



Tohoku Electric Power Group

Integrated Report 2022

Editorial Policy

Tohoku Electric Power Group Integrated Report 2022 Editorial Policy

The Tohoku Electric Power Group has published integrated reports since FY2018 to promote understanding of the Group's plans for medium- and long-term value creation from both financial and non-financial perspectives.

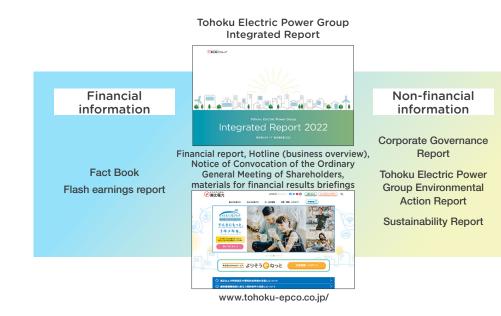
Based on a careful selection of the information we want to convey to shareholders and investors, this FY2022 Report includes an introduction to the Tohoku Electric Power Group's sustainability priorities (materiality topics) and specific measures designed to achieve Working alongside next, the Tohoku Electric Power Group's Medium- to Long-Term Vision.

The Report also reflects the International Integrated Reporting Framework of the IFRS Foundation, the Guidance for Collaborative Value Creation from the Ministry of Economy, Trade and Industry of Japan, and other documents. Prior to its publication we submitted this Report to the Board of Directors and confirmed its validity.

We will continue to enhance the content provided in the Report to deepen understanding of the Tohoku Electric Power Group among our stakeholders.

Tohoku Electric Power's media for information disclosure

The Tohoku Electric Power Group reports issues and actions of high significance in its Integrated Report. Indepth financial information and non-financial information are available from other information sources. The Tohoku Electric Power Group's Sustainability Report introduces a broad range of information on sustainability, including the Group's sustainability concepts, targets, and initiatives.



Guidelines and other information used for reference

Social Governance

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- Ministry of Economy, Trade and Industry: Guidance for Collaborative Value Creation
- IFRS Foundation: The International <IR> Framework
- IFRS Foundation: SASB Standards
- Global Reporting Initiative (GRI): GRI Sustainability Reporting Standards
- Final report of the Task Force on Climaterelated Financial Disclosures (TCFD)

Forward-looking statements

This report contains financial forecasts and other forward-looking statements. They represent Tohoku Electric Power's judgments based on information available at the time of disclosure and certain assumptions. They involve known and unknown risks, uncertainties, and other factors that may cause actual results, performance, and achievements to differ materially from expectations.

Boundary of Report

The 77 companies in the Tohoku Electric Power Group

Period subject to Report

While the Report in principle covers initiatives during FY2021 (April 1, 2021–March 31, 2022), certain activities presented include information from past fiscal years or FY2022

Date of publication

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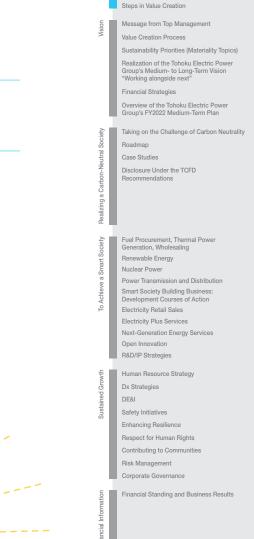
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The Tohoku Electric Power Group's Management Philosophy and Group Slogan

The Tohoku Electric Power Group's Management Philosophy

Prosper with Local Communities

We seek to create value only the Tohoku Electric Power Group can deliver and to realize growth and an enriched society by continuing to take on challenges and pursue innovation alongside our customers and our communities.

The Tohoku Electric Power Group Slogan

Yori, Sou, Chikara

(The Strength to Work Alongside)

Our motto, yori, sou, chikara, derives from the care we take in providing each and every customer with services suited to their lifestyles and working lives. Moving forward, driven by our founding motive of serving as a bedrock for the region, we will continue working hand-in-hand with local communities, delivering services to the individuals within them based on a true sense of gratitude and

broad vision of the future.

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Tohoku Electric Power was founded in 1951. Amid the postwar recovery, our first President, Ungoro Uchigasaki, established the management philosophy which called for "Rebuilding Japan starting in Tohoku and developing Tohoku starting with electric power." The Group rephrased this motto thereafter as follows: "The prosperity of the Tohoku region is essential to our own growth." We've continued to do business under this philosophy for some 70 years.

The strong commitment to local communities expressed in this concept is a fundamental management value and the ultimate expression of the Tohoku Electric Power Group's Management Philosophy of prospering with local communities. This vision of extending our roots to contribute to the regions in which we operate is an unshakeable pillar from which all Group employees continue to approach their work, even amid dramatically changing business environment.

However, the way to prosper with local communities must change with the times. To date, prosperity with local communities has referred to generating earnings by providing a stable, low-cost source of electricity to customers in Tohoku and Niigata. Looking forward, we will seek to expand our business area and secure management resources beyond Tohoku and Niigata, while maintaining our willingness to contribute to Tohoku and Niigata. Through value created by progressive activities grounded in energy services and creating solutions to social challenges, our goal is to contribute to Tohoku and Niigata, attracting human resources, technology, and investment to the region. Essential aspects of putting this management philosophy into practice include receptiveness to the needs and issues confronting the customers who make up our local communities and the commitment of each individual employee to creating new forms of prosperity in joint efforts.

The Tohoku Electric Power Group slogan—Yori, Sou, Chikara (The Strength to Work Alongside)—is a promise to our customers and to local communities. Based on the perspective of working together with and alongside our customers and communities, this promise says each and every Group employee will take this management philosophy to heart in his or her work and everyday activities. Under this slogan, we will seek to help co-create a comfortable, safe, reliable, and smart society and to provide the added value only the Tohoku Electric Power Group can deliver.

At a Glance

About the Tohoku and Niigata region

The area in which the Tohoku Electric Power Group's businesses are based—the Tohoku and Niigata region—accounts for about 20% of Japan's land mass. The region is subject to challenging natural conditions, including earthquakes like the Great East Japan Earthquake, winter storms, and snowfall.

The region's traits also serve as valuable community resources that contribute not just to renewable energy from hydroelectric, wind, and geothermal sources, but to the region's seasonal scenery and diverse culture, including foods and festivals marked by distinctive local flavors.

The region adjoins the vast market of the greater Tokyo area, to which it is connected by highspeed transportation network, including Shinkansen high-speed rail and expressways. At the same time, the region is experiencing the effects of depopulation and an aging population with low birth rates at a rate that outpaces other regions in Japan. The region is widely expected to confront social challenges in various areas, including transportation, education, and welfare.

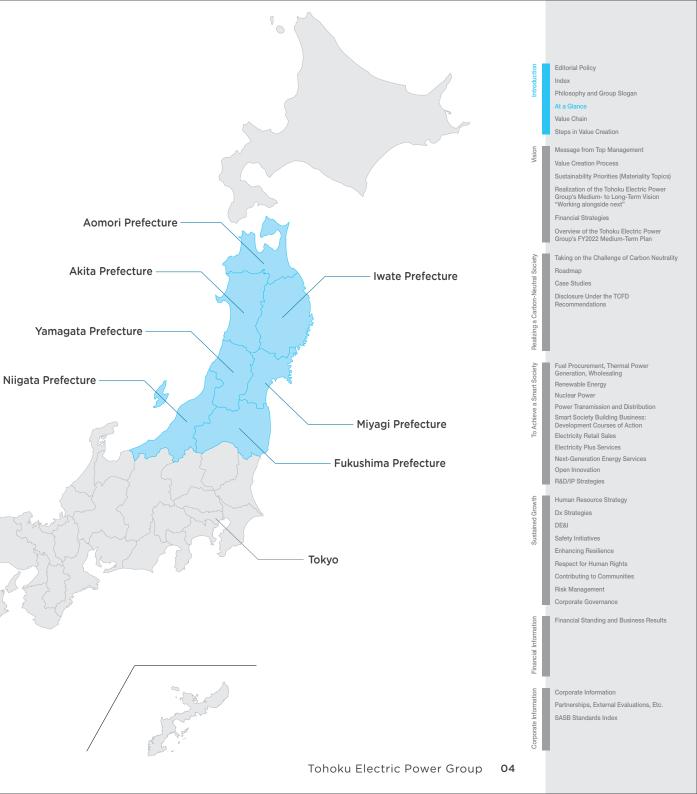
The Tohoku and Niigata region in terms of nationwide statistics

- Total land mass: 21.0% (79,531.71 km²) (2020)^{*1}
- **Population: 8.6%** (10,812,467) (October 2020)^{*1}
- **Gross production in the Tohoku and Niigata region (nominal): 7.7%** (43,450,345 million yen) (FY2018)^{°2}

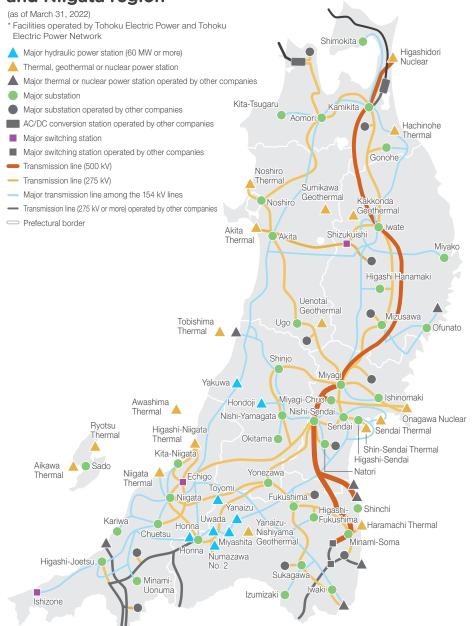
Distinctive features Agriculture, forestry, and fisheries: **18.3%** (1,093,173 million yen) (FY2018)²² Agriculture, forestry, and fisheries account for 2.5% of the total industry in the Tohoku and Niigata region, significantly above the national figure of 1.1%.

- Renewable energy power generation (FY2021)^{*3}
- Hydroelectric power generation: 21.0% (18,006,280 MWh)
- Wind power generation: 41.3% (3,065,774 MWh)
- Geothermal power generation: 34.5%
 (676,533 MWh)

 *1 Source: Ministry of Internal Affairs and Communications, 2020 National Census
 *2 Source: Cabinet Office, FV2018 Prefectural Economic Statistics
 *3 Source: Agency for Natural Resources and Energy, FV2021 Electricity Survey Statistics



Tohoku Electric Power Group facilities in the Tohoku and Niigata region*



Facility Overview

			tric Power Co., nc.	Tohoku Electric P (major faci	
	Hydraulic	205	2,450 MW	227	2,560 MW
	Thermal	8	11,300 MW	13	12,070 MW
	Geothermal	4	190 MW	5	212 MW
Power Stations	Solar	4	4.8 MW	13	17 MW
	Wind	_	_	1	14 MW
	Nuclear	2	2,750 MW	2	2,750 MW
	Total	223	16,690 MW	_	_

	Tohoku Electric	Power Network		Tohoku Electric Power Networ			
Transmission Facilities	Route distance	15,460 km			Route distance	149,120 km	
	Circuit length	25,196 km		Power	Extended wire	501 004 km	
	Supports	58,504		Distribution Facilities	distance	591,824 km	
Transformation Facilities	Number of facilities	635			Supports	3,159,229	

Annual power generation capacity*

3,000				_						
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2,500			,00			2	2,66	6 2	,59	99
		524		620		787		527		520
2,000		349				007		.297		
		177		297		-297—				-297
1,500		177		139		69		60		60
		744		685		685		721		732
1,000										
500		587		587		647		694		624
		366		366		372		366		365
0		300		300		012		000		36

power, waste power, and geothermal power. The power

transmission business is excluded from FY2020 due to a

spin-off.

