of a healthy community.

[Initiative framework and milestones for achieving goals]

At HEPCO, the representative director in charge of the Personnel & Labor Relations Department presides over the Health and Productivity Management Promotion Committee, considering measures that take into account the opinions of employees and the Health Insurance Association. In addition, relevant matters are reported to the Executive Committee and other boards, which then form a cooperative process to implement actions. In addition, based on a strategic map outlining the path toward achieving our goals, milestones are set to check progress made on current initiatives. In this way, the effect anticipated through implementing measures is ascertained and managed in relation to management challenges that we would like to resolve.



[HEPCO's Hallmarks]

- Basic health and productivity management stance (distinctive to HEPCO)

Each and every one of our employees is a pillar supporting the variety of services HEPCO provides.

The establishment of an environment in which employees are able to continue to work in good health "cheerfully and constructively," "positively," and "with spiritual richness and sincerity" is something that also fosters the company's sustainable growth.



- Measures Supporting Diverse Work Styles

HEPCO maintains a variety of workplaces in our engineering and administrative departments and offices. Moreover, we provide services throughout Hokkaido, so we have a mix of diverse work styles to suit the various communities.

For our health measure initiatives to support such work styles, these measures also need to be diverse, so we have promoted collaborative health programs with the Health Insurance Association in striving to implement a variety of measures.

Key Health Measures

Event	e-Learning for all employees	Small Change Campaign
	Walk rally (team & individual competitions)	Online smoking cessation program
Health awareness notice	Notice promoting generic drugs	Health promotion notice
	Health age notice	Polypharmacy notice

[Assessment of Health and Productivity Management Initiatives]

The effectiveness of measures needs to be verified in order to create a good working environment, so we have established health and productivity management indices with numerical targets for the percentage of smokers, absenteeism, presenteeism, work engagement, and so on as we strive to improve factors that may lower productivity.

Health and Productivity Management KPIs (reference values from employee surveys)

Index	Score	Current goal
Work engagement	2.686 (Max. 4 points)	3.00
Presenteeism	76.8 (%)	80.0
Absenteeism	1.93 (days)	1.50

Percentage of employee who smoke in each fiscal year

	2020	2021	2022
Percentage of smokers company-wide	28.6%	26.3%	24.8%

Work engagement refers to a mental state in which the individual finds vitality, enthusiasm, and engagement to be fulfilling. It is known that highly-engaged employees continue to perform their operations with a positive mental framework.

Presenteeism refers to a state where, although the employee is not absent from work, their productivity has declined due to health reasons (score = level of demonstrated performance). Absenteeism refers to circumstances where employees are absent from work due to health reasons (sick leave) and this indicator also represents the loss of performance due to health issues.

[HEPCO Selected as 2022 Health & Productivity Management Outstanding Organization]

A variety of HEPCO's initiatives were acknowledged as we are the first company in Hokkaido to be selected as a Health & Productivity Management Outstanding Organization. We have also been recognized as an Excellent Health & Productivity Management Company (Large Enterprise Division) White 500 for the third consecutive year.

Results of HEPCO's Excellent Health & Productivity Management Company Evaluation

Aspect	Weight	HEPCO	Top responding company	Industry top	Industry average
Overall assessment	-	61.9	67.2	64.2	54.6
Management philosophy & policies	3	66.1	69.8	67.0	51.9
Organizational structure	2	59.7	67.8	64.7	56.1
Implementation of system & measures	2	61.9	70.0	65.2	56.7
Assessment & improvement	3	59.3	67.5	60.3	54.8

(Source: METI 2021 Health and Productivity Management Level Survey Feedback)



"Health and productivity management" is a registered trademark of the Workshop for the Management of Health on Company and Employee.

Initiatives for eliminating work-related accidents

Based upon a strong resolve never to allow people engaged in HEPCO operations to fall victim to an accident, HEPCO Group has strived to conduct safety campaigns in which all employees participate with the aim of achieving zero accidents and zero occupational injuries. The results of these efforts have enabled HEPCO to continue to keep our frequency work-related injuries at a rate below the nationwide average of all industries. In FY2022, the rate for HEPCO was 0.18.

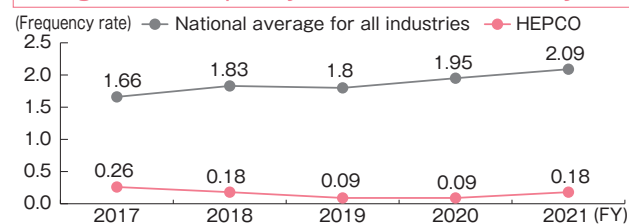
[Safety activity promotion system]

HEPCO Group established the Central Industrial Safety & Health Committee at our Head Office. The committee drafts the Safety & Health Activity Priority Policy, specifying priorities to be implemented company-wide and deliberates measures and other actions to prevent recurrences of work-related

accidents.

In accordance with the aforementioned policy, workplaces develop their activities independently and continuously improve them using the PDCA cycle.

Change in the frequency rate of work-related injuries



The frequency rate of work-related injuries represents the frequency of work-related accidents indicating the number of fatalities and injuries, which require a leave of absence of one day or more, per 1 million working hours.

[Promoting safety together with business partners and partner companies]

In striving to prevent work-related accidents, HEPCO has joined together with our construction work and service business partners to establish the Related Work Safety Cooperation Council, which establishes priorities to be addressed and discusses measures to prevent work-related accidents.

In addition, we also engage in a variety of other activities, such as presenting awards to companies and individuals, which acknowledge their excellence in managing safety, and we carry out other activities as well to raise safety awareness.



Joint HEPCO and contractor on-site safety patrol

Engaging in Transparent and Fair Transactions in Accordance with Our Basic Procurement Policy

HEPCO and Hokkaido Electric Power Network aim to fulfill our obligations as members of society based on our recognition that the HEPCO Group is unable to develop without the sustainable development of the local community, and to contribute to social and economic development as well as foster culture through the provision of products and services that integrate electric power.

To that end, we believe it is important to fulfill our corporate social responsibility even in the procurement of materials. Our procurement divisions conduct their activities pursuant to the following basic policy which is grounded in the HEPCO Group CSR Standards of Conduct.

Observance of laws, regulations and social norms

HEPCO observes all relevant laws and regulations applicable both inside and outside Japan as well as the spirit of such rules and social norms.

*Relevant laws and regulations are not limited to the Civil Code, Commercial Code, Anti-Monopoly Act, intellectual property-related laws and other such rules, but also include laws, regulations, social norms and other such standards pertaining to labor, human rights and other areas that HEPCO must observe in fulfilling our social responsibility.

Open procurement

HEPCO purchases materials and equipment that are both economically superior and of outstanding quality from a broad spectrum of companies both inside and outside of Japan.

Establishment of mutual trust (partnership)

We establish partnerships based upon equality and mutual trust with our business partners through transparent and fair transactions in our aim to achieve mutual development.

Fair and impartial treatment

In selecting business partners, we make a comprehensive determination of the candidate partner's safety, consideration of the environment, pricing, quality and performance, reliability of delivery and construction times, after-sales service, compatibility with existing facilities and equipment, as well as technical capabilities, financial situation and other factors, treating all our partners fairly and impartially.

Contributions to local communities

Together with our business partners, we would like, as members of the community, to contribute to revitalizing the local economy and society.

Partnerships with business associates

HEPCO strives to disclose information about equipment and material procurement as well as other activities throughout our entire business. By implementing the following initiatives, we are working to build even stronger partnerships with our business associates.

- Disclosing the "Overview of the HEPCO Group Management Plan" and "Procurement Plan and Projects Open to Competitive Bidding"
- Providing information about our entire business including equipment and material procurement via our email magazine
- Enhancing communication with partners through equipment and material procurement information sessions*1

*1 Since FY2021, these have been conducted in document form from the standpoint of preventing the spread of Covid-19 infections.

Participation in the Partnership Creation Declaration

HEPCO has joined the Partnership Creation Declaration*2 advocated by the Future-Shaping Partnership Creation Promotion Council Secretariat. We have declared that we will prioritize "coexistence and coprosperity throughout our supply chain and new collaborations transcending scale and corporate affiliations" as well as "observance of desirable business practices between main contractors and subcontractors (promotion standards*3 pursuant to the Act on Promotion of Subcontracting Small- and Medium-Sized Companies)."

*2 Only HEPCO is participating
(Ref) Partnership Creation Declaration <https://www.biz-partnership.jp/>
(Public institution) Association of Small and Medium Enterprise Promotion Organizations

Initiatives for Stably Supplying Electric Power and Strengthening Resilience

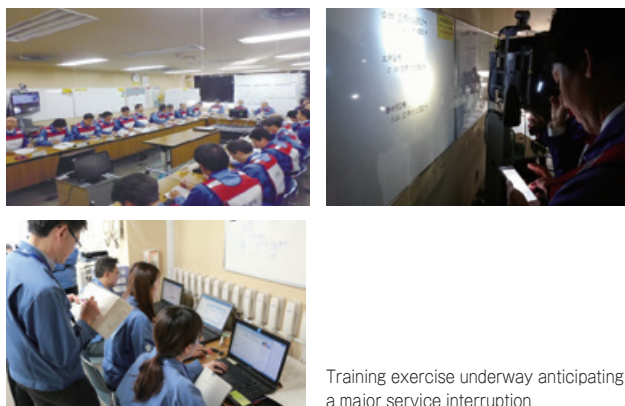
As a responsible energy provider, HEPCO Group has solidly retained the technical capabilities and sense of mission that have been handed down over time, and our entire group has worked together to provide a stable supply of electric power and strengthen resilience.

In coordination with relevant organizations, we will continue to implement the Plan-Do-Check-Act (PDCA) cycle in our efforts to prevent and mitigate disasters. We will strive so that everyone in Hokkaido may use electricity safely and securely.

Preparation for extensive service interruptions

~ Conducting training exercises anticipating a major disaster ~

We have conducted training exercises that focus on our initial response when a large-scale service interruption occurs as well as training to ascertain damage status, share information with organizations include relevant external bodies, and communicate information about service restoration estimates.



Training exercise underway anticipating a major service interruption

Develop a restoration system

~ Initiatives implemented to help restore service promptly after an interruption ~

In the event of a major disaster, the resulting damage will be promptly ascertained using imagery from helicopters and drones as well as satellite photos provided by the Japan Aerospace Exploration Agency (JAXA), and we will do our very best to promptly restore service.



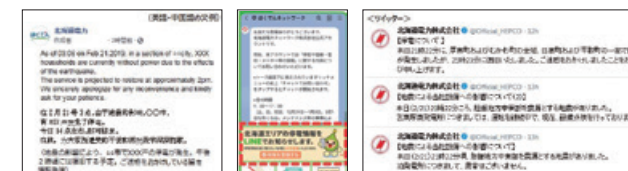
Satellite image

Drone image

Information communication

~ Rapidly providing information to customers across a range of media ~

In addition to the "Power Outage" page on our website, we have started communicating information via LINE, Twitter, and Facebook.



Information communicated via SNS

Strengthened collaboration with relevant organizations

~ Building a collaborative framework with relevant institutions ~

Disaster prevention agreements have been concluded with Hokkaido companies, local municipalities, Japan Self-Defense Forces, and other relevant organizations in order to stably supply electric power and restore service quickly after a disaster strikes. We will continue to strengthen this cooperative framework with relevant institutions.



Research and Development for Solutions to Regional Challenges

HEPCO Group will fully leverage the fundamental technologies that we possess to contribute to the sustainable development of Hokkaido by promoting collaboration and open innovation with the community through research and development that enhances our business foundation and helps achieve carbon neutrality.

Initiatives for creating SDG pioneer municipalities

For the Niseko Mirai (SDGs Block) Construction Project which aims to promote decarbonization and revitalize the community, HEPCO entered into a comprehensive partnership agreement with the enterprises that Niseko town and other municipalities have invested in, and we have been cooperating with this new community development based upon the SDGs philosophy.

In collaboration with businesses, we will consider models for EV use tailored to the community as well as the provision of assistance that makes use of technical knowledge pertaining to resilience reinforcement and energy management, maximizing smart electrification and other technologies to help homes save energy as well as provide locally produced energy from renewables for local consumption.

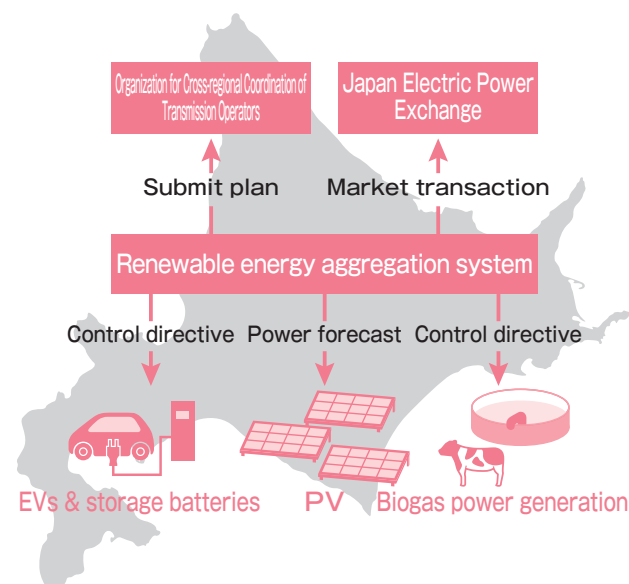


Illustration of completed model district

Renewable energies Participating in aggregation demonstration project

We are promoting the consideration of and research on the possibility of realizing a renewable energy aggregation project to be used for adjusting electric power demand and supply in combination with distributed energy resources (DER) such as renewables, EVs, and other resources in Hokkaido under a Ministry of Economy, Trade and Industry subsidized project with the cooperation of municipalities and businesses that either have or operate biogas or other renewable energy power sources.

The purpose of this project is to verify the technology necessary for controlling biogas power generation and storage batteries and improve the accuracy of forecasting amounts of solar and other renewable powers generated in order to ensure a balance between supply and demand, as well as to work to construct a stable and efficient electric power system in addition to expanding adoption of renewables.



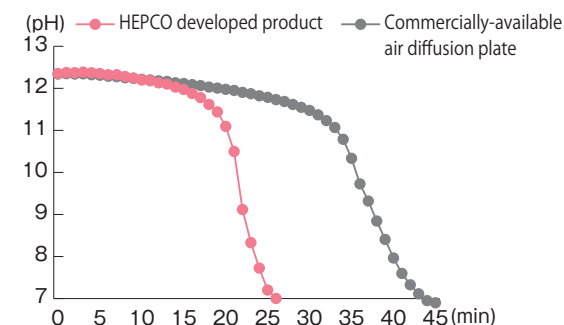
R&D partnership with communities for carbon recycling

Recycling technology, which immobilizes CO₂ as carbonate, has garnered attention as a step toward achieving carbon neutrality.

Accordingly, we are working jointly with concrete companies in Hokkaido to develop uses for carbonate as, for example, a secondary concrete product.

Also, together with brick companies in Hokkaido, we are developing an air diffusion plate for generating fine bubbles (see photo), which is an elemental technology for immobilization. When this air diffusion plate is used, the capability to neutralize alkaline drainage is improved, which makes it possible to efficiently immobilize carbonate.

Test of neutralization treatment of concrete plant drainage



The time it takes to neutralize concrete drainage water is 60% less than the time it takes to do the same with a commercially-available air diffusion plate.

Message from HEPCO Chairman

Aiming to sustainably enhance corporate value and increase the Board of Directors' effectiveness

HEPCO Group is continually striving to raise the level of our corporate governance so that we achieve sustainable growth and enhance corporate value.

In June 2022, we transitioned from a company with an audit and supervisory board to one with an audit and supervisory committee to create a corporate governance structure enabling us to respond appropriately and expeditiously to the significant changes taking place in the business environment in which HEPCO Group operates, such as the intensifying competition among electric power retailers as electric power system reforms are furthered as well as the evolution of technology and decarbonization with an eye toward achieving carbon neutrality.

This transition will allow the Board of Directors to delegate to individual directors the authority to conduct important operations for accelerating decision-making and business execution in addition to further enhancing governance. The Audit & Supervisory Committee is set up under the Board of Directors. Increasing the ratio of outside directors will provide greater transparency of the management process and enhance oversight functions.

HEPCO has annually conducted surveys of our directors and auditors (currently, directors and Audit & Supervisory Board members) inquiring about the composition of the Board of Directors, the manner in which affairs are conducted, its agenda, the system supporting the Board of Directors, and other matters in order to assess its effectiveness as well as exchange views about issues that should be addressed.

Taking into account comments and other views submitted in this effectiveness assessment, we further enhanced discussions about business risks in FY2022

by having outside directors take part in discussions about business risks. In addition, we established a forum for sharing with outside directors the current situation, challenges, and other issues facing our group companies and provided an environment for the Board of Directors to appropriately participate in the business operations of HEPCO Group companies.

In FY2023, we will aim to transition to a Board of Directors emphasizing oversight functions and reassess our operations so that the Board may engage in deliberations that are more focused on strategy and other such matters.

In addition, so that outside directors may appropriately participate in and offer advice about the appointment of directors, we will strive to increase opportunities for them to communicate with executive officers and others. We will also be offering training for directors and executive officers as well as arrange visits of outside directors to business offices and other facilities while also taking care to prevent the spread of Covid-19 infections.

HEPCO Group will promote the initiatives laid out in our HEPCO Group Management Vision 2030 and endeavor to sustainably grow our businesses and realize a sustainable society. We will fulfill our unwavering mission of supporting the economy of Hokkaido and the lives of our customers. In order to accomplish this, we will continue to enhance our governance so that it supports transparent, fair, prompt and bold decision-making.

October 2022

Chairman of the Board

真弓 明彦



HEPCO's Basic Approach to Corporate Governance

Based upon our management philosophy mandating “respect for humanity,” “contributions to local communities,” and “efficient management,” the HEPCO Group recognizes that we cannot develop unless the local community enjoys sustained development. We will make sure that we fulfill our responsibility as a member of society to provide products and services integrating electric power, and endeavor to achieve sustainable growth and enhance corporate value. In order to promote these initiatives for enhancing corporate value, HEPCO will actively strive to implement them in accordance with the following basic policies, which are based on our fundamental belief that it is essential for us to enhance corporate governance that supports transparent, fair, quick, and bold decision-making.

Corporate Governance Basic Policies

1. Appropriate cooperation with shareholders

Assurance of shareholders' rights

On the basic principle that shareholders are equal according to their share class and equity, HEPCO supports all our shareholders pursuant to laws, regulations, and other principles so that their voting rights at the general meeting of shareholders as well as all other rights that shareholders possess are appropriately assured.

Dialogue with shareholders

HEPCO strives to disclose information in a timely, appropriate, and fair manner, and communicates information to promote an extensive understanding of our business activities. We always seek to build a relationship of trust through continuing dialogue with our shareholders and investors.

2. Appropriate cooperation with stakeholders other than shareholders

HEPCO has established the HEPCO Group CSR Action Charter mandating that we conduct ourselves with an awareness of HEPCO's social responsibility in all our business activities, and strive to cooperate not only with shareholders, but also employees, customers, business partners, community residents as well as a variety of other stakeholders.

3. Assurance of appropriate information disclosure and transparency

In accordance with laws, regulations, and other principles, HEPCO discloses in a timely and appropriate manner to our shareholders and other stakeholders information about our financial affairs and managerial situation as well as management strategies, management issues, risks, governance, and other non-financial information.

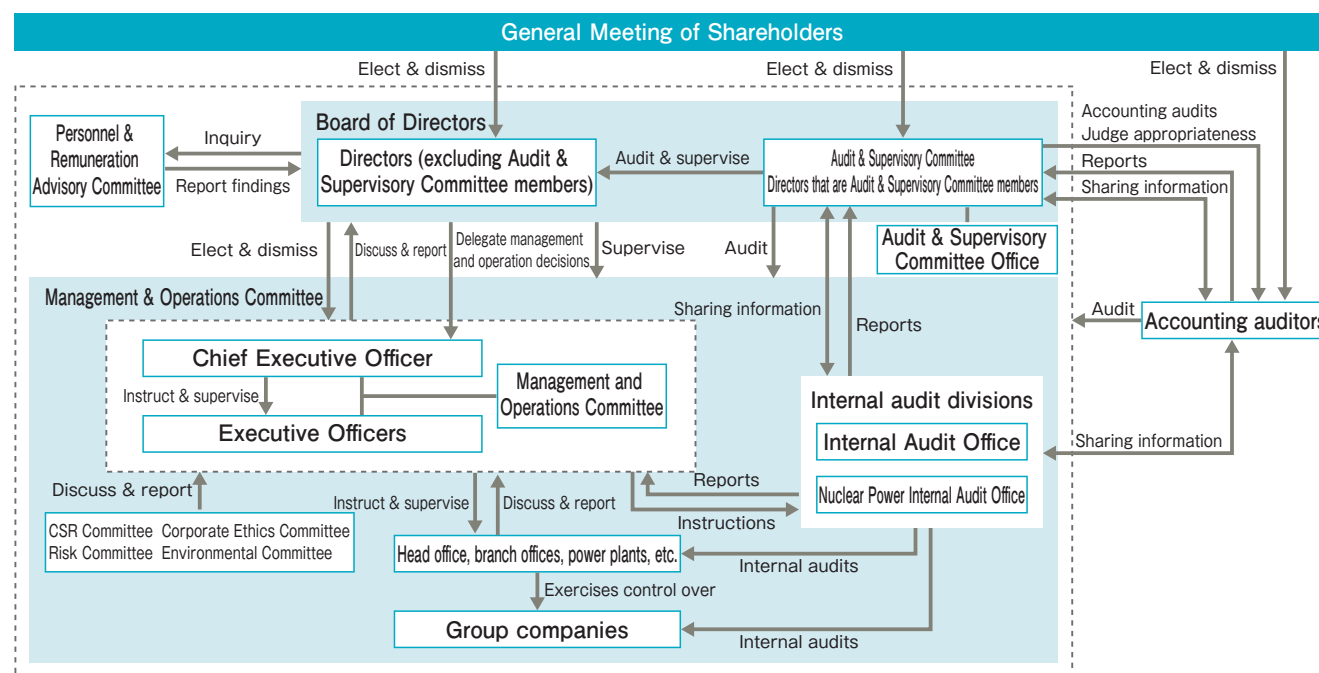
4. Responsibilities of the Board of Directors and other HEPCO institutions

Under the auspices of the system for companies establishing an audit and supervisory committee, HEPCO promptly responds to changes in the electricity business environment, recognizes our fiduciary responsibility and accountability to our shareholders, and strives to achieve sustainable growth as well as increase corporate value. In addition, we aim to manage our businesses in a highly transparent manner, and endeavor to strengthen this framework and provide support so that independent outside corporate directors are able to appropriately fulfill their roles and responsibilities.

Corporate Governance Framework

As the business environment in which HEPCO operates undergoes significant changes, we recognized the need to construct a framework that not only makes it possible for us to respond promptly and agilely to important business challenges, but also further enhance the transparency of the Board of Directors' decision-making and effectiveness of its management oversight, so we adopted the system of a company with an audit and supervisory committee.

The objective and multi-faceted opinions and advice provided by outside directors during Board of Directors' meetings and on other occasions facilitates HEPCO's endeavors to ensure effective oversight of management.



Assessment of Board of Directors' Effectiveness

(Previous fiscal year initiatives)

HEPCO has been able to enhance our governance through appropriate initiatives implemented based upon the results of last year's effectiveness assessment as pertains to improving study and training for newly appointed corporate officers, optimizing the number and composition of directors, engaging in more substantial discussions about management risks, as well as enhancing the manner in which the HEPCO Group Headquarters' Board of Directors should be involved in the management of group companies' business affairs.

(Assessment Conducted of Board of Directors' Effectiveness)

To further enhance corporate governance, HEPCO conducted a survey of directors and auditors regarding the composition of the Board of Directors, its operations, agenda, systems supporting the Board of Directors, and other matters.

Based on the survey results, views were exchanged about the assessment of the Board of Directors' effectiveness and issues to be addressed in May of this year.

(Summary of Assessment Results)

From evaluations of the survey items and opinions exchanged, it was verified that the effectiveness of HEPCO's Board of Directors has been on the whole maintained.

Comments were voiced in the hope of further enhancing governance, calling for a reassessment of the way in which the Board of Directors conducts its operations as part of the shift to a company with audit and supervisory committee, enhancing information provided and views exchanged about management risks, and continuing training, business office visits, and facility tours.

(FY2023 Initiatives)

Taking into account the survey results and comments, we will promote initiatives in FY2023 with the aim of transitioning to a Board of Directors emphasizing its oversight functions. We will actively strive to exchange views with outside directors and encourage more substantial deliberations about management risks and policies. In addition, we will also work to provide better opportunities for communication with executive officers and others so that outside directors may appropriately participate in and offer advice about the election of

directors. We will continue to offer training and education to directors and executive officers as well as have our outside directors visit business offices and other facilities to further augment governance.

Administration of Corporate Affairs

In principle, the Board of Directors meets monthly to make decisions on the execution of important operations as prescribed by laws, regulations, HEPCO's Articles of Incorporation, and internal rules in addition to receiving reports on the status of ongoing operations from members of the board, and supervising the performance of each director's duties. The Board of Directors is comprised of 15 members (13 men and 2 women), of which 5 are outside directors.

A system of executive officers has been adopted and the Board of Directors delegates to individual directors some of the authority for important management operations, thereby strengthening the Board of Directors' oversight functions and expediting operational execution.

Also, the Management and Operations Committee, which is comprised of executive officers (President, Executive Vice Presidents, and Executive Officers) and other senior management, meets weekly in principle, to deliberate important matters pertaining to policies and plans that concern overall HEPCO Group management as well as business execution. In addition, committees have been established to deliberate and coordinate the direction of the entire company on key management issues, such as compliance and risk management.

Audit & Supervision

In principle, the Audit and Supervisory Committee meets once a month during which it receives reports from accounting auditors and internal audit divisions as well as engages in consultations and make resolutions about important matters relating to audits as stipulated in laws, regulations, HEPCO's Articles of Incorporation, and internal rules. The six-member Audit & Supervisory Committee is comprised of directors (4 men and 2 women), of which 4 are outside directors. In addition, a full-time staff of seven is assigned to support the work of the Audit & Supervisory Committee members. In accordance with the audit policy and other guidelines stipulated by the Audit & Supervisory Committee, the Audit & Supervisory Committee, in addition to attending sessions of the Board of Directors and other important meetings, questions directors and others about the status of execution of their duties, peruses important decisions and other documentation, examines

operations and assets of business offices, and conducts other inquiries. The Audit & Supervisory Committee examines the arrangement and operation of the internal control system and conducts audits of directors' performance of their duties from the perspectives of legality and appropriateness. The efficiency of audits has been enhanced through close cooperation between the accounting auditors and internal audit divisions.