Annual shares of power sources*

Hydroelectric Coal Gas Oil, etc. Renewables



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Leveraging the strengths of the Tohoku Electric Power Group

Since its founding in 1951, the Tohoku Electric Power Group has contributed to community progress by providing stable electricity based on the following vision: "The prosperity of the Tohoku region is essential to our own growth."

In our base—the six Tohoku prefectures and Niigata Prefecture—recognition of our brand is 96.6%. We've earned a reputation for reliability and trustworthiness, the core of our brand value. We believe we must strengthen this value still further to ensure that the Tohoku Electric Power Group will continue to be the first choice in an environment characterized by increasingly severe competition.

To this end, we will propose and deliver value only the Tohoku Electric Power Group can provide by having each and every Group employee put into practice the concepts that represent the core of our Group slogan: Yori, Sou, Chikara (The Strength to Work Alongside) working alongside our customers; and working alongside our communities. Additionally, we strive to realize a smart society for a new age, starting in Tohoku, as called for in "Working alongside next," the Tohoku Electric Power Group's Medium- to Long-Term Vision. Editorial Policy

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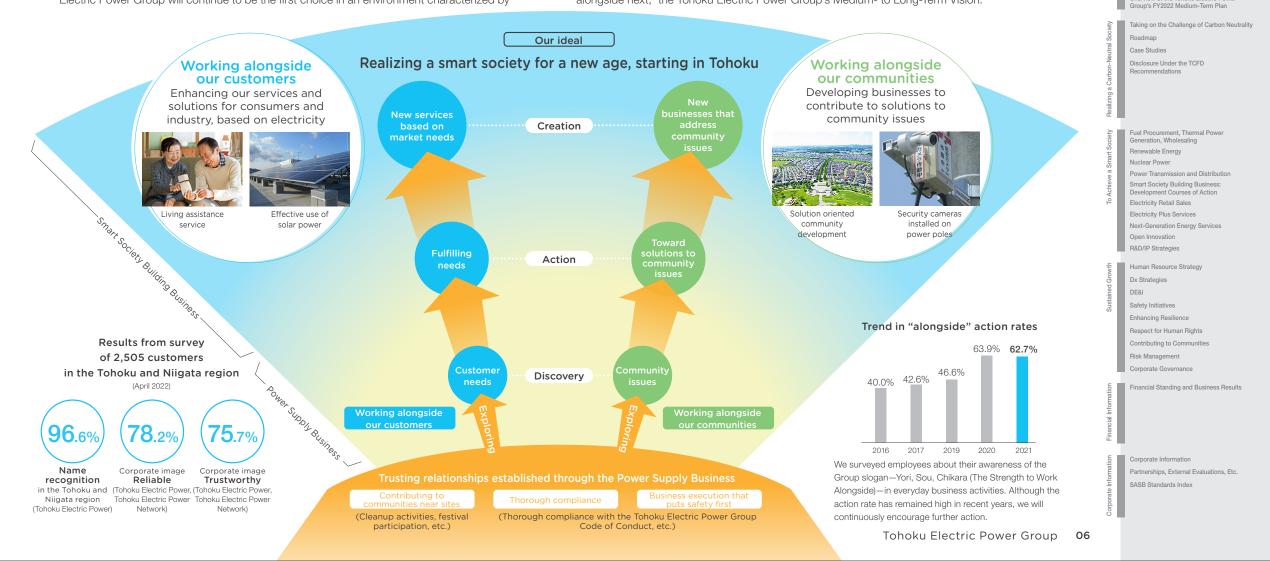
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By demonstrating its combined capabilities through further progress in Group management while clarifying the roles of each member company and optimally allocating management resources throughout the Group, the Tohoku Electric Power Group will strive to quickly put our midium- to long-term vision "Working alongside next" into practice and, by so doing, increase corporate value groupwide.

Power Supply Business

Smart Society Building Business

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	Fuel procurement with consideration for efficiency, flexibility, etc.	Pursuing an optimal power source structure in light of the S+3E ⁻¹ approach	Growing profits by maximizing the value of electricity	Maintaining a stable power supply	Maximizing value for the customer by establishing a comfortable, safe, reliable smart society	Roadmap Case Studies Disclosure Under the TCFD Recommendations
Main related companies See p. 86 for a list of Group member companies.	d Tohoku Electric Power NIHONKAI LNG Tohoku Natural Gas	Tohoku Electric Power, Tohoku Sustainable & Renewable Energy, Tohoku Electric Power Engineering & Construction, SAKATA KYODO POWER, JOBAN JOINT POWER, Soma Kyodo Power	Tohoku Electric Power Tohoku EPCO Energy Trading Tokyu Power Supply	Tohoku Electric Power Network Tohoku Power Transmission and Distribution Service Yurtec Kitanihon Electric Cable	Tohoku Electric Power, Tohoku EPCO Frontier, Tohoku EPCO Solar e Charge, Tohoku Energy Service, Yurtec, Tohoku Intelligent Telecommunication, HNK, E life-Partners	P BUP P BUP P BUP P BUP P Courement, Thermal Power Generation, Wholesaling P Renewable Energy
Topics	Main sources of imported fuel used for power generation Coal: Australia, Indonesia, US, Canada LNG: Australia, Malaysia, Russia, US, Qatar, Indonesia, Mozambique Uranium: Kazakhstan, Canada	Ratios of power generation capacity '2 (including power received from other companies) Hydroelectric Coal Gas Oll Nuclear New energy (MW) 3,000 28% 20% 20% 2,000 10% 11% 12% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 1,000 13% 14% 14% 2019 2020 2021 (FY)	Amid progressive adoption for market mechanisms in electricity trading, prompting optimization to maximize earnings while putting to maximum use trading functions based on an overview of all market processes, from fuel procurement to power generation and wholesale	Average frequency and length of power failures per customer household Length — Frequency (Minutes) (Times) 3,000 Impact of the Great East 1.2 Japan Earthquake 2,900 1.0 600 0.8 450 0.6 300 0.4 150 0.2 0 2009 2021 (FY)	Yori, Sou eNet members	Nuclear Power Power Transmission and Distribution Smart Society Building Business: Development Courses of Action Electricity Retail Sales Electricity Retail Sales Electricity Plus Services Next-Generation Energy Services Open Innovation R&D/IP Strategies DE&I Safety Initiatives Enhancing Resilience Respect for Human Rights Contributing to Communities Risk Management Corporate Governance Financial Standing and Business Results
	See » Fuel procurement, thermal power generation, wholesaling » P33	See » At a Glance » P05	See » Fuel procurement, thermal power generation, wholesaling » P36	See »Performance Data Sustainability Report 2022 »I 0-	Yori, Sou eNet https://www3.zf1.tohoku-epco.co.jp/	Corporate Information Partnerships, External Evaluations, Etc.

*1 Safety + energy security, environmental conservation, and economic efficiency

*2 Sums of individual figures and totals may not agree due to rounding. New energy indicates capacity of power generation and receiving equipment on the existing grid, including wind, solar, biomass, waste, and geothermal power generation. The power transmission business has been excluded since FY2020 due to a corporate split.

Steps in Value Creation

Tohoku Electric Power was founded in 1951, a time when Japan was still recovering from the turmoil of the Second World War. Since then, we've confronted difficult challenges in each era, including power shortages during the postwar period of reconstruction, oil crises, numerous natural disasters, and the deregulation of the electric power market. On each occasion, the Group has worked as a team to fulfill its mission of delivering a stable, high-quality supply of electricity. Moving forward, we will continue to work with local communities to contribute to the growth and development of the six Tohoku prefectures and Niigata Prefecture while ceaselessly working to create new corporate value.

			value creation Process
			Sustainability Priorities (Materiality Topics)
	1950s —	> 1970s —	Realization of the Tohoku Electric Power Group's Medium- to Long-Term Vision "Working alongside next"
Jts			Financial Strategies
Developments in society	■ Mid-1950s economic boom	Dollar shock	Overview of the Tohoku Electric Power Group's FY2022 Medium-Term Plan
lopi	1958-1961 economic boom, income-doubling plan	First oil crisis	Taking on the Challenge of Carbon Neutrality
in			Roadmap
De	Late 1960s economic boom	Second oil crisis Bubble economy	Case Studies
es			Disclosure Under the TCFD Recommendations
Social issues	 Postwar reconstruction and rapid economic growth bring growing demand for electric power 	A global oil crisis and power shortages	Realizing a Ca
			Fuel Procurement, Thermal Power Generation, Wholesaling
	7 7	7 7	E Nuclear Power
	Contributing to postuar recovery and the development of Tabely	Durauing diversification of neuron sources to break from	Smart Society Building Business:
ver	Contributing to postwar recovery and the development of Tohoku	Pursuing diversification of power sources to break from	Development Courses of Action
d vo	and Niigata by developing power sources catering to growing	dependency on oil-fired thermal power and ensure a stable	Electricity Plus Services
с <u>е</u> П С	demand for electric power	supply of electrical power	Next-Generation Energy Services
Value provided by Tohoku Electric Power	Amidst electricity shortages during the postwar period of recovery, Tohoku Electric	Motivated by the global oil crisis, Tohoku Electric Power approached various issues,	Open Innovation R&D/IP Strategies
	Power pushed ahead to develop energy sources within the Tadami River water system,	including research on diverse power sources and development site surveys, with the aim	Human Resource Strategy
okr	its largest hydroelectric power zone, working under the motto: "Rebuilding Japan starting	of breaking the dependency on oil-fired power. Power source diversification advanced	Dx Strategies
Sho Sho	with Tohoku and developing Tohoku through electric power." Later, to meet growing	considerably. Both the large-scale pumped-type Numazawa Power Station No. 2 and	DE&I
Ĕ	demand for electric power, we began building and expanding state-of-the-art thermal		Safety Initiatives
	power stations, starting with the Hachinohe Thermal Power Station. We've supported	Onagawa Nuclear Power Station Unit 1 came online during this period.	Enhancing Resilience Respect for Human Rights
	local economic growth and the lives of local residents ever since.		Contributing to Communities
			Risk Management



Our initiatives

Uwada Power Station comes online.



Our first large-scale thermal power plant, Hachinohe Thermal Power Station Unit No. 1, begins operating.