Policies and Procedures for Appointing and Discharging Senior Management and Nominating Candidates for Director with Audit & Supervisory Committee Portfolio

The policies and procedures for determining candidates for Director with Audit & Supervisory Committee portfolio are stated below. The Personnel & Remuneration Advisory Committee has been established, which is comprised of a majority of independent outside directors, and provides appropriate involvement in and advice for determining remuneration.

(Policies and Procedures)

We consider character, acumen, ability, and other attributes when selecting candidates determined to be the most qualified to serve as HEPCO directors as well as Directors with Audit & Supervisory Committee Portfolio so that the Board of Directors will be able to appropriately address a range of management challenges. Based on this policy, representative directors recommend candidates to serve as HEPCO directors as well as Directors with Audit & Supervisory Committee Portfolio. A final decision on the candidates is rendered once sufficient deliberation by the Board of Directors is held after the Personnel & Remuneration Advisory Committee, which is comprised of a majority of independent outside directors, has discussed the candidates. The names of candidates that pass this selection process are then submitted to the shareholders meeting for a vote. When the Board of Directors deliberates candidates for Director with Audit & Supervisory Committee Portfolio, it also seeks the consent of the Audit & Supervisory Committee.

The Board of Directors appropriately appoints and discharges senior management after deliberations by the Personnel & Remuneration Advisory Committee, which is comprised of a majority of independent outside directors, have been held that take into consideration evaluations of performance and other aspects.

Remuneration Policy

Remuneration for directors (excluding outside directors and directors with Audit & Supervisory Committee portfolio; hereinafter referred to as "directors") is based on each director's duties, performance, and other factors, and determined according to the following policy for the purpose of linking performance and corporate value as well as heightening awareness of contributions made to sustainable performance improvements and corporate value enhancement, and, with regard to remuneration for outside directors and Audit & Supervisory Committee members, from the perspective of assuring independence in relation to management by putting in place a compensation structure not affected by company performance.

1. Composition

- The remuneration provided to HEPCO directors (excluding outside directors) is comprised of a base compensation, bonus (short-term performance-linked compensation), and stock compensation (medium- to long-term performance-linked compensation).
- Outside directors and Directors with Audit & Supervisory Committee Portfolio receive only a base compensation from the standpoint of assuring their independence from management. This is achieved by putting in place a compensation structure not vulnerable to corporate performance.

2. Base compensation

- Base compensation is a fixed monthly remuneration. The amount is determined by a meeting of the Board of Directors and set within the range of the amount of remuneration determined by resolution of the general meeting of shareholders. The determination takes into account each director's responsibilities and performance, medium- and long-term earnings forecasts, annual operating performance, the fact that the electric business is a public service, in addition to other factors, and the amounts to be paid to each individual are discussed by the Personnel & Remuneration Advisory Committee, which is comprised of a majority of independent outside corporate officers. Then, entrusted by a resolution of the Board of Directors, the Chairman and President take into consideration the Personnel & Remuneration Advisory Committee's deliberations in determining the amount to be paid.

3. Performance-linked compensation

(1) Bonus (short-term performance-linked compensation)

- The total amount to be paid in bonuses (short-term performance-linked

compensation) is determined on each such occasion as set by resolution of the general meeting of shareholders, after which the Board of Directors decides the amounts to be paid.

In making this decision, specific metrics are not relied upon, but each business year's performance is comprehensively considered. The Personnel & Remuneration Advisory Committee, of which a majority of the members are independent outside officers, deliberates the appropriateness of any payments as well as amounts to be paid to each individual. In addition, if a bonus is to be paid, it is done after a resolution has been passed by the general meeting of shareholders. By a resolution of the Board of Directors, the Chairman and President are entrusted with the responsibility to take into account the Personnel & Remuneration Advisory Committee's deliberations in determining the amounts to be paid.

(2) Stock compensation (medium- to long-term performance-linked compensation)

• As for stock compensation (medium- to long-term performance-linked compensation), the number of shares to be paid is determined within the range of the maximum number of shares set by resolution of the general meeting of shareholders. After the matter has been discussed by the Personnel & Remuneration Advisory Committee of which a majority of the members are independent outside officers, the number of shares to be paid and other matters are determined in accordance with the Corporate Officer

Stock Payout Provisions stipulated by resolution of the Board of Directors.

More specifically, the number of shares to be paid is calculated using the total number of points awarded for each business year during the term of service and providing one share of the company's common stock per point under the stock benefit trust system at the time of retirement. The points awarded comprise points determined according to whether or not a dividend is paid as well as points linked to performance. The number of performance-linked points is determined according to the degree to which the target of ¥23 billion/year in consolidated ordinary income is achieved, which is the target profit set out in the HEPCO Group Management Vision 2030. If the target profit is not reached, then no points are awarded for that business year.

4. Ratio of base compensation, bonus (short-term performance-linked compensation), and stock compensation (medium- to long-term performance-linked compensation) amounts

- The ratio of the base compensation and stock compensation (medium- to long-term performance-linked compensation) paid is 9:1 at the time of target achievement, and, if a bonus (short-term performance-linked compensation) is paid, the percentage that accounts for of total remuneration is determined after comprehensively taking into account duties, performance, and other factors.

Total amount of remuneration, etc. for each corporate officer category, total amount of remuneration, etc. by type, and number of eligible corporate officers (FY2022)

Category	Total remuneration, etc. (million yen)	Total amount of remuneration, etc. by type					
		Monetary compensation				Non-monetary compensation	
		Base compensation		Bonus (short-term performance-linked compensation)		Stock compensation (medium- to long-term performance-linked compensation)	
		Number of recipients	Amount paid (million yen)	Number of recipients	Amount paid (million yen)	Number of recipients	Amount paid (million yen)
Board member (except outside director)	301	11	290	—	—	9	11
Statutory auditor (except outside auditor)	54	2	54	—	—	—	—
Outside Director	16	2	16	—	—	—	—
Outside Auditor	24	4	24	—	—	—	—

(Notes) 1. The aforementioned includes two directors and one auditor who retired as of the close of the 97th Ordinary General Meeting of Shareholders held on June 25, 2021.

2. It was determined that no bonus would be paid for that business year.

3. The maximum remuneration amounts set by resolution of the 83rd Ordinary General Meeting of Shareholders held on June 28, 2007 are as follows:

Directors: Not to exceed ¥50 million per month

Auditors: Not to exceed ¥11 million per month

The number of directors at the close of the ordinary general meeting of shareholders is 12 and the number of auditors is 5.

Board of Directors (As of June 28, 2022)



Chairman of the Board
Akihiko Mayumi(Date of Birth: May 7, 1954)

April 1979 Joined HEPCO
June 2012 Managing Director, HEPCO
January 2014 Executive Vice President & Director, HEPCO
September 2014 President & Director, HEPCO
June 2019 Chairman of the Board, HEPCO (present position)



Representative director
Chief Executive Officer
Yutaka Fujii(Date of Birth: April 19, 1956)

Director, Nuclear Power Promotion Division
April 1981 Joined HEPCO
June 2015 Director & Executive Officer, HEPCO
June 2016 Executive Vice President & Director, HEPCO
April 2018 Executive Vice President & Director, HEPCO and President, Power Network Company
June 2019 President & Director, HEPCO
June 2022 Representative Director and Chief Executive Officer, HEPCO (present position)



Representative director
Executive Vice President
Shunichi Funane(Date of Birth: March 7, 1959)

Director, Nuclear Power Administration Division and Deputy Director, Nuclear Power Promotion Division
April 1983 Joined HEPCO
February 2013 General Manager, Nuclear Power Department, HEPCO
June 2014 Director, Tomari Nuclear Power Station, HEPCO
July 2014 Operating Officer and Director, Tomari Nuclear Power Station, HEPCO
July 2016 Senior Operating Officer and Director, Tomari Nuclear Power Station, HEPCO
June 2018 Director, Executive Officer, and Director, Tomari Nuclear Power Office, HEPCO
June 2021 Executive Vice President & Director, HEPCO
June 2022 Representative Director and Executive Vice President, HEPCO (present position)



Representative director
Executive Vice President
Hideo Seo(Date of Birth: April 14, 1958)

Acting Director, Nuclear Power Promotion Division
Responsible for Internal Audit Office, Environmental Affairs Office, Personnel & Labor Relations Department, and General Affairs Department
April 1982 Joined HEPCO
June 2007 General Manager, Business Development Department, HEPCO
February 2009 Temporarily Assigned to the Hokkaido Economic Federation
January 2015 Manager, Asahikawa Branch Office, HEPCO
June 2016 Audit & Supervisory Board Member, HEPCO
June 2017 Director & Executive Officer, HEPCO
June 2022 Representative Director and Executive Vice President, HEPCO (present position)



Member of the Board
Executive Officer
Masahiro Ueno(Date of Birth: December 13, 1960)

Deputy Director, Nuclear Power Promotion Division
Responsible for Corporate Planning Department, Optimization & Trading Department, Renewable Energy Development Department, and Research & Development Department
April 1983 Joined HEPCO
July 2011 Director, Hakodate General Power Network Center, HEPCO
June 2014 General Manager, Engineering Department, HEPCO
June 2016 Operating Officer and Corporate Planning Department, HEPCO
April 2018 Senior Operating Officer and General Manager, Corporate Planning Department, HEPCO
June 2019 Director and Executive Officer, HEPCO (present position)



Member of the Board
Executive Officer
Noriaki Harada(Date of Birth: September 19, 1961)

Assistant Director, Nuclear Power Administration Division and Deputy Director, Nuclear Power Promotion Division
Responsible for Hydropower Department, Civil Engineering Department, and Shintoku Hydropower Station Construction Office
April 1985 Joined HEPCO
June 2014 General Manager, Distribution Department, HEPCO
June 2017 Operating Officer and General Manager, Personnel & Labor Relations Department, HEPCO
June 2020 Director and Executive Officer, HEPCO (present position)



Member of the Board
Executive Officer
Tsuyoshi Kobayashi(Date of Birth: September 19, 1961)

Responsible for Secretary Office, Accounting & Finance Department, and Purchasing & Contracting Department
April 1984 Joined HEPCO
June 2015 General Manager, Corporate Planning Department, HEPCO
June 2017 General Manager, Accounting & Finance Department, HEPCO
July 2017 Operating Officer and General Manager, Accounting & Finance Department, HEPCO
June 2020 Director and Executive Officer, HEPCO (present position)



Member of the Board
Executive Officer
Susumu Saito(Date of Birth: January 23, 1961)

Responsible for Thermal Power Department, Kaizen Promotion Office, and Information Systems & Telecommunications Department
April 1983 Joined HEPCO
June 2015 Director, Tomto-Atsuma Nuclear Power Station, HEPCO
July 2017 Operating Officer and Director, Tomto-Atsuma Nuclear Power Station, HEPCO
June 2019 Operating Officer and General Manager, Thermal Power Department, HEPCO
July 2019 Executive Officer and General Manager, Thermal Power Department, HEPCO
June 2021 Director and Executive Officer, HEPCO (present position)



Outside Director
Shigeki Ichikawa(Date of Birth: July 1, 1947)

April 1974 Licensed Attorney and Member, Sapporo Bar Association (present position)
June 2012 Audit & Supervisory Board Member, HEPCO
June 2016 Director, HEPCO (present position)

Director Audit & Supervisory Committee Member (As of June 28, 2022)



Member of the Board
Audit & Supervisory Committee Member
Koji Akita(Date of Birth: June 4, 1958)

April 1981 Joined HEPCO
March 2006 Manager, Power Trading Management Office, Corporate Planning Department, HEPCO
April 2009 Director, Central Load Dispatching Center, Engineering Department, HEPCO
September 2013 General Manager, Engineering Department, HEPCO
June 2015 General Manager, Research & Development Department, HEPCO
June 2017 Audit & Supervisory Board Member, HEPCO
June 2018 Senior Audit & Supervisory Board Member, HEPCO
June 2022 Director and Audit & Supervisory Committee Member, HEPCO (present position)



Member of the Board
Audit & Supervisory Committee Member
Hiroshi Oono(Date of Birth: April 5, 1960)

April 1984 Joined HEPCO
April 2009 General Manager, Sales Department, Kushiro Branch Office, HEPCO
December 2011 Manager, Business Ethics Office, General Affairs Department, HEPCO
June 2016 Manager, Kitami Branch Office, HEPCO
April 2018 Operating Officer and Manager, Sapporo Branch Office, Power Network Company (resigned March 2020)
April 2020 Operating Officer and Manager, Sapporo Branch Office, Hokkaido Electric Power Network Co., Inc. (resigned June 2020)
June 2020 Audit & Supervisory Board Member, HEPCO
June 2021 Senior Audit & Supervisory Board Member, HEPCO
June 2022 Director and Audit & Supervisory Committee Member, HEPCO (present position)



Outside Director
Audit & Supervisory Committee Member
Jun Hasegawa(Date of Birth: December 13, 1943)

April 1971 Lecturer, School of Engineering, Hokkaido University
April 1985 Professor, School of Engineering, Hokkaido University
April 1971 Professor, Graduate School of Engineering, Hokkaido University (resigned March 2004)
April 2004 Principal, National Institute of Technology, Hakodate College (resigned March 2009)
April 2009 President, Hokkaido Information University
April 2013 Advisor, Hokkaido Information University (resigned March 2014)
June 2013 Audit & Supervisory Board Member, HEPCO
June 2022 Director and Audit & Supervisory Committee Member, HEPCO (present position)



Outside Director
Audit & Supervisory Committee Member
Noriko Narita(Date of Birth: April 11, 1951)

April 1979 Licensed Attorney and Member, Sapporo Bar Association (present position)
December 2014 Chair, Hokkaido Labor Relations Commission (resigned November 2016)
June 2016 Audit & Supervisory Board Member, HEPCO
June 2022 Director and Audit & Supervisory Committee Member, HEPCO (present position)



Outside Director
Audit & Supervisory Committee Member
Iwao Takeuchi(Date of Birth: April 5, 1958)

April 1981 Joined North Pacific Mutual Bank, Ltd.
June 2012 Executive Officer and Manager, Kushiro Chuo Branch, North Pacific Bank, Ltd.
November 2013 Executive Officer and Special Advisor, First Loan Department, North Pacific Bank, Ltd.
June 2014 Managing Executive Officer, North Pacific Bank, Ltd.
June 2016 Managing Director, North Pacific Bank, Ltd.
June 2019 Deputy President & Director, North Pacific Bank, Ltd.
June 2021 Audit & Supervisory Board Member, HEPCO
June 2022 Standing Auditor, North Pacific Bank, Ltd.
June 2022 Director and Audit & Supervisory Committee Member, HEPCO (present position)



Outside Director
Audit & Supervisory Committee Member
Mitsuko Ukai(Date of Birth: April 20, 1952)

April 1983 Graduate Assistant, Graduate School of Humanities and Sciences, Ochanomizu University (resigned March 1985)
April 1985 Assistant Professor, Gumma Women's Junior College (resigned March 1991)
April 1991 Assistant Professor, Musashigaoka College (resigned March 2001)
April 2001 Professor, Graduate School of Education, Hokkaido University of Education
April 2018 Emeritus Professor, Graduate School of Education, Hokkaido University of Education (present position)
June 2018 Director, HEPCO
June 2022 Audit & Supervisory Committee Member, HEPCO (present position)

Directors' Skill Matrix

In order for HEPCO to continue to sustainably grow and contribute to realizing a sustainable society, there are areas of expertise that we regard as important and should be provided by our directors. These are corporate management & management strategy, sales, business development, technology & research and development, legal affairs, finance & accounting, and ESG. Our Board of Directors is comprised of members possessing such expertise.

Name	Position	Anticipated area of expertise						
		Corporate management & management strategy	Sales	Business development	Technology & research and development	Legal affairs	Finance & accounting	ESG
Akihiko Mayumi	Chairman of the Board	●	●					●
Yutaka Fujii	President and Director	●	●		●			
Shunichi Funane	Executive Vice President	●			●			●
Hideo Seo	Executive Vice President			●		●		●
Masahiro Ueno	Executive Officer	●	●	●				
Noriaki Harada	Executive Officer	●	●		●			
Tsuyoshi Kobayashi	Executive Officer	●	●				●	
Susumu Saito	Executive Officer			●	●			●
Shigeki Ichikawa	Outside Director					●	●	●
Koji Akita	Director, Audit & Supervisory Committee		●	●	●			
Hiroshi Oono	Director, Audit & Supervisory Committee	●	●			●		
Jun Hasegawa	Outside Director, Audit & Supervisory Committee			●	●			●
Noriko Narita	Outside Director, Audit & Supervisory Committee					●	●	●
Iwao Takeuchi	Outside Director, Audit & Supervisory Committee	●		●			●	
Mitsuko Ukai	Outside Director, Audit & Supervisory Committee			●	●			●

*Up to three fields of expertise and experience are listed for each individual. The above is not a complete list of all of the expertise and experience possessed by each individual.

Reasons for Outside Directors Elected and Their Activities

HEPCO strives to enhance transparency of our management process and improve oversight functions by vesting directors with Audit & Supervisory Committee portfolio with voting rights on the Board of Directors, granting them the right to state opinions about the appointment, dismissal, resignation, and remuneration of directors without Audit & Supervisory Committee portfolio during the general meeting of shareholders, and increasing the composition of outside directors on the Audit & Supervisory Committee and Board of Directors. We are working to ensure effective oversight of management by having outside directors offer objective and multi-faceted opinions and advice during Board of Directors' meetings and on other occasions.

Name (FY2022 Activities)	Reasons for Election
Shigeki Ichikawa Attended all 14 sessions of the Board of Directors	Shigeki Ichikawa possesses a wealth of experience and extensive knowledge gained in his career as an attorney. His extensive insight into legal affairs, compliance, risk management, and other fields has enabled him to provide multi-faceted and appropriate comments about HEPCO's management during sessions of the Board of Directors and on other occasions. As a member of the Personnel & Remuneration Advisory Committee, he has contributed to greater transparency and objectivity of the system for board member personnel and remuneration affairs. In consideration of such experience, knowledge, and achievements, he was elected with the expectation that he will contribute to strengthening the Board of Directors' oversight function from an independent and objective standpoint.
Jun Hasegawa Attended all 14 sessions of the Board of Directors as well as all 12 sessions of the Audit and Supervisory Board	Jun Hasegawa possesses a wealth of experience and extensive knowledge gained as a distinguished academic. He has expressed appropriate opinions and comments, which are grounded in his expertise, during sessions of the Board of Directors and on other occasions. In addition, as a member of the Personnel & Remuneration Advisory Committee, he has contributed to greater transparency and objectivity of the system for board member personnel and remuneration affairs. In consideration of such experience, knowledge, and achievements, he was elected with the expectation that, even after the transition is made to HEPCO as a company with an audit and supervisory committee, he will contribute to strengthening oversight functions of the Board of Directors and Audit & Supervisory Committee from an independent and objective standpoint.
Noriko Narita Attended all 14 sessions of the Board of Directors as well as all 12 sessions of the Audit and Supervisory Board	Noriko Narita has practiced law as an attorney, a career over which she has gained extensive experience and broad insight. She possesses considerable knowledge about financial and accounting affairs, and has expressed her views and comments about corporate governance during sessions of the Board of Directors and Audit & Supervisory Board. In consideration of such experience, knowledge, and achievements, she was elected with the expectation that, even after the transition is made to HEPCO as a company with an audit and supervisory committee, she will contribute to strengthening oversight functions of the Board of Directors and Audit & Supervisory Committee from an independent and objective standpoint.
Iwao Takeuchi Attended 9 of 10 sessions of the Board of Directors as well as all 10 sessions of the Audit and Supervisory Board	In addition to his wealth of managerial experience as well as broad knowledge and insight gained as a corporate officer at North Pacific Bank, Ltd., Iwao Takeuchi possesses considerable knowledge about financial and accounting affairs. He has expressed his views and comments about corporate governance during sessions of the Board of Directors and Audit & Supervisory Board. In consideration of such experience, knowledge, and achievements, he was elected with the expectation that, even after the transition is made to HEPCO as a company with an audit and supervisory committee, he will contribute to strengthening oversight functions of the Board of Directors and Audit & Supervisory Committee from an independent and objective standpoint.
Mitsuko Ukai Attended all 14 sessions of the Board of Directors	Mitsuko Ukai has a wealth of experience and extensive knowledge gained as a distinguished academic. Her broad insight even beyond her field of expertise has enabled her to offer multi-faceted and appropriate comments about HEPCO's management during sessions of the Board of Directors and on other occasions. In addition, as a member of the Personnel & Remuneration Advisory Committee, she has contributed to greater transparency and objectivity of the system for board member personnel and remuneration affairs. In consideration of such experience, knowledge, and achievements, she was elected with the expectation that, she will contribute to strengthening oversight functions of the Board of Directors and Audit & Supervisory Committee from an independent and objective standpoint.

*The aforementioned five individuals meet the requirements for independent directors pursuant to the provisions of the Tokyo Stock Exchange and Sapporo Stock Exchange.

HEPCO Group CSR Action Charter

Basic Approach

Grounded upon our management philosophy mandating "respect for humanity," "contribution to local communities," and "efficient management," the HEPCO Group recognizes that we cannot develop unless the community enjoys sustained development. We make sure that we fulfill our responsibility as a member of society and contribute to social and economic development as well as foster culture through the provision of products and services integrating electric power.

With a management structure unifying the HEPCO Group, we conduct our business activities in a transparent and fair manner so as to secure the trust of society and enhance corporate value.

In pursuing our business activities, we give top priority to safety, respect for human rights, and consideration of the environment.

Our position is firmly established upon a basic recognition of these principles and we will always act in accordance with the standards of conduct shown below.

Standards of Conduct

Our top priority is customer satisfaction in the provision of products and services integrating electric power.

- We will improve communication with our customers to ensure safety and stability, and provide products and services of a quality and price satisfactory to our customers.

We will sincerely live up to the trust and expectations that the community places in us.

- We will proactively provide information relating to our business activities, and, as a member of the community and greater society, we will improve communication with the community in an effort to enhance mutual understanding.
- We will deploy the comprehensive strengths of our group as we work to energize the local economy, community and greater society.

We will be sure to live up to the expectations of our shareholders and investors.

- We will be unrelenting in promoting increased managerial efficiency, appropriately managing risks in our business activities, and striving to stably and sustainably enhance value.
- We will appropriately and timely disclose information about our business activities, and actively communicate with our shareholders and investors.

We will create a work environment that is safe and motivating for our employees.

- We will always aim to be thoroughly aware of health and safety as we strive to improve the workplace environment and culture, endeavor to create an open and transparent work culture, ensure safety, and maintain health.
- We will respect each and every individual's personality and individuality, and create a pleasant and fulfilling workplace where each employee is able to sufficiently demonstrate his or her abilities.

We will engage in transparent and fair transactions with our business partners as equal partners upon a basis of mutual trust.

- We will value good faith and act sincerely in accordance with our agreements and sound business practices.
- We will also ask our business partners to share our awareness of corporate social responsibility and make the effort necessary to ensure that such obligations are fulfilled.

We will conduct our business activities while also proactively working to find solutions to global and local environmental issues.

- So that our society may sustainably develop, we will promote global warming prevention measures, local environmental conservation, and formation of a recycling-oriented society, and we will work to reduce our environmental footprint in every facet of our business.
- We will practice thorough environmental management, and provide appropriate and timely announcements about our initiatives to address environmental issues.

We will practice compliance thoroughly in all aspects of our business.

- We will always be aware and act in a manner which recognizes that practicing compliance (upholding laws, regulations, internal rules, and company ethics) is our responsibility.
- We will properly manage personal information as well as all forms of information that our company is entrusted with.
- We will stand firmly against and stringently respond to any antisocial acts that threaten the order and safety of society.

CSR Committee

The CSR Committee, which is chaired by HEPCO President, was established at the Head Office with the aim of smoothly and effectively promoting corporate social responsibility initiatives throughout the HEPCO Group. The CSR Committee deliberates revisions to the HEPCO Group CSR Action Charter, policies and measures concerning important CSR initiatives, and other matters.

Business and Other Risks

The principal risks that may affect the HEPCO Group's performance are described below.

Forward-looking statements provided here are current as of the date on which the financial statement was filed (June 29, 2022).

The HEPCO Group recognizes these risks and strives to prevent and address them in the event they do arise.