Numazawa Power Station No. 2 Unit No. 1 comes online. (photo: plant under construction c. 1977)



Launch of operations at Onagawa Nuclear Power Station Unit No. 1, our first nuclear power plant



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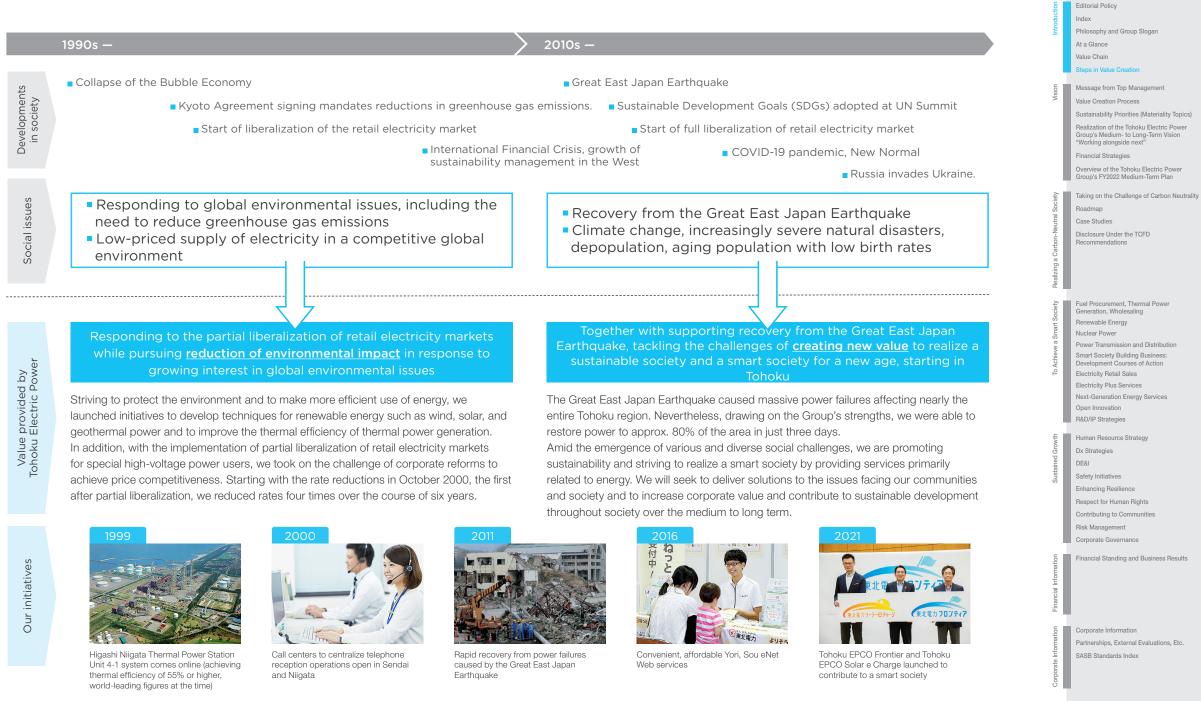
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Message from Top Management



The current business environment

The world today is experiencing change at an accelerating pace. The business environment in which we operate is becoming increasingly diverse and complex due to factors such as changes in values, the progress of digitalization due to the impact of COVID-19, the accelerating trend toward carbon neutrality, and supply chain disruptions and growing market fluctuations in fuel and electricity trading due to the Ukraine crisis.

We are committed to responding flexibly to these rapid, large-scale changes as opportunities to create a more abundant future for the Tohoku and Niigata region. To do so, we must deliver a stable supply of electricity, enhance our competitive strengths through structural reforms in the Power Supply Business, and realize a smart society for a new age, starting in Tohoku. In FY2021, we made steady progress toward realizing the Group's Medium- to Long-Term Vision "Working alongside next" through efforts including the launch of business operations by Tohoku EPCO Frontier, which plays a key role in the Smart Society Building Business. A look at recent revenues and expenditures shows we are in a state of a negative profit margin, in which our power supply costs exceed revenue from electricity rates. This is due to various complex factors such as rising global fuel prices and wholesale electricity prices due to Russia's invasion of Ukraine and the rising cost of power procurement due to damage to thermal power plants resulting from an earthquake off the Fukushima Prefecture coast. After recording ordinary losses of 49.2 billion yen in FY2021, we expect to record major losses in FY2022 as well. We recognize that we face a crisis situation in which our financial foundations are now threatened to a degree higher than experienced following the Great East Japan Earthquake.

Regrettably, for these reasons, we are unable to pay dividends to our shareholders in FY2022. We plan to revise electricity rates for high-voltage and extra high-voltage power and to eliminate the cap on the fuel-cost adjustment system for low-voltage deregulated rate plans from November of this year.

Representative Director & President Tohoku Electric Power Co., Inc.

Hojiro Higuchi

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Getting back into the black in FY2023

Our goal for FY2023 is to do whatever we can to restore profitability and to continue to serve our communities by delivering a stable supply of electricity to all our customers, even in a time of challenging demand and supply conditions, through stable fuel procurement and investment in various areas, including upgrading and improving power facilities. Through various sustained measures we will overcome the challenges presented by the current severe business environment.

To do so, together with efforts to restore damaged thermal power stations as soon as possible, we will employ optimal combinations of power and fuel transactions utilizing trading and other activities, seeking to secure revenues and realize well-balanced stable operations, thereby curbing rising power generation costs, based on comprehensive considerations of trends in electricity and fuel markets and operation adjustments in accordance with actual demand and supply.

In addition, amid the increasing risk of market fluctuations in thermal power fuel prices, we see nuclear power as increasingly important, both as a carbon-free power source and in terms of stable supply and reduced exposure to market risks. It also helps efforts to diversify power sources. Construction will begin on Onagawa Nuclear Power Station Reactor No. 2, for which the Nuclear Regulatory Commission approved construction plans at the end of last year, with a slated completion date of November 2023. We plan to resume operations based on the understanding of local residents.

In April of this year, we reorganized the Power Generation and Sales Company into the Power Generation Company, Renewable Energy Company, and Sales Company. In the Power Supply Business, we will strive to secure revenues by maximizing the value of electricity based on the development of optimal business models for each field.

In parallel with efforts to rapidly recover and strengthen our financial foundations via measures to improve revenues and expenditures, we will secure the resources needed for investments in future growth through diverse funding methods, including environmental bonds and hybrid bonds.

To realize a smart society for a new age, starting in Tohoku

Despite dramatic changes in the current business environment, the medium- to long-term goal for realizing the Tohoku Electric Power Group's Medium- to Long-Term Vision "Working alongside next" remains unchanged. In addition to advancing structural reforms in the Power Supply Business, we will assume the challenge of shifting to the business model needed to realize a smart society. These are part of efforts to achieve what we want to be in 2030—a group of companies growing in step with sustained societal progress by helping to establish a

smart society for a new age, starting in Tohoku.

In the Smart Society Building Business, we are targeting net sales of roughly 100 billion yen in FY2030 based on progress in business development centered on next-generation energy services and services for household consumers groupwide.

In next-generation energy services, we launched renewable energy aggregation services in July. These new services draw on our expertise gained in the power generation business to support trade in power generated from renewable energy sources.

In addition, agriculture, a leading industry in the six Tohoku prefectures and Niigata Prefecture, faces various serious issues such as a shrinking and aging agricultural workforce, large-scale damage caused by intensifying natural disasters, and unstable production and quality effects due to climate change. To develop solutions to these challenges, we have rolled out services jointly with a startup that offers outstanding technological capabilities and expertise in the area of plant factories. We plan to pursue proactive proposal activities in this area. In the area of household consumer services, by bundling various services with retail electricity

sales, we believe we will be able both to increase earnings and achieve comfort, safety, and peace of mind for our customers. For this reason, we plan to strive to maximize earnings groupwide by developing and proposing services to meet diverse needs.



The launch of solutions services based on a power generating/saving indoor farm system in cooperation with Plants Laboratory Inc.

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Taking on the Challenge of Carbon Neutrality

Guided by the Tohoku Electric Power Group's Carbon Neutral Challenge 2050, we will accelerate CO₂ emissions reductions in three ways: maximum use of renewable energy and nuclear power; decarbonization of thermal power sources; and electrification and realization of a smart society. The goal is to halve CO₂ emissions by FY2030 relative to FY2013 levels. Toward the goal of thermal power decarbonization, we are moving ahead with verification testing of mixed burning with hydrogen and ammonia at our Niigata Thermal Power Station; verification testing of mixed burning with black pellets at the Noshiro Thermal Power Station; and research on converting CO₂ to methane gas. Regarding mixed burning with black pellets, we are producing the raw materials for biomass fuel on unused land at our Akita Thermal Power Station, processing the biomass materials produced into pellets, and testing their suitability. The goal here is to identify biomass materials ideally suited to production in the cold climate of the Tohoku region. For the conversion of CO₂ to methane gas, we are undertaking joint research with Shizuoka University to assess a range of conditions, including varying catalyst volumes and heating temperatures, to convert the CO₂ generated by thermal power sources to methane gas through synthesis with hydrogen. Future plans call for the examination of measures to counter catalyst degradation while testing long-term durability. We are also making steady progress toward our goal of transitioning from the approximately 2,700 company vehicles owned by Tohoku Electric Power and Tohoku Electric Power Network to electric-powered vehicles, including EVs and plug-in hybrids, by FY2030.





Verification testing of mixed burning with hydrogen and ammonia in the Niigata Thermal Power Station Unit No. 5 system

Making sustainability the core of our management

Since its founding, the Tohoku Electric Power Group has sought to contribute to the progress of local communities in various ways, including efforts to ensure the stable supply of electricity, including grid development and disaster countermeasures covering our vast service area, and measures to promote electrification and develop technologies to realize safe, comfortable, and enriched living for community residents. These efforts are based on our understanding that "The prosperity of the Tohoku region is essential to our own growth." Though such sustained efforts and based on the trust and strong ties established with local communities, we have established the foundations for today's Tohoku Electric Power Group. Today, the six Tohoku prefectures and Niigata Prefecture face various issues related to societal sustainability, including climate change and increasingly destructive natural disasters, in addition to depopulation, low birth rates, and an aging population.

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Philosophy and Group Slogar

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To deliver solutions to increasingly diverse and complex social challenges, I believe it will be essential to strengthen partnerships with a wide range of companies and organizations and to pursue society-wide joint efforts. Since its founding, the Tohoku Electric Power Group has built relations of trust with local customers, local governments, and financial organizations by doing business in ways rooted in the community. I believe the Group will face ever stronger demands to deliver the solutions only we can offer. To do so, we must listen more attentively to the voices of our communities through these locally rooted networks based on our Group slogan Yori, Sou, Chikara (The Strength to Work Alongside). We must pool our strengths with those of other companies and organizations through these community networks.

To create social value at the same time as increasing corporate value through such solutions to social challenges, we have identified sustainability materiality topics as ones that we must take on as priorities. Through tackling the challenges of solutions to important issues related to sustainability, together with our communities, and realizing the Working alongside next vision and Carbon Neutral Challenge 2050, we will strive to co-create social value and corporate value in a sustained manner into future generations, together with our stakeholders. Since taking office, I have repeatedly reminded employees of the need to think about what we can do rather than what we cannot do. Today, as we are faced with the manifestation of various social challenges amid a dramatically changing business environment characterized by decarbonization, digitalization, and decentralization, we will need to stop conventional ways of thinking, transform our own perspective, and continue tackling each and every challenge boldly. I am confident that by tackling these challenges we will be able to realize further growth for the Tohoku Electric Power Group.

Despite the unprecedented challenges we face in this business environment, I am determined to lead the Tohoku Electric Power Group forward toward increased corporate value over the medium to long term while contributing to progress within the six Tohoku prefectures and Niigata Prefecture and, by extension, society at large. We would appreciate our stakeholders' continued support.



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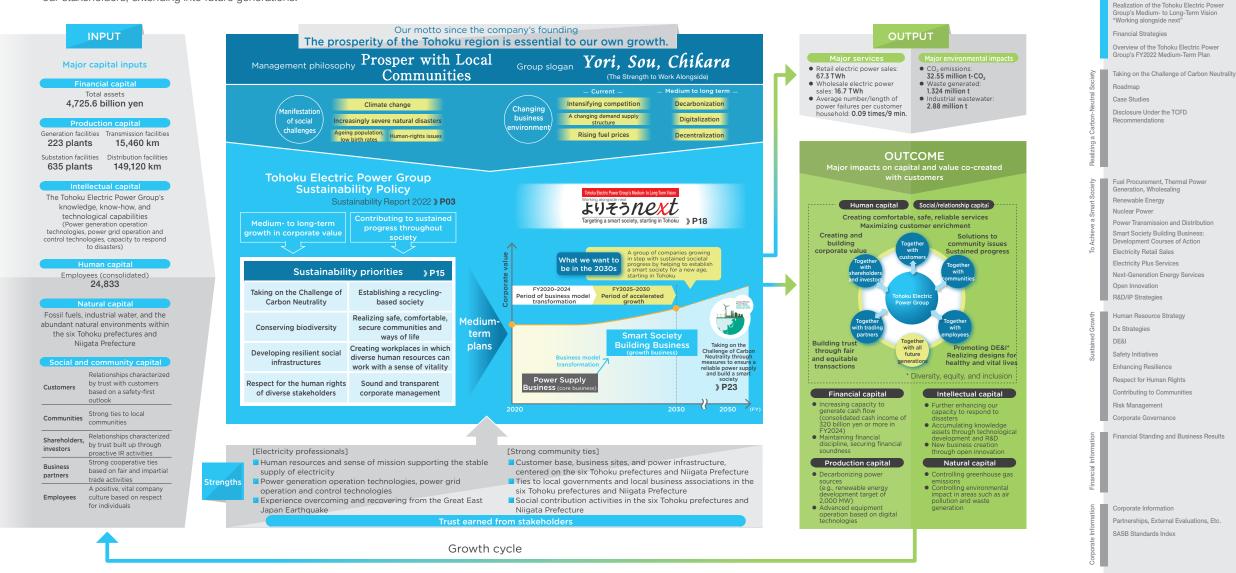
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Nuclear Power

Value Creation Process

Since its founding, the Tohoku Electric Power Group has created value alongside the community by tackling the challenges of social issues that change with the times, based on the fundamental concept that "The prosperity of the Tohoku region is essential to our own growth."