Status of Nuclear Power Generation	<p>HEPCO regards ensuring the safety of Tomari Nuclear Power Station as our most important management task, and, spearheaded by the president's responsibility for top management, we are striving to further enhance safety based upon our "Safety Improvement Plan." Specifically, we are complying with the new regulatory requirements enacted for nuclear power plants, and have been endeavoring to diversify our safety measures as well as strengthen and enhance our severe accident response system through, among other efforts, conducting nuclear emergency preparedness training which anticipates a severe accident or other such disaster, as well as implementing construction work for safety measures aimed at further enhancing safety and reliability. In addition, following enforcement of the new regulatory requirements, we have filed applications to amend our reactor licenses and worked to address the compliance reviews. We have been accommodating, such as an assessment of ground motion formulated without specifying a hypocenter, reassessment of tsunami caused by an earthquake anticipated along the eastern edge of the Japan Sea, assessment of possible volcanic activity, reassessment of the thickness of fallen pyroclastic material, impact assessment of liquefaction of the seawall foundation due to an earthquake, assessment of impact on power generation facilities in a case where a tsunami damages the seawall, and other assessments.</p> <p>Nevertheless, there is the possibility that our business performance may be affected if the shutdown of Tomari Nuclear Power Station is further prolonged, which depends upon on the status of future reviews and other factors as well as the possibility that fuel costs may continue to rise.</p>	Fluctuations in Electricity Demand and Sales	<p>The HEPCO Group's performance may be affected if there is a decrease in electricity demand as a result of an economic or production activity decline due to an economic downturn, COVID-19 pandemic, or other event, advance in energy savings, decrease in population, temperature effects, and other factors, or if there is a decrease in electricity sales on account of greater competition with other operators.</p>
Equipment Failure	<p>Although the HEPCO Group endeavors to maintain the reliability of our power generation and distribution systems through steady implementation of inspections and maintenance, there is the possibility that costs may be incurred for restoring such systems or burning more fuel than anticipated at other power plants due to the shutdown of a power plant if its facilities or equipment experience interference due to a natural disaster, malfunction, or other such event.</p>	Fluctuations in Amount of Rainfall or Snowfall	<p>The amount of annual rainfall or snowfall may affect the HEPCO Group's performance as an abundance of water would be a factor reducing fuel costs and a shortage of water would be a factor increasing fuel costs.</p> <p>Because the system of setting aside a reserve for fluctuation in water levels has resulted in certain adjustments being made, the effect on performance is diminished.</p>
Institutional Changes Encompassing the Electricity Industry	<p>The development, revision, and other changes to markets and rules aimed at further promoting competition in the electricity business as well as other such changes to national systems and frameworks may affect the HEPCO Group's performance.</p> <p>Nuclear back-end operations associated with nuclear power generation are ultra-long-term and entail uncertainty. A system has been set up that contributes financing calculated in accordance with laws and regulations for costs required to reprocess spent fuel as well as dispose of radioactive waste. As for expenses required for dismantling nuclear power generation facilities, measures have been put in place pursuant to laws and regulations for a system to calculate the total estimated cost over the anticipated operable period. Although these systems and measures mitigate risks to the operator, performance may be affected if such systems are revised.</p> <p>In addition, although the HEPCO Group strives to reduce its CO₂ emissions intensity as a member of The Electric Power Council for a Low Carbon Society, which is comprised of electric power companies nationwide, and we are aiming to cut CO₂ emissions from the power generation division by more than 50% from FY2014 levels (reduction of more than 10 million tons) by FY2031, the introduction of environmental regulations relating to global warming measures may affect the HEPCO Group's performance.</p>	Interest Rate Fluctuations	<p>The balance of the HEPCO Group's interest-bearing debt was 1,385.3 billion yen at the end of FY2022, and trends in future market interest rates may affect the HEPCO Group's performance.</p> <p>However, the greater portion of our interest-bearing debt has been financed at fixed interest rates and other measures have been put in place to reduce such fluctuations. Therefore, any such effect on performance is considered limited.</p>
Fluctuations in Fuel & Wholesale Electricity Market Prices	<p>As for fuel procurement costs, the current situation in Ukraine has had a significant effect, causing fuel prices to fluctuate widely. Expenditures for electricity purchases are affected by fluctuations in wholesale electricity market prices. Accordingly, the HEPCO Group aims to achieve a balanced power source mix, and endeavors to spread out and avoid the risk of price fluctuations through a combination of long-term contracts and spot purchases, diversification of suppliers and other contractual methods, leveraging derivative trading, and adoption of other measures. In addition, the fuel-cost adjustment system reflects changes in fuel prices within a specified range, so the effect on performance is mitigated.</p>	Businesses other than Electricity	<p>The HEPCO Group strives to conduct preliminary evaluations and appropriately manage operation of businesses other than our electricity business. However, deteriorations in the business environment and other factors may make engaging in such businesses more difficult than initially anticipated.</p>
		Spread of Infectious Diseases	<p>To ensure a stable supply of electric power, the HEPCO Group has implemented the following key measures to prevent the spread of COVID-19. However, if the spread of infection hinders business operations, performance may be affected.</p> <ul style="list-style-type: none"> -An internal system has been developed to appropriately communicate and inform personnel about necessary information and instructions relating to infection prevention measures, business continuity, and other matters. -An alternative shift system has been organized together with support systems and other arrangements to prepare for any cases of infection that may occur at key facilities for supplying electric power. -Within the HEPCO Group, limitations have been placed on meetings and business trips, telework and staggered working hours implemented, business spaces partitioned, worker assignments dispersed, and other measures taken. -At reception counters, a comprehensive set of infection prevention measures have been implemented that include partitions and bottles of alcohol for disinfection.
		Strict Adherence to Compliance	<p>Although the HEPCO Group CSR Action Charter and Compliance Code of Conduct have been established and the HEPCO Group ensures that we are fully compliant with laws, regulations, internal rules, and company ethics, public trust may be lost and performance affected if actions occur that violate laws or contravene company ethics.</p>
		Information Management	<p>The HEPCO Group has maintained information security, established internal rules, and conducted employee training to strictly control operational information about our customers and others that is held by the HEPCO Group. However, problems resulting from information leaks may demean HEPCO Group's social credibility and affect its performance.</p>

The potential degree, timing and amount are not provided for aforementioned risks that are difficult to reasonably foresee.

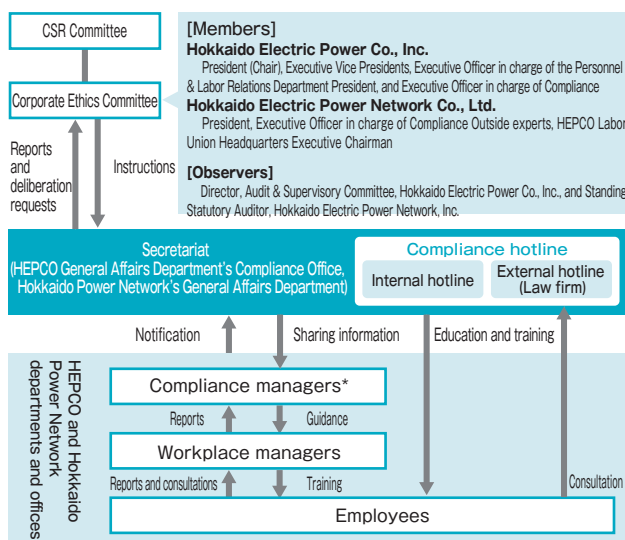
Strict Adherence to Compliance

HEPCO and Hokkaido Electric Power Network established the “Compliance Code of Conduct,” which mandates that their corporate officers and employees be fully aware of how they should conduct themselves so as to always be in compliance.

Compliance Promotion Framework

Under the auspices of the Corporate Ethics Committee chaired by HEPCO’s President, the HEPCO General Affairs Department’s Compliance Office and Hokkaido Electric Power Network’s General Affairs Department serve as secretariats for efforts to provide compliance training and workshops as well as support compliance initiatives within the company and at group companies. The Corporate Ethics Committee was established to properly respond to and prevent the recurrence of compliance violations, and effectively facilitate compliance-related initiatives throughout the HEPCO Group. The Corporate Ethics Committee holds regular meetings each quarter.

Compliance Promotion Framework



*107 as of March 31, 2022

Compliance Promotion Initiatives

Because compliance is inseparable from business operations, executives who are supervising departments and offices have been installed as compliance managers, and the secretariats work together with these compliance managers. In each workplace, these compliance managers are central to efforts to promote greater awareness of compliance and establish proper observance in the way that personnel conduct themselves.

Specific initiatives include e-Learning courses offered to all employees annually. In FY2022, 99% of employees took such courses. In addition to on-the job training in the workplace (provided quarterly), which uses teaching materials with compilations of case studies detailing compliance violations and other such incidents, compliance workshops have been held with sessions tailored to each workplace and administrative hierarchy, for which the secretariats have provided instructors (attended by a total of 4,006 personnel, including sessions conducted at group companies).

Compliance hotline

Compliance hotlines have each set up to handle consultations about compliance violations or other infractions by employees in the workplace as well as on or off of the job. This system is able to gather a broad range of information about compliance violations.

Number of compliance hotline inquiries (including anonymous inquiries)

FY2020:	FY2021:	FY2022:
27	34	20

Initiatives relating to personal information protection

HEPCO and Hokkaido Power Network have constructed frameworks headed by their respective executive officers overseeing compliance. Internal rules have been developed based upon the Personal Information Protection Act and other relevant laws and regulations. Contractors' efforts are periodically supervised. E-Learning and workshops are also regularly offered to employees.

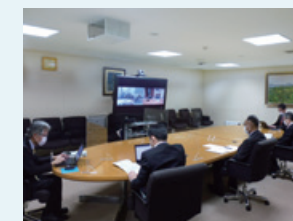
In addition, both companies have established and released personal information protection policies. They have set up personal information consultation services, to which comments and questions from people outside the company are directed regarding how personal information is handled.

TOPICS

Forums held for the executive officer in charge of compliance and compliance managers to exchange views

As part of our initiatives to ensure further compliance, forums are continually held where the executive officer in charge of compliance and our business office compliance managers exchange views so that they may share and discuss good practices and issues relating to promoting compliance that business offices face.

Efforts have been made at each workplace to impart and share the view that compliance takes priority over everything, and that smooth communication is important for employees to fully understand how important such matters are.



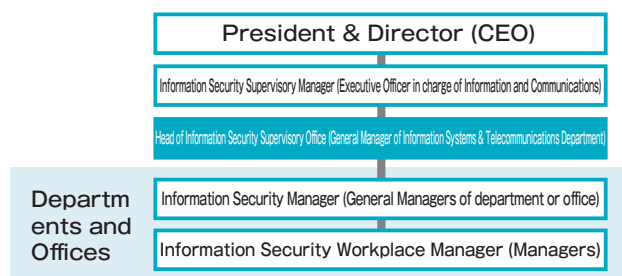
Information Security

Basic information security policy

HEPCO and Hokkaido Electric Power Network (hereinafter, collectively referred to as "HEPCO") promote secure information security initiatives so that electric power is stably supplied. To counter the increasing threat in recent years of a cyber- attack, we have promoted information security management that is predicated upon the PDCA cycle, while, at the same time, working to maintain and further raise the level of information security.

Information security management system

HEPCO's system for managing information security has been arranged so that the Executive Officer in charge of Information and Communications serves as the Information Security Supervisory Manager and the Information Systems & Telecommunications Department as the Information Security Supervisory Office. In each of HEPCO's Head Office departments and offices as well as our business offices, an information security manager has been appointed to head information security management, and there are also information security workplace managers who promote initiatives in each workplace.



Cyberattack Countermeasures

As a key infrastructure company engaged in the electricity business, HEPCO recognizes that a cyberattack poses a major threat, and we have implemented the following initiatives in accordance with relevant laws, regulations, company rules and other standards.

(1) Management and operational measures (organizational and personal security control measures)

Information security rules and other internal regulations have been developed. Thorough guidance is provided about information management, including measures (implemented annually) to train and have employees and information security workplace managers be fully aware of information security. There are also prohibitions on the use of external storage media in principle, and management of registers detailing the status of recording media controls.

So that we may detect cyberattacks early and respond rapidly, we have had our Security Operation Center (SOC) conduct security surveillance (24 hours × 365 days/year) and the Computer Security Incident Response Team (CSIRT) collect and distribute security-related information as well as provide incident response. In addition, a regular part of our training operations includes exercises where we assume a cyberattack has been launched so that we may identify issues to be resolved and improve the level of our response.

(2) Physical and technical security control measures to prevent human system breaches

HEPCO has adopted appropriate safeguards to prevent system intrusions, attacks on systems, destruction or alteration of important data, as well as information leaks and breaches.

(3) Readiness against external threats seeking to exploit vulnerabilities

Along with prohibiting the use of USB drives in principle, HEPCO has put in place preparations to counter external threats seeking to exploit vulnerabilities. These controls include filters to restrict viewing of external websites, checking for viruses in email attachments sent from outside the company, as well as other measures to keep data safe against external attacks.

Group-wide information security initiatives

HEPCO has put in place an information security management system for the entire HEPCO Group. We formulate plans and promote information security measures to serve as the standard throughout the entire group.

In addition, we established the HEPCO Group Information Security Policy so that information security is maintained and augmented throughout the entire group and our group companies uniformly and reliably implement information security measures. Group companies adopt a variety of security control measures based upon this policy.

Moreover, HEPCO has supported group companies in developing action plans to reinforce information security within their companies. Initiatives developed as part of the PDCA cycle are implemented in conjunction with efforts to raise the level of information security throughout the entire HEPCO Group.

TOPICS

Education and training provided for employees to improve their information security response capabilities

HEPCO Group has strengthened the ability to respond to cyberattacks attempted using suspicious emails, a technique that is becoming more sophisticated by the day. To help our personnel learn how to identify suspicious emails and respond after one is received, we have held training sessions for employees on the topic of suspicious emails as well as conducted multiple exercises simulating targeted email attacks on employees and corporate officers of HEPCO and our group companies.

Disclosure of information and constructive dialogue with shareholders and investors

HEPCO Group strives to disclose timely, appropriate and impartial information as well as communicate information to help further a better understanding of our business activities. We are working to build trust through a continuing dialogue with our shareholders and investors.

Assurance of appropriate information disclosure and transparency

In accordance with laws, regulations, and other principles, HEPCO discloses in a timely and appropriate manner to our shareholders and other stakeholders information about our financial affairs and managerial situation as well as management strategies, management issues, risks, governance, and other non-financial information.



Constructive Dialogue with Our Shareholders and Investors

So that we may hold a constructive dialogue with shareholders and investors, HEPCO set up a division exclusively for investor relations and designated a director to oversee these interactions.

We are also endeavoring to promote a better understanding of our business activities and enhance communication through various means that promote dialogue, such as holding company information sessions. Information of interest, comments, and other suggestions gained through these dialogues are timely and appropriately reported to HEPCO directors.

Beginning in FY2022, we have strived to enhance communication by conducting company information sessions both in-person and online so that as many people as possible are able to participate.

[Key activity achievements]

- Company information sessions featuring HEPCO President as the main speaker:
2 sessions held with total of approx. 140 attendees
- Shareholder and investor consultations after quarterly earnings reports:
Total of approx. 80 companies



In-person information session that is also being streamed online



Dialoguing with shareholders at general meetings of shareholders

In advance of general shareholder meetings, we have endeavored to enhance the content of information provided and disclose it early. We have also made available in advance videos explaining our business reports among other efforts to provide easy-to-understand explanations for shareholders as soon as possible.

Also, taking into account the COVID-19 pandemic, we have adopted discussion formats that make it easy for our shareholders to communicate their views (format in which questions and comments about reports and agenda items are compiled and then discussed) while also reducing the session duration. We aspire to respectfully provide explanations and respond to questions posed by our many shareholders and thereby enhance dialogue.



General meeting of shareholders in session

The status of HEPCO Group initiatives are stated as relates to the United States Sustainability Accounting Standards Board (SASB) industry-specific standards (electric utilities & power generators industry). The SASB standards were prepared envisioning mainly companies and markets in the United States, so they also include items that do not correspond to business activities in Japan. HEPCO has endeavored to disclose as much information as possible in accordance with the SASB standards.

Topic	Accounting Metric	Code	Performance
Environment			
Greenhouse Gas Emissions & Power Supply Plan	(1) Scope 1 emissions (2) Ratio of Scope 1 emissions subject to emission regulations (3) Ratio of Scope 1 emissions subject to mandatory emission reporting	IF-EU·110a.1	(1) 14,100,000t-CO ₂ (2) 99% (3) 100%
	Greenhouse gas (GHG) emissions associated with power supplied to customers	IF-EU·110a.2	12,100,000t-CO ₂
	○Short- and long-term Scope 1 emissions reduction plan ○Emissions reduction targets ○Analysis of target performance	IF-EU·110a.3	<p>The HEPCO Group is striving to achieve targets for reducing greenhouse gas emissions set in the HEPCO Group Management Vision 2030, redouble those efforts, and further promote initiatives to achieve carbon neutrality for all energy use in Hokkaido by 2050.</p> <p>○Emissions reduction targets</p> <p>◇FY2031 targets</p> <p>·Aim is to reduce CO₂ emissions from the power generation division by more than half compared to FY2014 level, which was 18.92 million tons (reduction equivalent to over 10 million tons annually).</p> <p>◇FY2051 targets</p> <p>·In addition to eliminating CO₂ emissions from the power generation division, our aim is to expand electrification, use green hydrogen among other efforts to achieve carbon neutrality in Hokkaido, including in forms of energy other than electricity.</p> <p>○Reduction plan</p> <p>◇By 2030</p> <p>·Restart nuclear power station on the fundamental premise that safety is assured</p> <p>·Expand renewable energy power generation business inside and outside Japan to increase power generation capacity by 300,000 kW or more</p> <p>·Utilize low CO₂-emitting LNG-fired thermal power plants</p> <p>·Decommission aging oil- and coal-fired power plants</p> <p>·Promote adoption of heat pumps and other high- efficiency electric devices and electric vehicles</p> <p>·Offer energy-saving diagnoses</p> <p>·Increase adoption of ZEB</p> <p>·Offer PPA services</p> <p>◇By 2050 (additional measures for future initiatives)</p> <p>·Develop CO₂-free thermal power plants that utilize hydrogen, ammonia, CCUS, and other innovative technologies</p> <p>·Supply hydrogen and ammonia produced from renewable energy sources in Hokkaido to meet electric power which is difficult to electrify</p> <p>○Analysis of achievements</p> <p>·In addition to utilizing the low CO₂-emitting and highly-efficient LNG-fired Ishikariwan Shinko Power Station, HEPCO is suspending or decommissioning aging coal-fired thermal power plants and taking other steps that put us on a course for reducing emissions below the FY2014 level. (CO₂ emissions from power generation division in FY2022: 14.41 million tons)</p>

Topic	Accounting Metric	Code	Performance
Greenhouse Gas Emissions & Power Supply Plan	(1) Number of customers served in markets subject to renewable portfolio standards (RPS) (2) Percentage of RPS target achieved through markets subject to RPS	IF-EU·110a.4	(1) N/A (2) N/A *Given as "N/A" because Japan abolished the RPS Act, which prescribed RPS regulations, and transitioned to the Feed-in Tariff System in 2012.
Air Quality	Air emissions of the following pollutants: (1) NOX (excluding N ₂ O) (2) SO _x (3) Particulate matter (PM ₁₀) (4) Lead (Pb) (5) Mercury (Hg); percentage of each in or near areas of dense population	IF-EU·120a.1	(1) 10,000t, 95% (2) 10,000t, 99% (3) Undisclosed (4) Undisclosed (5) Undisclosed
Water Resource Management	(1) Total water withdrawn (2) Total water consumed; percentage of each in regions with high or extremely high baseline water stress	IF-EU·140a.1	(1) 25,800,000,000m ³ , 0% (2) 2,550,000m ³ , 0%
	Number of non-compliance incidents associated with water intake and water quantity	IF-EU·140a.2	0 incidents
	Water resource management risks and risk mitigation strategies	IF-EU·140a.3	The following initiatives have been carried out in an effort to ascertain water-related risks and mitigate such risks. To ascertain the impact of water-related risks, the World Resources Institute's Aqueduct tools have been used to analyze water stress in areas where HEPCO Group facilities are located. The results have shown water stress classified as "low-medium," indicating that water-related risks do not have a significant impact on operations. ○Thermal power generation facilities ·Water used for cleaning equipment and other wastewater generated during power plant operation is passed through a comprehensive wastewater treatment system or other such facility to separate oils, remove solids, neutralize effluent, and perform other functions so that the water may then be released as clean water. ·The difference between water intake and drainage temperatures as well as other parameters are monitored to investigate the effect that water releases have on the sea environment. ·In accordance with the Water Pollution Prevention Act's effluent standards, pollution control agreements entered into with local governments, and other mandates, HEPCO sets management values and strives to prevent water pollution. ○Hydroelectric power production facilities ·The HEPCO Group complies with water intake quantities for which permits have been received in accordance with laws and regulations. ·At hydroelectric power plants that correspond to certain conditions*, water is released for river environment maintenance. *Hydroelectric power plants corresponding to certain conditions: Sectors where the water level may fall due to water intake for hydroelectric power generation are required to be 10 km or longer in length with a catchment area of 200 km ² or larger.
Coal Ash Management	Amount of coal ash generated and percentage recycled	IF-EU·150a.1	·633,301t, 89%
	Number of coal ash impoundments	IF-EU·150a.2	·2 locations ·The structure of coal ash repositories is a landfill, and the HEPCO Group strives to ensure safety by complying with the ministerial ordinance-mandated "Technical Standards for Final Disposal Sites for Ordinary Waste and Final Disposal Sites for Industrial Waste."

Topic	Accounting Metric	Code	Performance
Social Capital			
Energy Affordability	Average retail electric rate (per 1 kWh) for (1) residential, (2) commercial, and (3) industrial customers	IF-EU-240a.1	(1) 27.49 [JPY] (2) 22.32 [JPY] (3) 21.64 [JPY] *Calculation excludes the renewable energy surcharge.
	Typical monthly electric bill for residential customers for (1) 500 kWh and (2) 1,000 kWh	IF-EU-240a.2	(1) 16,671 [JPY] (2) 35,479 [JPY] *Calculation excludes the renewable energy surcharge.
	Due to non-payment of electric bill, (1) Number of residential customer electric disconnections and (2) percentage reconnected within 30 days	IF-EU-240a.3	(1) 15,757 *Number of disconnections due to nonpayment of electric bill *Excludes number of supply interruptions based upon the General Provisions for Specified Retail Service (2) None *Cases where an electric bill has not been paid after the due date are stipulated to be a revocation of the supply contract in accordance with the Electricity Standard Terms and Conditions (contract cancellation). *Because supply stops and restarts are not specified in the Electricity Standard Terms and Conditions, this item is listed as "None."
	External factors relating to ease with which consumers may access electric power (Including economic conditions within electric power supply service area)	IF-EU-240a.4	The Electricity Business Act specifies: "A general electricity transmission and distribution utility must not refuse to provide wheeling service in its service area without justifiable grounds." In principle, electric power is supplied to all customers who wish such service within the Hokkaido Electric Power Network service area, so there is no difference in the ease with which consumers are able to access electric power. Other external factors that may affect electricity rates are the renewable energy surcharge and fuel cost adjustment.
Human Capital			
Occupational Health & Safety	(1) Rate of occupational accidents (TRIR: number of incidents per 200,000 man-hours) (2) Rate of fatal occupational accidents (number) (3) Rate of potential incidents (NMFR: no. of incidents per 200,000 man-hours)	IF-EU-320a.1	(1) 0.44 [%] [HEPCO employees] (2) 0 [incidents] [HEPCO employees] (3) Undisclosed (Total potential incidents are not tabulated for the entire company, so this item is given as undisclosed.)
Business Model Innovation			
End-Use Efficiency & Demand	Percentage of electric utility revenues from rate structures that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)	IF-EU-420a.1	There are no items corresponding to decoupling or lost revenue adjustment mechanisms.
	Percentage of electricity supplied (MWh) delivered over smart grids	IF-EU-420a.2	Percentage of meters converted to smart meters as of the end of March 2022: 81.6%
	Electric power reduced through energy-saving initiatives	IF-EU-420a.3	The following quantitative data is disclosed in lieu of the amount of electric power reduced. OFY2022 energy-saving, electrification and ZEB proposals: approx. 4,100 (companies) *HEPCO proposes a variety of solutions to our customers to meet their electrification and energy-saving needs. (See https://www.hepco.co.jp/business/total_solution/index.html) OService for energy-saving information(See https://www.enemall.hepco.co.jp/u.index.html) ·HEPCO Ene-Mall registrants: 297,760 HEPCO Ene-Mall is a free members-only online service that delivers useful information to customers, such as how to most efficiently use electricity presented with comparative graphs showing monthly electricity charges and usage.

Topic	Accounting Metric	Code	Performance
Leadership & Governance			
Nuclear Safety & Emergency Management	Total number of nuclear power units (Based on classification using U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column)	IF-EU-540a.1	3 units (Tomari Nuclear Power Station's 3 units) *Currently, all units at Tomari Nuclear Power Station are shutdown, and the HEPCO Group is currently undergoing a review by the Nuclear Regulation Authority to verify compliance with new regulatory requirements.
	Nuclear safety management and emergency management	IF-EU-540a.2	Each and every HEPCO employee recognizes that he or she is responsible for safety and continually works to foster and maintain a safety culture. HEPCO's efforts to improve safety include formulation and annual reassessments of a safety improvement plan based on our value that safety is the highest priority. One example may be seen in HEPCO Group's establishment and reinforcement of the Corrective Action Program (CAP), an initiative for broadly collecting information as well as detecting and resolving issues voluntarily in order to prevent nonconformances from happening and recurring. In addition, HEPCO Group participates in activities sponsored by organizations inside and outside Japan relating to nuclear power so that we may proactively incorporate knowledge about nuclear safety. We also apply the Japan Nuclear Safety Institute's guidelines on excellence and engage in activities with the aim of achieving excellence.
Grid Resiliency	Number of regulatory non-compliance incidents relating to cybersecurity and physical risks	IF-EU-550a.1	Undisclosed (Out of consideration of the risks that disclosure may lead to a cyber attack, the number of instances is given as "undisclosed.")
	(1) Average annual service interruption time (System Average Interruption Duration Index (SAIDI)) (2) Average annual number of service interruptions (System Average Interruption Frequency Index (SAIFI)) (3) Average time until restoration after one service interruption (Customer Average Interruption Duration Index (CAIDI)) *Inclusive of event-caused interruptions over a certain magnitude	IF-EU-550a.2	(1) 12 minutes (2) 0.14 times (3) 85.71 minutes/service interruption

Activity Metric	Code	Performance
Number of (1) residential, (2) commercial, and (3) industrial customers	IF-EU-000.A	(1) 2.91 million (Total residential) (2) and (3) total: 380,000 (Total electric power)
Total electricity supplied to: (1) residential, (2) commercial, (3) industrial, and (4) all other customers	IF-EU-000.B	(1) 8,365 [GWh] (Total residential) (2) and (3) total: 13,714 [GWh] (Total electric power) (4) 86 [GWh] (5) 7,765 [GWh]
Length of transmission and distribution lines	IF-EU-000.C	[Transmission lines] Overhead: 12,501km, Underground: 735km [Distribution lines] Overhead: 66,666km, Underground: 1,693km
Total electricity generated, percentage by major energy source, percentage in regulated markets	IF-EU-000.D	Total electricity generated: 23,121GWh, of which hydroelectric power is 14.9%, thermal power 84.6%, nuclear power: none, and new energies: 0.5%. Japan has no regulated markets.
Amount of wholesale electricity purchased	IF-EU-000.E	9,901 [GWh]

Financial Information

Key Financial Data (Consolidated Basis)

	2018	2019	2020	2021	2022
Operating revenue (Sales) (Unit: 1 million yen) ^{(*)1}	612,999	630,298	603,693	585,203	663,414
Operating profit (Unit: 1 million yen)	33,726	42,217	42,415	53,775	24,970
Ordinary profit (Unit: 1 million yen)	19,421	30,181	32,640	41,150	13,830
Profit attributable to parent company shareholders (Unit : 1 million yen)	16,549	22,357	26,720	36,155	6,864
ROE (%) ^{(*)2}	8.48	10.69	11.83	14.12	2.50
Profit per share of capital stock (yen/share) ^{(*)3}	71.84	101.93	123.16	169.09	26.57
Cash dividend per share (common stock) (yen)	5	10	10	20	20
Cash dividend per share (Class-A or Class-B preferred stock) (yen)	3,800,000	3,000,000	3,000,000	3,000,000	3,000,000
Capital investment (Unit: 1 million yen)	139,141	137,695	116,606	78,360	87,185
Total assets (Unit: 1 million yen)	1,915,904	1,954,981	1,959,060	2,001,650	1,992,879
Total net assets (Unit: 1 million yen)	212,991	228,417	247,381	289,733	285,717
Shareholders' equity ratio (%)	10.51	11.09	11.99	13.84	13.68
Interest-bearing debt (Unit: 1 million yen)	1,426,808	1,400,740	1,416,997	1,397,394	1,385,387
Cash flow from operating activities (Unit: 1 million yen)	107,054	113,808	102,686	136,547	102,337
Cash flow from investing activities (Unit: 1 million yen)	△ 145,355	△ 126,932	△ 126,745	△ 85,607	△ 77,720
Cash flow from financing activities (Unit: 1 million yen)	66,360	△ 31,238	9,823	△ 24,662	△ 19,489

*1 Following application of the "Accounting Standard for Revenue Recognition" (Accounting Standards Board of Japan, No. 29, March 31, 2020), the Regulation on Accounting at Electric Utilities has been revised and the amount of the impact from the Feed-in Tariffs (FIT) for renewable energy sources is no longer subject to revenue and expense reporting from the beginning of the current accounting year. Key management indices and other metrics relating to 2020 and before are regarded as management indices and other metrics once this revision has been applied retroactively to previous periods.