Today, we face numerous social challenges, including climate change, increasingly severe natural disasters, depopulation, and an aging population with low birth rates. By moving toward solutions to the sustainability materiality topics we have identified based on changes to the business environment and social issues and by realizing the Tohoku Electric Power Group's Medium- to Long-Term Vision "Working alongside next" and tackling the challenge of Carbon Neutral Challenge 2050, the Tohoku Electric Power Group will strive to co-create social value and corporate value together with our stakeholders, extending into future generations.



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Sustainability priority (materiality topic) identification process

Seeing the various issues related to the sustainability of society not only as risks but also as opportunities for the sustained growth of both the Group and society as a whole, the Tohoku Electric Power Group is taking on the challenges of realizing Working alongside next, the Tohoku Electric Power Group's Medium- to Long-Term Vision and of the Tohoku Electric Power Group Carbon Neutral Challenge 2050.

Recognizing the importance of clearly identifying specific priorities (materiality topics) in order to promote sustainability through realizing the vision of Working alongside next, the Group has identified eight sustainability priorities through the following process, based on deliberations in the Sustainability Promotion Committee and with reference to the recommendations of outside experts. These priorities will be monitored from now on through deliberations in the Sustainability Promotion Committee and the Board of Directors and used to steer management's course toward realization of the vision of Working alongside next.

Step 1

Choosing topics

To choose topics related to the businesses of the Tohoku Electric Power Group and its stakeholders, the current states of both external and internal environmental conditions were analyzed. Based on the findings of such analysis, a list was prepared of 63 topics to be considered.

Assessing the topics

Step 2

In cooperation with related internal sections, the topics chosen in Step 1 were assessed along the two axes of their importance to the Tohoku Electric Power Group and their importance to stakeholders. These assessments also were discussed in the Sustainability Promotion Committee, and the views of management were reflected in the assessment process as well. On the subject of importance to stakeholders, comments from five classes of stakeholders considered important to the Group—customers, local communities, shareholders and investors, trading partners, and employees—were collected through means such as surveys and dialogues for use in the assessment process.

Based on the findings of this process, particularly important topics were narrowed down and grouped. Then, a list of proposed priorities consisting of 29 individual topics and eight materiality topics was prepared.

Guidelines, frameworks, and other materials referenced



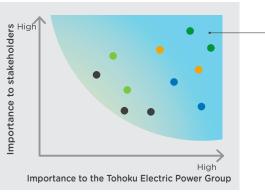
- International frameworks (e.g., Sustainable Development Goals (SDGs), Global Reporting Initiative (GRI) Standards, Sustainability Accounting Standards Board (SASB) frameworks, ISO 26000)
 Items used in assessments by ESG assessment
- agencies

 Japanese government's Green Growth Strategy
- Social and regional issues in the Tohoku and Niigata region
- Industrywide topics, etc.

Internal environment

The Tohoku Electric Power Group's management philosophy, policies, Medium- to Long-Term Vision, medium-term plans, etc.

Overview of assessment and grouping along two axes



Step 3

Validation

The proposed priorities prepared in Step 2 were validated from the perspective of stakeholders through means including exchange of opinions with outside experts.

Major opinions of outside experts

- Sustainability priorities should be expressed more from the perspective of stakeholders.
- In promoting sustainability initiatives, it is important to utilize digital transformation (DX) and promote diversity, centered on promoting women in the workplace, and to participate actively in domestic and international initiatives and other activities.
- There also is a need for consideration of human rights throughout the entire supply chain, which is a subject of increasing interest in society.

Relevant SDGs Sustainability priority (materiality topic) 9100.000 13 III 🔆 💦 🚱 Taking on the Challenge of Carbon Neutrality Establishing a recycling-based society F Conserving biodiversity Realizing safe, comfortable, secure communities and ways 11 of life Developing resilient social infrastructure S Creating workplaces in which diverse human resources can work with a sense of vitality Respect for the human rights of diverse stakeholders v *** Sound and transparent corporate management G

Relationship between identification of sustainability priorities and SDGs

Step 4 Identifying sustainability priorities (materiality topics)

Based on the results of Step 3, final proposed materiality topics were discussed in the Sustainability Promotion Committee and then decided on by the Board of Directors. From now on, together with setting targets and key performance indicators (KPIs) regarding the identified materiality topics and monitoring these, the materiality topics will be reviewed as necessary in light of factors such as changes to the business environment and social issues. Fuel Procurement, Thermal Power Generation, Wholesaling Renevable Energy Nuclear Power Power Transmission and Distribution Smart Society Building Business: Development Courses of Action Electricity Retail Sales Electricity Pleus Services Next-Generation Energy Services Open Innovation R&D/IP Strategies

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	Materiality topic	Key topics	Related SDGs	Major risks associated with failure to address	Major opportunities potentially created by addressing	Current main targets and indicators ^{•2}	FY2021 results	At a Glance Value Chain
с	Taking on the hallenge of Carbon Neutrality	 Rapid resumption of stable operation of nuclear power stations based on a safety-first approach Increasing adoption of renewable energy Migration toward decarbonization of thermal power Promoting energy conservation solutions and electrification alongside customers Promoting decarbonization technological development and innovations 	7.2000 800 800 800 800 800 800 800 800 800	 Increasing costs from stricter regulations, loss of society's trust Inability to grow market share in decentralized power sources and declining market value of the Company's conventional power sources Falling share prices due to accelerating divestment from thermal power and rising fundraising costs Damage to facilities and power failures due to increasingly severe weather events Decreased hydroelectric power generation due to changing precipitation patterns 	 Increased demand for electricity due to expanded use of EVs and other electrification Falling fuel costs due to restricted operation of thermal power Contributions to local economy (e.g., employment) Creation of new business opportunities 	[TD] Targeting CO ₂ emissions reductions in FY2030 to one-half actual levels in FY2013 (45.63 million t-CO ₂)	32.55 million t-CO ₂ ⁻¹ (–28.7% vs. FY 2013)	Alter Share Steps in Value Creation Message from Top Management Value Creation Process Sustainability Priorities (Material Realization of the Tohoku Electric Group's Medium- to Long-Term "Working alongside next" Financial Strategies Overview of the Tohoku Electric Group's FY2022 Medium-Term F Taking on the Challenge of Carb Roadmap Case Studies Disclosure Under the TCFD Recommendations
	Establishing a recycling-based society	Controlling waste generation and using resources effectively	formation 12 and 10 and	 Rising waste treatment costs Reputation risk due to negative impact on ecosystems and extinction of rare species Rising fundraising costs, divestment 	 Improved power generating efficiency of hydroelectric power due to effective use of water resources Lower costs due to effective use of waste and reduced waste generation 	[TD/TN] Recycling at least 90% of all industrial waste [TD/TN] Proactively choosing products that use fewer plastics or substitute materials and maintaining or increasing rates of recycling plastic waste	86.7% [Waste generated] 1000 t [Recycling rate] 77%	Fuel Procurement, Thermal Pow Generation, Wholesaling Renewable Energy Nuclear Power Power Transmission and Distrib 9 Smart Society Building Business
	Conserving biodiversity	Local environmental preservation	14 #aren 15 #ar ****	due to lower ESG evaluation	Earning the trust of stakeholders	Accounting for biodiversity in business activities	Coexistence with plants and wildlife in business activities Sustainability Report 2022 P32	Development Courses of Action Electricity Retail Sales Electricity Plus Services Next-Generation Energy Service Open Innovation
	Realizing safe, omfortable, secure communities and ways of life	 Promoting the Smart Society Building Business to utilize digital technologies to help find solutions to community challenges Pursuing customer satisfaction Co-creation of vital local communities 	3 minite 	 Degradation of revenue foundations due to depopulation and deindustrialization Loss of business opportunities due to failure to adapt to changing societal needs Decreased demand due to lower 	 Strengthening earnings and customer satisfaction through the development and deployment of services Population growth due to regional vitalization and industrial promotion (market growth) Securing new business opportunities 	[G] 10 or more businesses or services implemented groupwide in FY2024 [G] Pilot model businesses fully launched in five or more locations groupwide in FY2024	3	R&D/IP Strategies Human Resource Strategy Dx Strategies DE&I Safety Initiatives Enhancing Resilience Respect for Human Rights
		in Tohoku and Niigata	o c Mana	customer satisfaction	by identifying customer needs	[TD] Yori, Sou eNet users	1.22 million	Contributing to Communities Risk Management Corporate Governance
Developing resilien social infrastructures		social disasters		 Loss of society's trust due to lengthening power failures following large-scale disasters Loss of business opportunities due to failure to adapt to changing societal needs Accelerating depopulation as communities become less attractive and public service levels decline 	 Maintaining and strengthening societal trust through rapid recovery from power failures Preventing depopulation through regional vitalization and industrial promotion (market growth) in Tohoku and Niigata Maintaining and expanding the customer base by earning stakeholder trust 	[TN] Average number/length of power failures per customer household	0.09 times/9 min.	Corporate Governance Financial Standing and Busines: Financial Standing and Busines: Corporate Information Partnerships, External Evaluatio SASB Standards Index

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ł	Materiality topic	Key topics	Related SDGs	Major risks associated with failure to address	Major opportunities potentially created by addressing	Current main targets and indicators ⁻¹	FY2021 results							
						[TD/TN] Training costs per employee	94,000 yen							
						[TD/TN] Number of employees earning IT Passports	48							
		Enhancement of human capital to		Increasing difficulty in securing human		[TD/TN] Achieving a rate of at least 80% of employees taking ordinary leave by the end of March 2025	TD: 74% TN: 79%							
1	Creating workplaces in which diverse human resources can work with a sense of vitality	 Implementing work-style reforms through means such as use of digital 	3 minutese A minutese 5 minutese 8 minutese 8 minutese	 Increasing annually in second production (productivity), lower performance 	Securing human resources, preventing decreased job y), lower rtunities through eet customer	[TD/TN] At least doubling the number of women managers (vs. the start of FY2019) by the end of FY2024	1.32 times							
		technologies Promoting diversity, equity, inclusion Promoting health management 	5 min. 8 minime. C	Accidents involving fatalities or serious injuries		[TD/TN] Achieving a rate of at least 5.0% of managers being women by the end of FY2035	2.1%							
						[TD/TN] Achieving a percentage of no more than 20.0% of employees being smokers by the end of FY2024	21.6%							
									[TD/TN] Percentage of employees with disabilities (statutory rate: 2.3%)	2.46%				
	Respect for the human rights of	 Ensuring worker safety Preventing discrimination and 	3 matrix 8 minutes		a minipuries	 Consideration for employee human rights by ensuring worker safety Securing human resources, preventing 	[TD/TN] Zero fatal accidents	Employees: 0 Subcontractors: 1						
	diverse stakeholders	harassment Ensuring public safety and consumer safety	Growing demand loss due to impaired trust among stakeholders or brand damage	Growing demand loss due to impaired trust among stakeholders or brand	Growing demand loss due to impaired trust among stakeholders or brand	trust among stakeholders or brand	Growing demand loss due to impaired trust among stakeholders or brand	Growing demand loss due to impaired trust among stakeholders or brand	Growing demand loss due to impaired trust among stakeholders or brand	Growing demand loss due to impaired trust among stakeholders or brand	Growing demand loss due to impaired trust among stakeholders or brand	 separation Maintaining and expanding customer base through earning trust from stakeholders 	[G] Number of accidents affecting the public	4
		 Securing sound foundations for revenues and finances Thorough adherence to corporate 				[G] Number of consultations with whistleblowing hotline	130							
	Sound and transparent corporate management	Indrougn adherence to corporate ethics and compliance Risk management and response Ensuring information security Protecting and utilizing intellectual	16 antenni 17 antenni 1 7 antenni	 Growing demand loss due to impaired trust among stakeholders or brand damage Falling stock prices, increased 	 Maintaining and expanding customer base through earning trust from stakeholders 	[TD/TN] Number of patents held	286 patents, 4 utility models, 13 designs, 84 trademarks							
		property Risk management in the supply chain Expanding two-way communication with stakeholders Enhancing partnerships Developing an effective governance structure	- 4 (6)	 Interpret of the process process	 Beneficial fundraising through improved ESG evaluation Rising stock prices 	[TD] Percentages of outside directors and women directors	Percentage of outside directors: 44% Percentage of women directors: 19%							

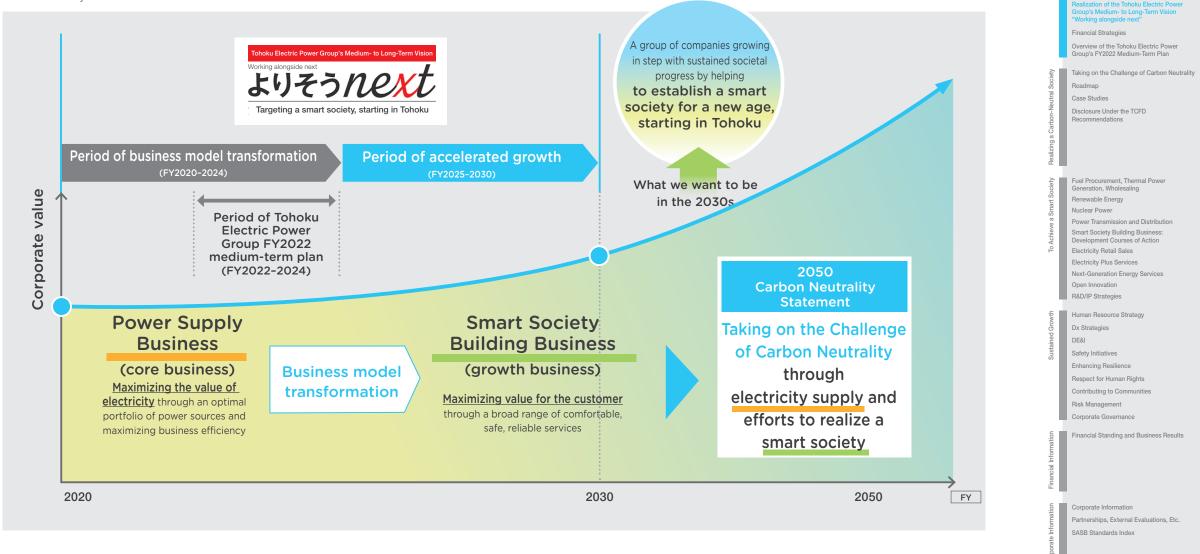
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Realization of the Tohoku Electric Power Group's Medium- to Long-Term Vision "Working alongside next"

Based on our awareness that failing to innovate and proactively take on new challenges during the current environment of dramatic transformations in society and electricity supply and demand structures would make it difficult to fulfill the Group's reason d'etre of seeking co-prosperity with local communities and realizing sustained growth alongside society, the Tohoku Electric Power Group released its Medium- to Long-Term Vision, "Working alongside next" in February 2020.

Striving to achieve the Group's ideal vision—"realizing a smart society, starting in Tohoku" as identified in Working alongside next vision, we are advancing structural reforms in the Power Supply Business and moving toward swiftly achieving profitability in the Smart Society Building Business. Through these two businesses, we will also tackle the challenge of carbon neutrality by 2050.



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Investment in growth fields, future business development

As we move forward to realize the Medium- to Long-Term Vision "Working alongside next," we regard the renewable energy business, including power transmission grid enhancements, and the smart society building business as growth areas over the medium to long term. We will strive to expand these business areas and achieve profitability in a timely manner by investing approximately 400 billion yen through roughly 2030.

		Investment through 2030	Major initiatives	Effects, returns (targets)	Group's Medium to Long-Term Vision "Working alongside next" Financial Strategies
	Developing renewable energy power sources	More than 100 billion yen	 Enhancing renewable energy business promotion structures Accelerating new development of 2,000 MW through means including strengthening in-house development and expanding development areas Maintaining and expanding kWh capacity through means including thorough renovation of aging hydroelectric and geothermal facilities Deploying operations and maintenance (O&M) businesses through Tohoku Electric Power Renewable Energy Service * Operations & Maintenance 	(FY2030) Consolidated cash income of approx. 20 billion yen	Apposed Fuel Procurement, Thermal Power Generation, Wholesaling
Growth businesses	Investment in renewable energy networks	Approx. 200 billion yen	 Grid capacity expansion (enhancements of connecting lines and trunk lines) Effective use of existing grid (e.g., N-1 generation control system, addressing congestion) Securing adaptability and advancing adjustment methods (improving power generation forecasts, responding to the supply-demand adjustment market) Adopting next-generation devices and smart meters to the power distribution grid Optimal demand-supply controls through renewable energy, storage cells, EMS, etc. 	 Decarbonization Continuous, stable supply Grid optimization 	Renewable Energy Nuclear Power Power Transmission and Distribution Smart Society Building Business: Development Courses of Action Electricity Retail Sales Electricity Plus Services Next-Generation Energy Services Open Innovation R&D/IP Strategies Human Resource Strategy Dx Strategies DE&I Safety Initiatives
	Smart Society Building Business	Approx. 100 billion yen	 Tohoku EPCO Frontier: Offering plans bundling electricity with services and various services to enrich people's lives Tohoku EPCO Solar e Charge: Offering services combining solar power with storage cells VPP business: Developing services in aggregation of renewable energy and other areas Community project, smart city plan Support for comfortable living, sustainable agriculture, etc. 	(FY2030) Net sales of approx. 100 billion yen * Consolidated cash income of approx. 20 billion yen * * Not including electricity sales	Outory initiatures Enhancing Resilience Respect for Human Rights Contributing to Communities Risk Management Corporate Governance Image: Standing and Business Results Image: Standing and Business Results Opported Information Partnerships, External Evaluations, Etc.

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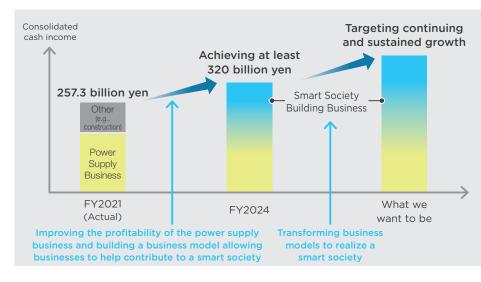
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Financial targets

In addition to securing stable revenue through comprehensive enhancements in competitive strengths and structural reforms of our core power supply business, the Tohoku Electric Power Group will assume the challenge of business growth to help realize a smart society by strategically investing management resources into dramatically transforming our business model. Success in this endeavor will require generation of the funding (cash income) for investments in related initiatives. To increase our capacity to generate cash flow, we established the financial target (indicator) of consolidated cash income. In addition to achieving consolidated cash income of at least 320 billion ven in FY2024 and building the foundations for the sustainable generation of income over the long term, we will seek not just to achieve further growth, but to generate stable returns for our diverse stakeholders.



Reference Consolidated cash income

To measure our capacity to generate the cash needed, we established consolidated cash income as a financial target. This includes non-cash expenses (i.e., depreciation and impairment of nuclear fuel) not included in accounting profit indicators such as ordinary income, as well as shares of gains or losses of entities accounted for by the equity method.

Consolidated cash income is calculated as follows:

Consolidated cash income = operating income + depreciation + amortization of nuclear fuel + share of profit of entities accounted for using equity method (Operating income does not include the effects of the time lag in the fuel cost adjustment system.)

The Tohoku Electric Power Group will continue to target its financial targets through cost cutting and efficiency improvements throughout our businesses and by enhancing revenue

Sales strategies targeting profitability

market fluctuations, customer needs, etc.

decommissioning aging thermal power facilities

processes and accelerating work-style reforms

Comprehensive review of business processes

Efficiency improvement initiatives in FY2021

markets

Optimizing power source

Promoting a sales approach founded on securing profitability

(within and outside our service area, retail and wholesale)

Proposing optimal retail service lineups while accounting for

Maximizing wholesale revenues through attention to individual

Optimization and maximizing profits throughout the

Enhancing competitive strengths in power supply by optimizing

demand and supply via flexible fuel procurement and trading

Shifting human resources to growth fields through productivity

increases resulting from review and consolidation of business

including optimizing power source structures and fuel procurement.

the equivalent of 170 employees, freeing them up for transfer to growth areas.

functions; reducing power generation costs by suspending and

power generation and wholesale businesses as a whole

foundations through structural reforms in the Power Supply Business. Fuel costs skyrocketed following Russia's invasion of Ukraine in February 2022. Additionally, the yen has weakened at an accelerating pace. Since these dramatic fluctuations in fuel prices and exchange rates have a major impact on the Group's core Power Supply Business, we

Efforts toward achievement of financial targets

recognize the need to ascertain the kinds of effects future trends in energy markets may have on our business environment. Enhanced profitability through structural reforms in Anticipated downside risk

the Power Supply Business to achieve financial targets

factors

Dramatic fluctuations in fuel prices and exchange rates (need to ascertain impact on business environment)

Decreased profitability due to intensifying competition

Structural changes on the supply side (decreased competitive strength of thermal power sources) accompanying large-scale adoption of renewable energy

> We will respond appropriately to downside risks through the key measures indicated at left

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discontinuing operation of obsolete thermal facilities Procurement of electricity In cooperation with Tohoku EPCO Energy Trading, utilizing trading functions to optimize on the market, optimizing the Value Chain from fuel procurement through power generation, and wholesaling fuel procurement Optimizing purchasing To lower prices in procurement of materials and services, establishing an internal committee to implement cost savings from the three approaches of purchasing

Cutting costs by utilizing state-of-the-art power sources and suspending and

Details of major initiatives

methods, items purchased, and volumes purchased Improving efficiency of Improving efficiency in data-entry operations and in responding to inquiries, by using Al. RPA, and other solutions

We achieved an improvement of approx. 25 billion yen* in cash income through various measures.