*2 Shareholders' equity is calculated using the value arrived at by subtracting non-controlling shareholders' interest from net assets.

*3 Profit per share of capital stock is calculated by subtracting the amount of preferred dividends attributed to the current term from profit attributable to parent company shareholders.

*4 The amount of power received from consolidated subsidiaries Hokkaido Power Engineering Co., Inc. and HOKUDEN ECO-ENERGY Co., Ltd. is included.

*5 The total may not match as figures have been rounded down or up.

Key Non-Financial Data (Consolidated Basis)

	2018	2019	2020	2021	2022
Electricity sales (GWh)					
Low-voltage customers	12,628	11,673	11,169	10,815	10,345
High- and extra high-voltage customers	12,178	11,101	12,532	11,791	11,734
Other	—	—	—	77	86
Total retail electricity sales	24,806	22,774	23,701	22,683	22,165
Electricity sold to other companies	3,305	4,311	2,818	3,870	7,765
Total	28,111	27,085	26,519	26,553	29,930
Supplied power (GWh)					
Hydroelectric	3,279	4,083	3,277	3,450	3,454
Thermal	21,029	19,082	18,020	18,007	19,554
Nuclear	—	—	—	—	—
New energies, etc.	148	145	128	129	113
Electricity purchased externally ^{(*)4}	6,822	6,829	7,546	7,998	9,901
Pumping power at pumping power plants	△ 239	△ 325	△ 244	△ 225	△ 203
Total	31,039	29,814	28,727	29,359	32,819
Power generating capacity (MW)					
Hydroelectric	1,648	1,650	1,651	1,651	1,631
Oil	1,815	1,815	1,815	1,815	1,815
Coal	2,250	2,250	2,250	2,250	2,250
LNG	—	569	569	569	569
Nuclear	2,070	2,070	2,070	2,070	2,070
New energies, etc.	26	26	26	26	26
Total	7,810	8,381	8,382	8,382	8,362
Water supply rate (%)	94.9	112.6	88.7	92.3	96.2
CO ₂ emission factor (kg-CO ₂ /kWh)	0.678	0.656	0.601	0.549	0.533
No. of employees	10,962	10,937	10,736	10,503	10,226

Consolidated Balance Sheets

	(Million yen)	
	2021	2022
Assets		
Non-current assets	1,773,810	1,763,847
Electric utility plants and equipment	1,202,725	1,163,594
Hydroelectric power production facilities	203,730	202,852
Thermal power production facilities	202,765	187,553
Nuclear power production facilities	166,332	148,664
Transmission facilities	182,371	179,494
Transformation facilities	106,253	105,698
Distribution facilities	289,311	292,648
General facilities	45,589	40,363
Other electric utility plants and equipment	6,370	6,318
Other non-current assets	52,418	57,530
Construction in progress	164,648	183,841
Construction in progress	150,537	166,238
Retirement in progress	146	146
Special account related to spent nuclear fuel reprocessing	13,965	17,456
Nuclear fuel	231,162	235,193
Nuclear fuel in processing	231,162	235,193
Investments and other assets	122,854	123,685
Long-term investments	52,144	57,104
Net defined benefit asset	19,475	17,265
Deferred tax assets	40,822	40,840
Other	11,386	14,160
Allowance for doubtful accounts	△ 974	△ 5,686
Current assets	227,839	229,031
Cash and deposits	83,767	88,894
Notes & accounts receivable-trade and contract assets	73,107	71,449
Inventories	31,013	37,084
Other	42,878	32,317
Allowance for doubtful accounts	△ 2,926	△ 714
Total	2,001,650	1,992,879

	(Million yen)	
	2021	2022
Liabilities and Net assets		
Liabilities		
Non-current liabilities	1,376,655	1,378,184
Bonds payable	690,000	710,000
Long-term loans payable	534,670	512,453
Net defined benefit liability	35,926	37,040
Asset retirement obligations	104,612	108,388
Other	11,446	10,302
Current liabilities	333,730	327,329
Current portion of long-term debt	122,642	118,105
Short-term loans payable	39,900	44,500
Commercial papers	10,000	—
Notes and accounts payable-trade	48,457	60,167
Accrued taxes	18,798	8,405
Other	93,932	96,151
Reserves under the special laws	1,530	1,647
Reserve for fluctuation in water levels	1,530	1,647
Total Liabilities	1,711,916	1,707,161
Net assets		
Shareholders' equity	274,004	273,867
Share Capital	114,291	114,291
Capital surplus	47,784	47,348
Retained earnings	130,228	130,094
Treasury stock	△ 18,300	△ 17,867
Accumulated other comprehensive income	3,097	△ 1,219
Valuation difference on available-for-sale securities	2,369	1,517
Remeasurements of defined benefit plans	727	△ 2,736
Non-controlling interests	12,631	13,069
Total net assets	289,733	285,717
Total	2,001,650	1,992,879

Consolidated Statements of Operations

(Million yen)

	2021	2022
Operating revenues	585,203	663,414
Electric utility operating revenue	547,329	625,497
Other business operating revenue	37,874	37,916
Operating expenses	531,428	638,443
Electric utility operating expenses	496,140	604,947
Other business operating expenses	35,288	33,496
Operating profit	53,775	24,970
Non-operating income	1,697	3,400
Dividend income	631	722
Interest income	21	20
Share of profit of entities accounted for using equity method	150	326
Gain on sales of goods	132	722
Other	761	1,609
Non-operating expenses	14,321	14,540
Interest expenses	10,400	9,513
Loss on valuation of securities	1,870	1,478
Other	2,050	3,548
Ordinary revenue	586,901	666,814
Ordinary expenses	545,750	652,983
Ordinary profit	41,150	13,830
Provision or reversal of reserve for fluctuation in water levels	△ 260	116
Provision of reserve for fluctuation in water levels	—	116
Reversal of reserve for fluctuation in water levels	△ 260	—
Extraordinary loss	—	1,519
Loss on return of imbalance charge	—	1,519
Profit before income taxes	41,411	12,194
Income taxes-current	7,258	3,083
Income taxes-deferred	△ 2,186	1,780
Total income taxes	5,071	4,864
Profit	36,339	7,330
Profit attributable to non-controlling interests	183	465
Profit attributable to owners of parent	36,155	6,864

Consolidated Statements of Comprehensive Income

(Million yen)

	2021	2022
Profit	36,339	7,330
Other comprehensive income		
Valuation difference on available-for-sale securities	3,069	△ 791
Deferred gains or losses on hedges	△ 7	—
Remeasurements of defined benefit plans	6,663	△ 3,399
Total other comprehensive income	9,725	△ 4,191
Comprehensive income	46,064	3,139
Comprehensive income attributable to		
owners of parent	45,742	2,548
non-controlling interests	322	591

Consolidated Statements of Changes in Net Assets Previous consolidated fiscal year (April 1, 2020 to March 31, 2021)

(Million yen)

	Shareholders' equity					Accumulated other comprehensive income				Non-controlling interests	Total net assets
	Share Capital	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
Balance as of April 1, 2020	114,291	47,786	97,537	△ 18,206	241,409	△ 669	7	△ 5,827	△ 6,490	12,461	247,381
Cumulative effects of changes in accounting policies			—		—						—
Balance at beginning of term restated to reflect changes in accounting policies	114,291	47,786	97,537	△ 18,206	241,409	△ 669	7	△ 5,827	△ 6,490	12,461	247,381
Changes during the period	Dividends of surplus		△ 3,465		△ 3,465						△ 3,465
	Profit attributable to owners of parent		36,155		36,155						36,155
	Purchase of treasury stock			△ 95	△ 95						△ 95
	Disposal of treasury stock		△ 1	1	0						0
	Change in ownership interest of parent due to transactions with non-controlling interests		△ 0		△ 0						△ 0
	Net changes of items other than shareholders' equity					3,038	△ 7	6,555	9,587	169	9,756
Total changes of items during the period	—	△ 1	32,690	△ 93	32,595	3,038	△ 7	6,555	9,587	169	42,351
Balance as of March 31, 2021	114,291	47,784	130,228	△ 18,300	274,004	2,369	—	727	3,097	12,631	289,733

Consolidated Statements of Changes in Net Assets Current consolidated fiscal year (April 1, 2021 to March 31, 2022)

(Million yen)

	Shareholders' equity					Accumulated other comprehensive income				Non-controlling interests	Total net assets
	Share Capital	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
Balance as of April 1, 2021	114,291	47,784	130,228	△ 18,300	274,004	2,369	—	727	3,097	12,631	289,733
Cumulative effects of changes in accounting policies			△ 452		△ 452						△ 452
Balance at beginning of term restated to reflect changes in accounting policies	114,291	47,784	129,775	△ 18,300	273,551	2,369	—	727	3,097	12,631	289,280
Changes during the period	Dividends of surplus		△ 6,546		△ 6,546						△ 6,546
	Profit attributable to owners of parent		6,864		6,864						6,864
	Purchase of treasury stock			△ 168	△ 168						△ 168
	Disposal of treasury stock		△ 436	600	164						164
	Change in ownership interest of parent due to transactions with non-controlling interests		△ 0		△ 0						△ 0
	Net changes of items other than shareholders' equity					△ 852	—	△ 3,464	△ 4,316	438	△ 3,878
Total changes of items during the period	—	△ 436	318	432	315	△ 852	—	△ 3,464	△ 4,316	438	△ 3,562
Balance as of March 31, 2022	114,291	47,348	130,094	△ 17,867	273,867	1,517	—	△ 2,736	△ 1,219	13,069	285,717

Consolidated Statements of Cash Flows

(Million yen)

	2021	2022
Net cash provided by (used in) operating activities		
Profit before income taxes	41,411	12,194
Depreciation and amortization	79,267	77,435
Decommissioning costs of nuclear power units	4,456	4,623
Loss on retirement of non-current assets	2,443	5,568
Interest and dividends income	△ 652	△ 743
Interest expenses	10,400	9,513
Loss on return of imbalance charge	—	1,519
Decrease (increase) in notes & accounts receivable-trade and contract assets	△ 11,257	1,656
Decrease (increase) in inventories	5,219	△ 6,071
Increase (decrease) in notes and accounts payable-trade	5,508	11,486
Increase (decrease) in accrued consumption taxes	5,881	△ 9,737
Other	10,384	10,769
Subtotal	153,063	118,215
Interest and dividend income received	675	745
Interest expenses paid	△ 10,500	△ 9,690
Income taxes paid	△ 6,691	△ 6,932
Net cash provided by (used in) operating activities	136,547	102,337
Net cash provided by (used in) investing activities		
Purchase of non-current assets	△ 85,003	△ 77,787
Payments of investment and loans receivable	△ 4,589	△ 2,686
Collection of investment and loans receivable	312	409
Other	3,673	2,344
Net cash provided by (used in) investing activities	△ 85,607	△ 77,720

(Million yen)

	2021	2022
Net cash provided by (used in) financing activities		
Proceeds from issuance of bonds	119,565	69,746
Redemption of bonds	△ 110,000	△ 40,000
Proceeds from long-term loans payable	62,500	45,400
Repayments of long-term loans payable	△ 57,062	△ 82,064
Proceeds from short-term loans payable	141,357	144,100
Repayments of short-term loans payable	△ 146,398	△ 139,443
Proceeds from issuance of commercial papers	140,000	85,000
Redemption of commercial papers	△ 170,000	△ 95,000
Cash dividends paid	△ 3,454	△ 6,525
Other	△ 1,170	△ 703
Net cash provided by (used in) financing activities	△ 24,662	△ 19,489
Net increase (decrease) in cash and cash equivalents	26,277	5,127
Cash and cash equivalents at beginning of period	57,490	83,767
Cash and cash equivalents at end of period	83,767	88,894

Reportable Segment Sales, Profit/Loss, Assets, and Other Financial Information

Previous consolidated fiscal year (April 1, 2020 to March 31, 2021) (Million yen)

	Reportable segment			Other (Note 1)	Total	Adjustment (Note 2)	Consolidated (Note 3)
	Hokkaido Electric Power	Hokkaido Electric Power Network	Total				
Sales							
Sales to customers	470,465	76,852	547,318	37,885	585,203	—	585,203
Intersegment sales	68,207	166,920	235,127	101,735	336,862	△ 336,862	—
Total	538,672	243,773	782,445	139,621	922,066	△ 336,862	585,203
Operating profit	36,226	1,197	37,424	4,745	42,169	△ 1,019	41,150
Assets	1,861,206	713,388	2,574,594	130,524	2,705,119	△ 703,468	2,001,650
Other							
Depreciation and amortization	43,968	28,222	72,191	7,591	79,783	△ 516	79,267
Interest expenses	10,370	3,996	14,366	96	14,462	△ 4,061	10,400
Capital investments	22,298	31,799	54,097	7,840	61,938	△ 949	60,988

Note 1: The category of "Other" is business segments not included in reportable segments, and includes other consolidated subsidiaries, etc.