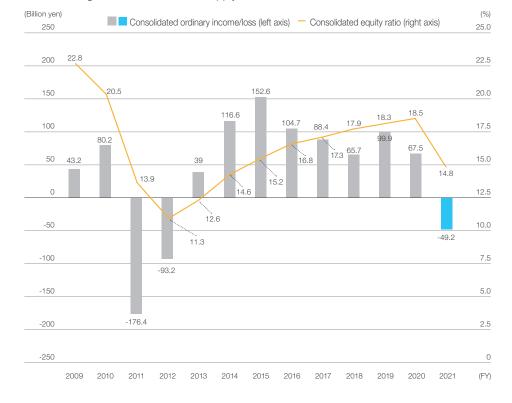
In addition, thanks to productivity improvements and other results of review and consolidation of business

processes using AI, RPA, and other means as well as work-style reforms, we cut operational workloads by

* Compared to the time the Tohoku Electric Power Group's Medium- to Long-Term Vision "Working alongside next" was announced (end of FY2019)

Our thinking on financial soundness

The Tohoku Electric Power Group has worked to enhance its equity capital due to substantial damage caused to its financial foundations by the Great East Japan Earthquake in March 2011. Our consolidated equity ratio has recovered thanks to the steady generation of profits in various ways, including promoting improvements to management efficiency. In FY2021, we promoted thorough improvements to management efficiency while striving to maintain stable supply. Still, we recorded substantial losses due to factors including rising fuel prices and the impact of extraordinary losses on damage to facilities caused by two major earthquakes off the coast of Fukushima Prefecture successively occurred for these two years. This has led to a significant decline in the consolidated equity ratio to 14.8%. In FY2022, we also expect to record losses in excess of those recorded last year due to rising fuel prices and other factors. As a result, we expect the consolidated equity ratio to fall still further. For these reasons, the Group will strive to recover from this worsening financial standing and improve financial soundness in various ways, including advancing efforts to improve revenues and expenditures with an awareness of rising fuel costs and electricity procurement costs as well as changes in the demand and supply structures.



Policy on returns to shareholders

Our policy calls for decisions on dividends reflecting comprehensive consideration of matters including financial results during the fiscal year and medium- to long-term revenue and expenditure projections, based on pursuing stable dividends. In FY2021, we paid interim dividends of 20 yen/share and year-end dividends of 15 yen/share. However, in FY2022, because we expect greater losses than recorded last year we plan to refrain from paying both interim and year-end dividends.

Returns to shareholders

consideration for stable dividends

resumption of operations at Unit

development of the smart society

building business, and achievement

FY2021 results

Interim: 20 ven/

year-end: 15 yen

No. 2 at Onagawa, progress on

Steady returns based on

as well as matters such as

of financial targets





Medium- to Long-Term vision

Financial soundness

In addition to investing in the

electricity business, including

resumption of nuclear power

station operation and renewable

energy development, we will put

interest-bearing debt to effective

use through investments in growth

capacity to repay debts (flow) and

FY2021 results

Consolidated interest-

bearing debt/cash income

ratio: 10.7

Consolidated equity ratio:

14.8%

dividends once more

businesses while monitoring our

our financial standing.

● 東北電力 74 個人投資家のみなさまへ 出社ホームページ (株主・投資家のみなど 2022年3月23 戦 行 改 間 ビジネスワポート本部総務部長 渡辺 隆:

A Company briefing for individual investors (held online)

Capital efficiency

We plan to improve returns on

invested capital by monitoring

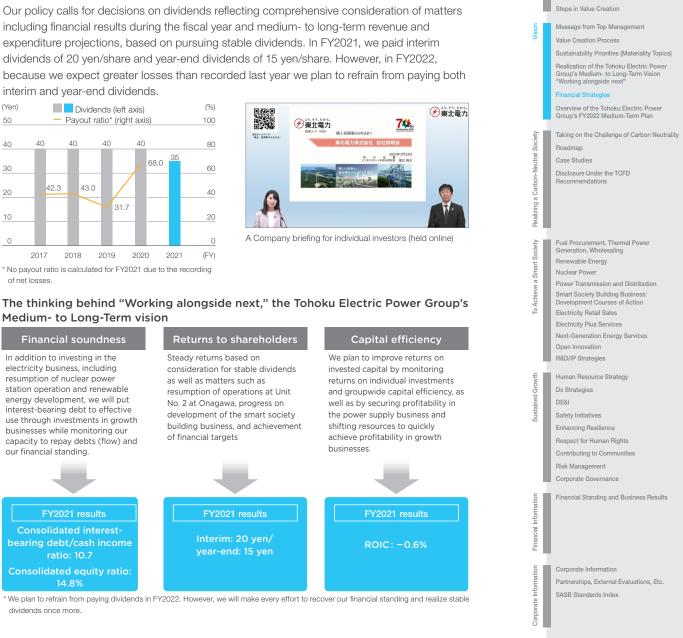
the power supply business and

achieve profitability in growth

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shifting resources to quickly

businesses.



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Due to rising global fuel prices, rising prices on the wholesale electricity trading markets since Russia's invasion of Ukraine in February 2022, and other factors, the cost of fuel and power procurement continues to rise, making it difficult to secure profits in wholesale and retail sales of electric power.

In light of these changing market conditions as well as trends in areas such as energy policies and systems, it is important to develop and implement optimal strategies that adequately reflect the differences in risks and opportunities confronting individual businesses and functions, including power generation (renewable, nuclear, and thermal), wholesale sales, power transmission and distribution, and retail sales. In addition, due to the COVID-19 pandemic and trends toward decarbonization, the transformations of digitalization and decentralization are continuing and accelerating, and it is vital that the Group adapt to these as well.

The FY2022 Medium-Term Plan calls for forging ahead with structural reforms in the Power Supply Business and swiftly achieving profitability in the Smart Society Building Business, under its three focal points of "Change," "Challenge," and "Create," while further raising the level and increasing the speed of initiatives to contribute to each of these goals through bold measures that do not simply assume continuation of existing ways of doing business.

	Basic understanding	Focal point	Key points of the FY2022 Medium-Term Plan
Structural difficulties in securing revenues in the power wholesale and retail businesses	Maintaining the course of action of advancing structural reforms to the Power Supply Business and moving toward swiftly achieving profitability in	Point 1 "Change" Enhancing competitive strengths through comprehensive reforms in the Power Supply Business	Advancing the transformation toward a business structure capable of generating sustained profits even in a market environment undergoing structural changes, and balancing achievement of individual missions and maximizing profits in each function that makes up the Power Supply Business
Need to formulate optimal strategies and maximize profits in each business Accelerating trend toward the "three	Further raising the level	Point 2 "Challenge" Taking on the challenge of swiftly achieving profitability for Smart Society Building Business	Securing competitive advantages and building revenues by proposing high-value-added service bundles built on retail electricity sales, while also running rapidly through the cycle from service development through commencement of sales, to accelerate development of proprietary service platforms
D's'** * Digitalization, decentralization, decarbonization Rising movement toward carbon neutrality by 2050	and increasing the speed of initiatives through bold measures that do not simply assume continuation of existing ways of doing business	Point 3 "Create" Evolving the management foundations supporting corporate value creation	Becoming more attuned to changes in the demands of society and stakeholder expectations and proactively advancing sustainability initiatives centered on the environment, society, and governance (ESG) groupwide

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Considering countermeasures against global warming as important management topics, the Tohoku Electric Power Group has aggressively sought to reduce CO₂ emissions by developing renewable energy, making thermal power generation more efficient, and promoting use of eco-friendly heat pumps. Addressing climate change has become an even more important concern to society as a whole, as seen for example in the Japanese government's pledge to achieve carbon neutrality by 2050.

In light of these circumstances, in March 2021 the Group launched the Tohoku Electric Power Group Carbon Neutral Challenge 2050, under which

we will accelerate CO₂ emissions reductions based on three main pillars: maximum use of renewable energy and nuclear power; decarbonization of thermal power sources; and electrification and realization of a smart society.

In March 2022, we joined the Green Transformation (GX) League* under the leadership of the Ministry of Economy, Trade and Industry. We believe that the Basic Vision of the GX League, which calls for tackling the challenge of swiftly achieving carbon neutrality, driving the virtuous cycle of environment and economy, leading the reform throughout the entire economic and social system, including other stakeholders, all aiming at the target of carbon neutrality by 2050, meshes perfectly with the Group's initiatives and thinking on carbon neutrality. The Group will continue actively tackling the challenge of carbon neutrality to realize a sustainable society as a company that works alongside our communities and customers.

* Green transformation (GX) refers to the transformation of society and the economy through corporate transition from fossil fuels and electricity, sources of greenhouse gas emissions, to renewable energy and carbon-zero gases. The METI has established the GX League as a venue for companies proactively advancing GX initiatives to discuss reforms throughout the entire socioeconomic system and implement measures to create new markets together with other players also tackling the challenge of GX, through industry, academy and financial cooperation

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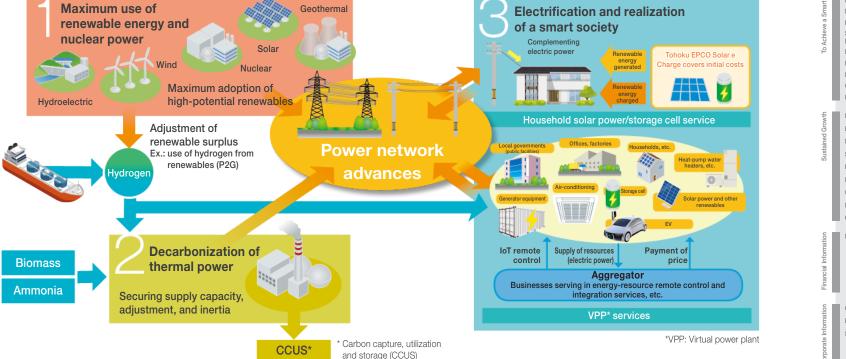
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Carbon neutral vision

The Tohoku Electric Power Group seeks to realize a society that simultaneously achieves power generation through largescale clean energy sources, decentralized energy systems, and efficient energy use.

Roadmap Toward Realizing Carbon Neutrality

The Group is accelerating efforts to reduce CO₂ emissions based on the three main pillars of maximum use of renewable energy and nuclear power, decarbonization of thermal power sources, and electrification and realization of a smart society.

Our goal for FY2030 is to halve CO₂ emissions relative to FY2013 levels. As we advance efforts in the development of renewable energy, resumption of operation of nuclear power plants, and decarbonization of thermal power, we are also ceasing the use of inefficient power sources and decarbonizing our power sources as a whole, while keeping in mind our responsibility to deliver stable supplies.

In the years through 2050, in addition to measures such as maximum use of renewable energy and nuclear power it will be essential to achieve technological breakthroughs in areas

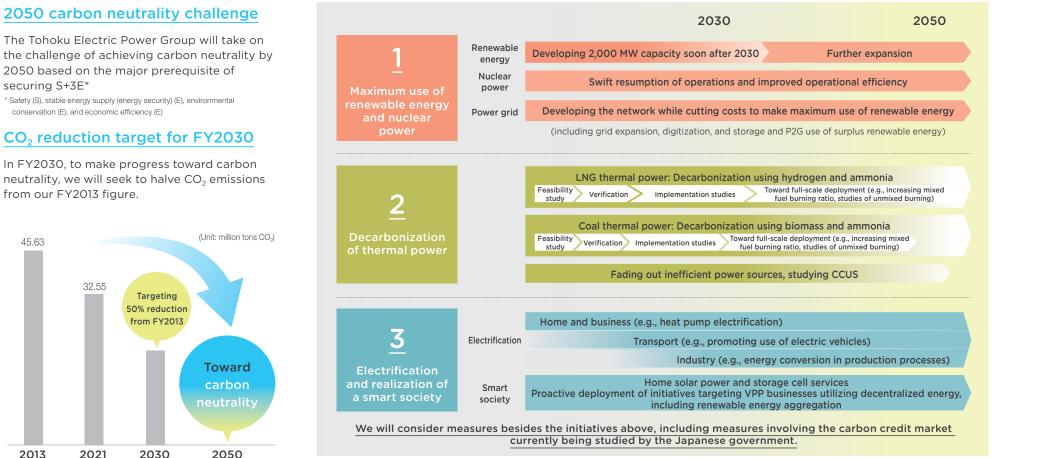
securing S+3E*

45.63

2013

such as carbon-neutral thermal power. Accordingly, we will strive to realize carbon neutrality while also helping customers to use energy more efficiently, through promoting electrification and the Smart Society Building Business, in addition to developing and utilizing innovative technologies from among the unlimited choices available.