2: The adjustments of negative ¥1,019 million in segment profit, negative ¥703,468 million in segment assets, negative ¥516 million in depreciation and amortization, negative ¥4,061 million in interest expenses, and negative ¥949 million on an increase in capital investments are due to elimination of transactions between segments.

3: Segment profit has been adjusted with ordinary profit listed in the consolidated financial statement.

Current consolidated fiscal year (April 1, 2021 to March 31, 2022) (Million yen)

	Reportable segment			Other (Note 1)	Total	Adjustment (Note 2)	Consolidated (Note 3)
	Hokkaido Electric Power	Hokkaido Electric Power Network	Total				
Sales							
Revenue from contracts with customers	526,499	94,630	621,129	37,128	658,258	—	658,258
Electric utility operating revenue	525,420	94,630	620,050	1,344	621,395	—	621,395
Other business operating revenue	1,078	—	1,078	35,784	36,862	—	36,862
Other revenue	616	3,721	4,337	817	5,155	—	5,155
Sales to customers	527,116	98,351	625,467	37,946	663,414	—	663,414
Intersegment sales	70,818	169,648	240,466	98,384	338,851	△ 338,851	—
Total	597,934	267,999	865,934	136,331	1,002,265	△ 338,851	663,414
Segment profit (loss)	12,000	△ 4,444	7,555	7,965	15,521	△ 1,690	13,830
Assets	1,855,074	705,063	2,560,138	143,454	2,703,592	△ 710,713	1,992,879
Other							
Depreciation and amortization	43,617	26,591	70,208	7,762	77,971	△ 536	77,435
Interest expenses	9,483	3,642	13,126	92	13,218	△ 3,705	9,513
Capital investments	27,376	39,125	66,501	8,879	75,380	△ 1,284	74,096

Note 1: The category of "Other" is business segments not included in reportable segments, and includes other consolidated subsidiaries, etc.

2: The adjustments of negative ¥1,690 million in segment profit, negative ¥710,713 million in segment assets, negative ¥536 million in depreciation and amortization, negative ¥3,705 million in interest expenses, and negative ¥1,284 million on an increase in capital investments are due to elimination of transactions between segments.

3: Segment profit or loss has been adjusted with ordinary profit listed in the consolidated financial statement.

Reportable segments for the company are "HEPCO," which handles corporate functions (Group head office functions) as well as the power generation and retail electricity businesses, and "Hokkaido Electric Power Network," which handles the power transmission and distribution businesses. The "Other" category includes electrical and telecommunications works, general management of buildings, civil engineering and construction, periodic inspection, maintenance and repair of power plants, telecommunications business, etc.

Corporate Information

Corporate Profile (Non-Consolidated Basis)

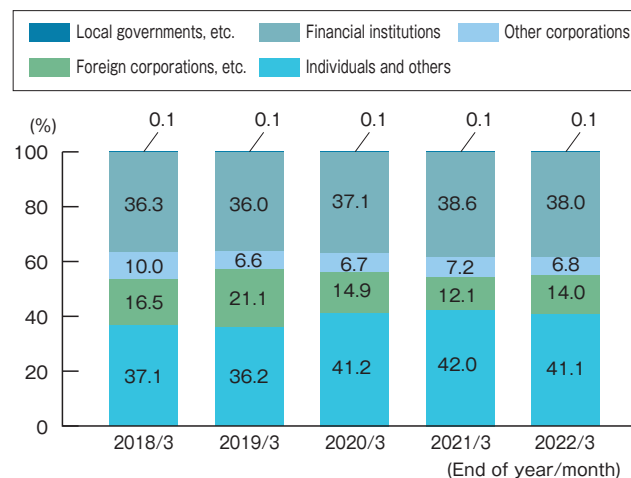
Overview (As of March 31, 2022)

● Corporate Name	Hokkaido Electric Power Co., Inc.
● Location [Head Office]	2, Higashi 1-chome, Odori, Chuo-ku, Sapporo, Hokkaido 060-8677, Japan Tel : (81) 11-251-1111
● Established	May 1, 1951
● Share Capital	¥114,291 million
● Total Assets	¥1,849,970 million
● Electricity Retail Sales (FY2022)	Low-voltage customers 10,345 GWh High-voltage and extra high-voltage 11,734 GWh Total 22,079 GWh
● Website URL	https://www.hepco.co.jp/english/

Share Information (As of March 31, 2022)

● Number of Shareholders	Common stock 69,884 Class-B preferred stock 2
● Total Number of Authorized Shares	495 million
● Total Number of Issued Shares	Common stock 215,291,912 Class-B preferred stock 470
● Independent Auditor	Ernst & Young ShinNihon LLC
● Stock Listings	· Tokyo Stock Exchange, Inc. (Prime Market) · Sapporo Securities Exchange
● Transfer Agent	Mizuho Trust & Banking Co., Ltd.

Distribution of Share Ownership



Major Shareholders (As of March 31, 2022)

(1) Common Stock

Shareholder	No. of shares held (1,000-share units)	Ownership ratio
The Master Trust Bank of Japan, Ltd. (Trust Account)	30,191	14.68%
North Pacific Bank, Ltd.	10,215	4.97%
Custody Bank of Japan, Ltd. (Trust Account)	7,251	3.53%
Nippon Life Insurance Company	7,231	3.52%
HEPCO Employees Shareholding Association	5,344	2.60%
Mizuho Bank, Ltd.	4,226	2.05%
The Hokkaido Bank, Ltd.	4,131	2.01%
Meiji Yasuda Life Insurance Company	4,048	1.97%
Custody Bank of Japan, Ltd. (Trust Account 4)	3,210	1.56%
Isao Nasu	2,852	1.39%

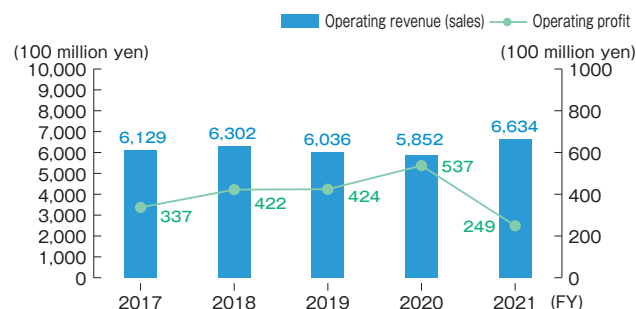
Note : Ownership ratio is calculated by subtracting 9,971,642 shares of treasury stock from the total number of shares outstanding.

(2) Class-B Preferred Stock

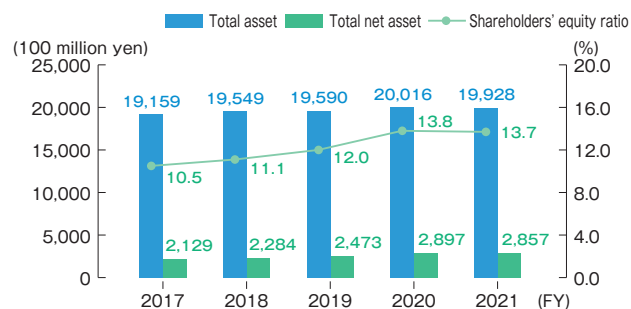
Shareholder	No. of shares held	Ownership ratio
Development Bank of Japan Inc.	400	85.11%
Mizuho Bank, Ltd.	70	14.89%

Financial & Non-Financial Highlights

Consolidated operating revenue (sales)/operating profit

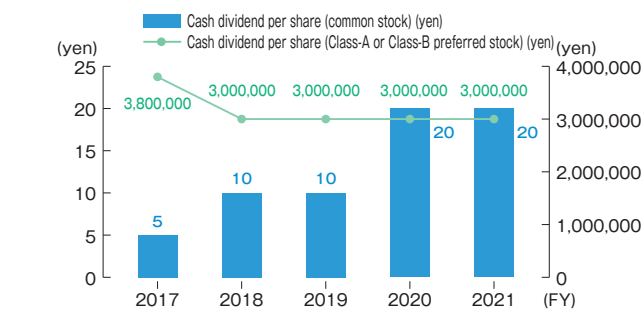


Total assets, total net assets and shareholders' equity ratio (consolidated)

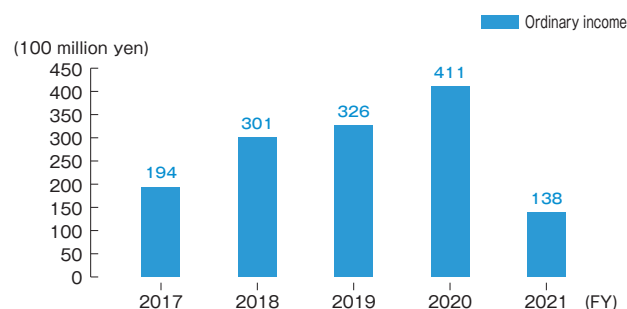


*Shareholders' equity is calculated by subtracting non-controlling shareholders' interest from net assets.

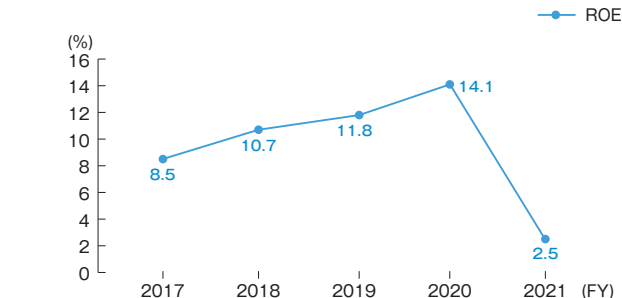
Cash dividend per share (common stock, Class-A or Class-B preferred stock) (yen)



Consolidated ordinary income

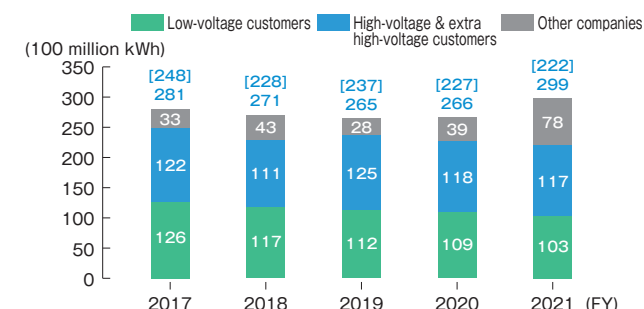


Consolidated ROE



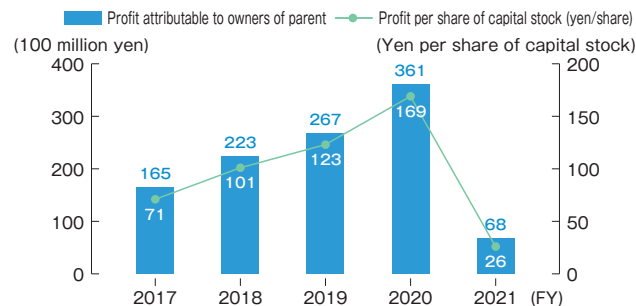
*Shareholders' equity is calculated by subtracting non-controlling shareholders' interest from net assets.

Total electricity sold



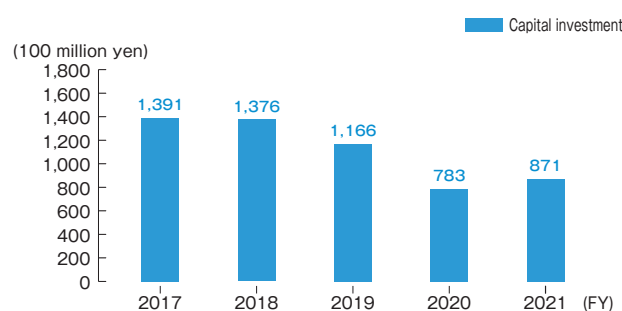
*Figures in parentheses indicate retail electricity sales (repost)

Profit attributable to parent company shareholders and profit per share of capital stock

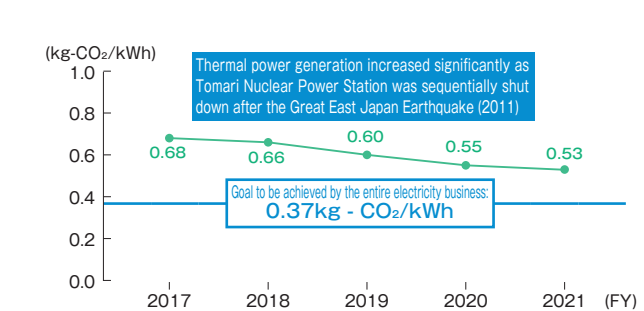


*Profit per share of capital stock is calculated by subtracting the amount of preferred dividends attributed to the current term from profit attributable to parent company shareholders.

Capital investment (consolidated)



Change in CO₂ emission factor



*Value adjusted for CO₂ credits and other measures



Daisetsu Mountain Range and the morning glow reflected in flooded rice fields in Pippu Town