We expect these measures to require investment on a scale of approximately 400 billion yen through roughly 2030, centered on renewable energy development (including network construction) and the Smart Society Building Business. Both are growth fields and businesses that contribute to carbon neutrality. We expect this investment to move us closer to our consolidated cash income target of more than 320 billion ven in FY2024 (while targeting future growth by establishing the sustainable foundations for generating cash over the long term)



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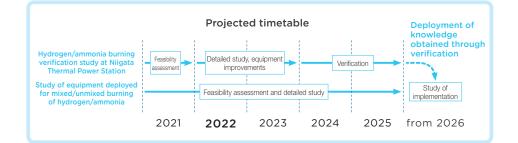


Case Studies of Carbon Neutrality Initiatives

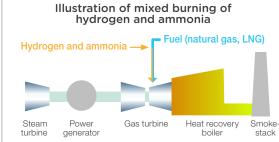
Case study 1: Decarbonization of thermal power

O Verification study of mixed burning with hydrogen and ammonia to decarbonize LNG-fired thermal power

Expectations are high for hydrogen and ammonia as energy sources to move closer to achieving carbon neutrality. Neither substance releases CO_2 emissions when burned. Since use to generate power requires verification of stability when burning, we will proceed with verification testing at our Niigata Thermal Power Station No. 5 series (a natural gas plant in the city of Niigata, Niigata Prefecture, with a capacity of 109 MW). Another issue raised by the use of hydrogen and ammonia is the lack of supply chains for fuel purchase and supply. It is our hope that the verification of these fuels in an actual power station will advance supply chain development.



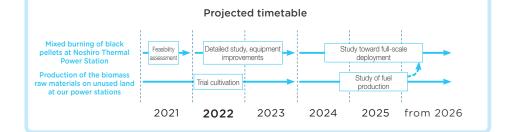




O Verification study of mixed burning with black pellets to decarbonize coal thermal power

In addition to putting to use local resources (wood chips) previously unused, in 2021, the Noshiro Thermal Power Station (a coal-fired station with total output of 1,800 MW located in Noshiro, Akita Prefecture) began verification testing of mixed burning with black pellets—biomass fuel made from partially carbonized wood.

Black pellets offer greater thermal energy than wood chips. They also offer properties similar to coal, which means they can be used in existing facilities without major modifications. We estimate potential CO₂ reductions of roughly 300,000 tons over one year from mixed burning with approximately 10% black pellets in a single plant (600 MW) at the Noshiro Thermal Power Station. We consider this to be an effective way to move toward carbon neutrality, and we are aiming to launch full-fledged operation beginning in FY2024.



Verification testing of raw material production using unused land on a power station site

At the Akita Thermal Power Station (a station fired by heavy oil and crude oil with total output of 600 MW, located in Akita, Akita Prefecture), test cultivation of plants that can serve as raw materials in biomass fuel began in 2021, to put unused land on the plant site to use and gain knowledge concerning biomass fuels.

About 700 saplings were planted in July 2021. These grew quickly, demonstrating that certain varieties of plants were well suited to growing even in the cold Tohoku climate. After harvesting some of the trees, trial pelletizing is underway to verify their properties as biomass fuel.

Future plans call for studying the production of black pellets and use in mixed burning at the Noshiro Thermal Power Station based on considerations such as crop yields, conditions and properties, and the pellet properties of the plants grown here.



Harvesting the plants

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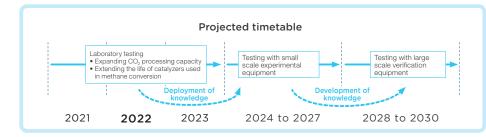
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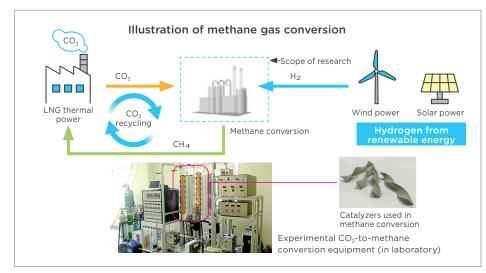
Case study 2: Research on conversion of CO₂ generated by thermal power to methane gas using hydrogen from renewable energy

We're currently undertaking joint research with Shizuoka University on converting the CO_2 generated by thermal power sources to methane gas—a carbon capture, utilization and storage (CCUS) technology.

This project seeks to synthesize methane gas from CO_2 generated by a thermal power station and hydrogen produced using renewable energy for reuse in mixed burning in LNG thermal power generation. This technology will enable reductions in and more effective use of CO_2 generated by thermal power sources.

This project is currently studying expanding the size of the equipment used to convert CO_2 to methane gas, extending the useful life of catalyzers used in methane conversion, and other approaches.





Case study 3: Initiatives toward realizing a hydrogen society

Alongside the New Energy and Industrial Technology Development Organization (NEDO), Toshiba Energy Systems & Solutions Corporation, Iwatani Corporation, and Asahi Kasei Corporation, Tohoku Electric Power and Tohoku Electric Power Network are taking part in feasibility studies, which began in February 2020, for the Fukushima Hydrogen Energy Research Field (FH2R) in the town of Namie, Fukushima Prefecture. Plans call for this to become one of the world's largest hydrogen production facilities based on renewable energy. This facility will have the capacity to generate 1,200 Nm³*of hydrogen per hour (during rated operation) from renewable energy and other sources. Based on adjustments of grid demand and supply, this is intended both to put renewable energy (which entails considerable output variation) to maximum use and to establish clean, low-cost hydrogen production technologies and technologies to enable practical implementation of the power-to-gas concept. Toward these ends, during the feasibility study period through the end of February 2023 the project seeks to achieve progress in various control systems (hydrogen energy operation systems, control systems on the grid side, and hydrogen-demand forecasting systems) and in water electrolysis.

* Normal cubic meter (Nm³) is a unit indicating volume of gas in a dried state at pressure of 1 ATM and temperature of 0 °C.

This project is part of the NEDO Development of Technologies for Realizing a Hydrogen Society/Development of Hydrogen Energy System Technology/Formulation of Business Model for Renewable Energy-based Hydrogen System and Development of Technologies for Largescale Verification.



The completed Fukushima Hydrogen Energy Research Field (FH2R) project

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Case study 4: Preliminary project under the Niigata Prefecture Natural Energy Island Vision

The Tohoku Electric Power Group is participating in the Niigata Prefecture Natural Energy Island Vision, a project that seeks to establish a sustainable recycling-based society and carbon neutrality, invigorate the local economy, improve disaster resilience, and maintain a thriving natural environment based on the adoption of renewable energy.

O Supplying solar power and storage cell services with zero initial costs and unlimited usage at fixed monthly rates

Tohoku EPCO Solar e Charge is advancing an initiative toward local production and local consumption of energy as well as CO₂ emissions reductions in the household sector, through direct supply of renewable energy by installing solar power and storage cell equipment at homes on Sado Island (in the city of Sado, Niigata Prefecture).

Since September 2021, it has concluded business partnership agreements with home builders on the island (six companies as of the end of July 2022) on sale of the Aozora Charge Service, which offers solar power and storage cell services with zero initial costs and unlimited usage at fixed monthly rates. Under these agreements, these services are provided for newly built homes on the island. Through these partnerships with home builders, Tohoku EPCO Solar e Charge is delivering safe, reliable, comfortable clean homes in which residents can live in comfort and with peace of mind even in the event of power failures, by combining the Aozora Charge Service with high-performance homes provided by the builders. It also proposes new ways of living to increase electricity self-sufficiency in energy-saving homes.

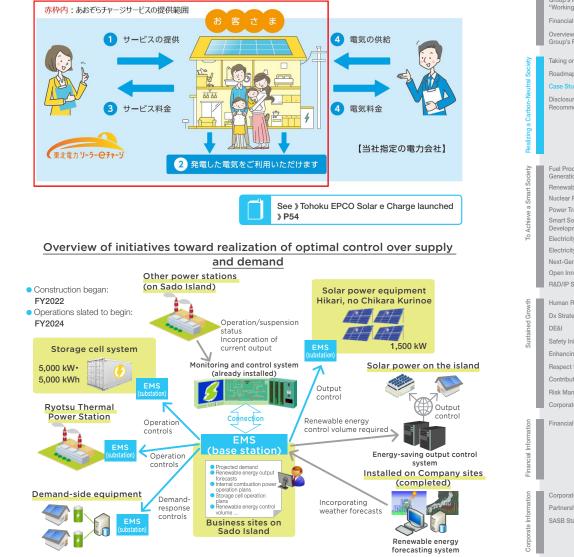
O Efforts to realize optimal control over supply and demand

Currently, power supplied on Sado Island is sourced mainly from internal combustion power stations. In addition, since the island is not connected to the power grid on the mainland and its power demand is limited to the island alone, there is a concern that connection of large volumes of renewable energy sources to the island grid could impact stable power supplies due to weather-dependent output fluctuations, making it impossible to maintain a sound balance between power use and generation. In light of these conditions, to encourage further adoption of renewable energy on Sado Island, Tohoku Electric Power Network is installing solar power and storage cell systems as well as setting up energy management systems (EMSs) for centralized management and control of internal combustion power generation, solar power, storage cell systems, and demand-side equipment, aiming to realize optimal control over supply and demand.

These efforts aim both to mitigate the impact on the power grid of fluctuations in output from renewable energy sources, through optimal management and control of supply-side equipment including storage cell systems and of demand-side systems, and to put renewable energy to maximum use on the island, in order to contribute to decarbonization of power sources.

Knowledge gained through this initiative is expected to be useful not just in promoting decarbonization of power supply on remote islands but also in building decentralized grid* systems.

* Decentralized grid: A power grid that receives power via a transmission and distribution network but enables autonomous power supply through a combination of renewable and other decentralized power sources capable of operating independently of the network in the event of an emergency.



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Having long recognized climate change risks and opportunities as important management issues, we've moved forward with measures to reduce emissions of CO_2 and other greenhouse gases in terms of both supply and demand. In addition, since announcing our support for the TCFD* recommendations in April 2019 we have redoubled efforts to promote environmental management in aspects such as strengthening our responses to climate

change and continually enhancing information disclosure in accordance with the framework of the recommendations.

We believe it is important not merely to disclose information but to reflect in our management strategies the risks and opportunities posed by climate change. In doing so, we also rely on engagement with various stakeholders including institutional investors.

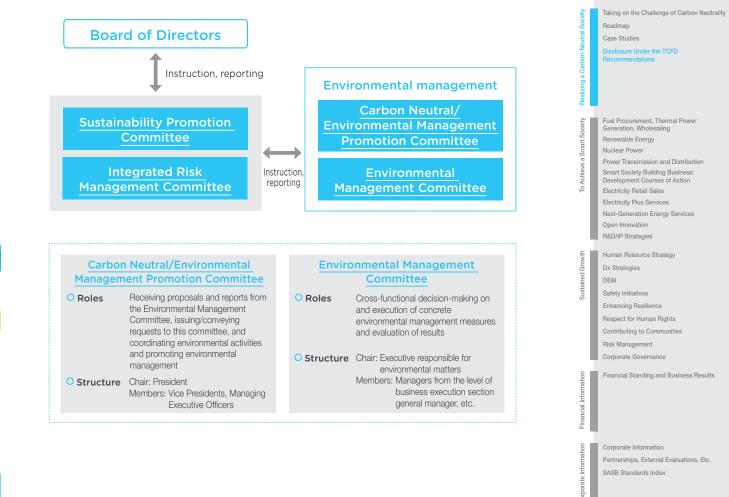
* Task Force on Climate-related Financial Disclosures, established by the Financial Stability Board (FSB) to reflect the aims announced by G20 finance ministers and central bank governors

TCFD

The Board of Directors enhances our responses to climate change and makes decisions on their incorporation into management strategy based on a recognition of the risks and opportunities posed by climate change, studies of various response measures, and monitoring and oversight of the state of progress toward our goals.

The President chairs the Carbon Neutral/Environmental Management Promotion Committee and coordinates environmental activities, including responses to climate change.

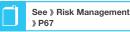
Following the integration of progress status into the environmental management framework, responses to climate change are reported annually to the Board of Directors as sustainability priorities following deliberations by the Substantiality Promotion Committee. The Substantiality Promotion Committee identifies carbon neutrality as one of the Tohoku Electric Power Group's sustainability priorities (materiality topics) and considers climate-related matters when setting goals and monitoring KPIs.





TCFD

Tohoku Electric Power integrates and lists in its environmental management framework the groupwide climate risks and opportunities identified by each business execution section and assessed with regard to financial impact. It then ascertains the priority of responding to each risk based on the projected financial impact. Under the integrated risk management framework, a structure has been developed for reporting on climate-related risks with major impacts on management to the Board of Directors twice annually, together with non-climate-related risks.





See » Business and other risks FY2021 Securities Report » P16 Editorial Policy

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Scenario analysis

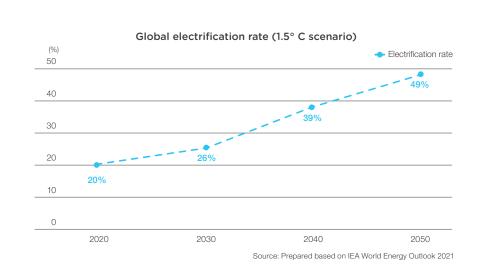
We perform ongoing scenario analyses to ascertain the financial impact of future climate change risks and opportunities. In our scenario analyses, we selected the risks and opportunities identified under the environmental management framework deemed likely to have an outsize impact on the Company's businesses and ascertained in particular which risks and opportunities are likely to grow within the scenarios envisioned.

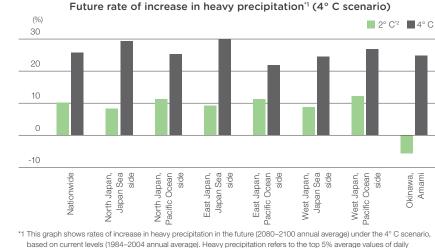
We chose two scenarios: a 4° C scenario under which the shift to a low carbon society fails to advance and countermeasures against climate change are not enhanced beyond current levels, and a 1.5° C scenario under which major changes are made to policy and the behavioral forms throughout society as a whole to achieve greenhouse gas emissions neutrality and limit the global temperature increase to no more than 1.5° C (the scenario of progress toward carbon neutrality in 2050). Our scenario analysis reflects medium- to long-term timelines including the period starting in 2050.

To ensure sustained operations under any scenario, we will continue to analyze climate change risks and opportunities, seeking to minimize management risks and swiftly reflecting opportunities in management strategies, aiming for sustained growth.

1.5° C scenario	Anticipated risks to the Company
Temperature rises by less than 1.5° C since the Industrial Revolution thanks to aggressive action. <u>Reference scenarios: IEA WEO2021 (NZE Scenario), etc.</u>	 Enhanced restrictions on CO₂ emissions Systems related to adoption of renewable energy Energy prices, market prices Changing evaluations by stakeholders Progress of decarbonization technologies (including electrification and distributed power sources)
4° C scenario \longrightarrow	Anticipated risks to the Company
Temperature at century's end is up 3.2–5.4° C from the Industrial Revolution due to failure to take additional countermeasures. Reference scenarios: IPCC Fifth Assessment Report (RCP8	 G Increasingly severe climate disasters Changes in precipitation patterns Analysis of physical risks associated with more pronounced impacts 3.5 Scenario), etc.

We're improving our scenario analysis in stages, based on multiple climate change scenarios identified by the International Energy Agency (IEA), Intergovernmental Panel on Climate Change (IPCC), and other bodies. This scenario analysis is intended to consider impacts that may arise under certain assumptions and feasible responses, based on a long-term perspective. No guarantees are made regarding results.





precipitation on days of precipitation during the year

*2 The 2° C scenario refers to RCP2.6.

Source: Based on Ministry of the Environment and Japan Meteorological Agency projections of Japan's climate at the end of the 21st century





TCFD TASK FORCE of CLIMATE-RELATED FINANCIAL DISCLOSURES Strategy

Results of analysis of transition risks

Under the 1.5° C scenario, which anticipates growing transition risks, we anticipate political and policy risks (e.g., introduction of carbon pricing) or economic and market risks (e.g., falling market prices of conventional power sources) in each of the short, medium, and long term. This scenario involves risks of thermal power using coal and other fossil fuels becoming less competitive due to rising costs of carbon emissions.

Over the medium to long term, we expect advances in decarbonization technologies that

Scenario	Category	Climate change risk	Anticipated business risks to the Company ¹	Impact	Timing of occurrence ⁻²	Anticipated business opportunities for the Company
-	Politics (policies)	1 Enhanced restrictions on CO ₂ emissions	Increased costs due to adoption of carbon pricing, etc.	Significant	Short/ medium/ long term	Growth in market share of low carbon and carbon-free products (including power source from renewable energy) and services
		Systems related to renewable energy adoption	Decreased recoverability of investment in renewables due to changes to the FIT program, intensifying competition in the renewables business, etc.	Significant	Short/ medium/ long term	
	Economy (markets)	3 Energy prices, market prices	Decreased market prices of existing power sources due to expansion of distributed power sources	Significant	Short/ medium/ long term	
	Society (reputation)	4 Changing evaluations by stakeholders	Accelerating divestment from thermal power sources for which decarbonization has not been implemented, rising fundraising costs, falling stock prices	Significant	Short/ medium/ long term	
	Technology	5 Progress of decarbonization technologies (including electrification and distributed power sources)	Increase in new capital investment involving decarbonization technologies Decreased demand for electricity due to progress on energy-saving technologies	Significant	Medium/ long term	Growing demand for electricity due to rising electrification rates, including EVs Lower cost of renewable energy facilities Development and penetration of technologies related to storage cells, CCUS

*1 Business risks that would have pronounced impact on the Company have been identified under certain assumptions.

*2 Short term: through 2025; medium term: through c. 2030; long-term: through c. 2050

enable improved thermal efficiency and lower costs for the storage cells used in electric vehicles. This involves risks including rising amounts of new capital investment and decreased electricity demand due to progress in energy-conservation technologies. The 1.5° C scenario also anticipates business opportunities for the Group due to growing market shares of carbon-free products and services, rising electrification rates, and other factors.

Our response

Proactively assuming the challenge of carbon neutrality by accelerating CO₂ emissions reductions in the Tohoku Electric Power Group under the Tohoku Electric Power Group Carbon Neutral Challenge 2050

Maximum use of renewable energy and nuclear power

- Developing projects targeting new development of 2,000 MW in renewable energy
- Rapid resumption of nuclear plant operations
- Decarbonization of thermal power sources
- Verification testing of mixed burning with hydrogen and ammonia at the Niigata Thermal Power Station
- Verification testing of mixed burning with black pellets at the Noshiro Thermal Power Station
- Test cultivation of biomass materials on unused land at power plant sites

Electrification and realization of a smart society

- Progress on electrifying Company vehicles to promote EV use
- Business expansion through proposal of electrification including conversion of heat sources and decentralized power sources
- Promoting the renewables aggregation business'
- * Services to ensure the aggregation and effective use of community renewable resources

Promoting technological development

- Technological development toward utilization of hydrogen and ammonia
- Technological development in grid and storage systems toward increased use of renewables
- Technological development related to offshore wind power
- Technological development in carbon recycling

See »Roadmap Toward Realizing Carbon Neutrality »P24

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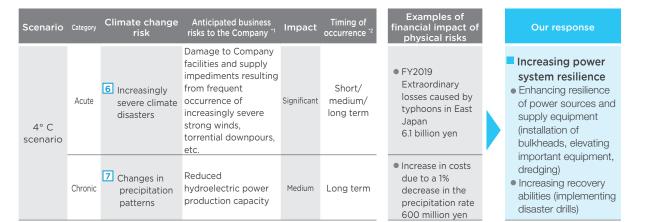
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Results of analysis of physical risks

Under the 4° C scenario, which envisions high levels of physical risks, we anticipate significant climate change impacts, increasingly severe climate disasters, and changing precipitation patterns.

Acute risks include increased damage to Group facilities and impediments to supply. It will become increasingly important to enhance resilience throughout the power infrastructure. We also anticipate the chronic risk of changes in precipitation patterns to affect hydroelectric power generation and other activities. We will strive to increase power system resilience through being ready for frequent and severer climate disasters and enhancing the resilience and recoverability of facilities.



*1 Business risks that would have pronounced impact on the Company have been identified under certain assumptions. *2 Short term: through 2025; medium term: through c. 2030; long-term: through c. 2050

TCFD

Indicators and targets

CO₂ reduction targets

We will proactively assume the challenge of carbon neutrality by 2050, based on the major prerequisite of securing S+3E. To achieve the goals of the Tohoku Electric Power Group Carbon Neutral Challenge 2050, the Group will aim to halve CO₂ emissions in FY2030 vs. their actual FY2013 levels. Based on the Tohoku Electric Power Group Carbon Neutral Challenge 2050 announced in March 2021, we will accelerate CO₂ emissions reductions across the Tohoku Electric Power Group through decarbonization of thermal power, maximum use of renewable energy and nuclear power, and electrification and realization of a smart society.

1. Maximum use of renewable energy and nuclear power

- Seeking to develop 2,000 MW of renewable energy soon after 2030
- Swift operation resumption and increased operation rate of nuclear power based on the essential prerequisite of safety

2. Decarbonization of thermal power

- Expanding mixed burning of biomass in coal thermal power generation
- Testing mixed burning of hydrogen and ammonia at thermal power stations

3. Electrification and realization of a smart society

- Proposing optimal electrification and energy efficiency centered on heat pumps
- Expanding promotion of distributed energy services
- Promoting the renewable-energy aggregation business



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Example of financial

impacts of transition risks

Cost of purchasing

100 GWh worth of

non-fossil-fuel

60 million yen*

achieve obligations under the Act on

Structures (0.6 yen/kWh) × volume

purchased (assumption)

* Results of fourth phase of market trading to

Sophisticated Methods of Energy Supply

certificates:

TCFD

Indicators and targets

Scope 1, 2, and 3 greenhouse gas emissions

Scope 1 and 2 greenhouse gas (GHG) emissions from Tohoku Electric Power and Tohoku Electric Power Network power stations and other business facilities are calculated pursuant to the following Japanese laws: Act on Rationalizing Energy Use, Act on Promotion of Global Warming Countermeasures.

Scope 3 GHG emissions are calculated based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.4).

Scope 1 emissions are direct emissions from GHG sources in Tohoku Electric Power and Tohoku Electric Power Network. Scope 2 emissions are indirect emissions from the generation of electricity and heat supplied to us by other companies. Scope 3 emissions are indirect emissions from the business activities of Tohoku Electric Power and Tohoku Electric Power Network, not included in Scope 1 and 2 emissions.

Since emissions related to fuel extraction and transport have been added to Scope 3 Category 3 emissions beginning with FY2021, Category 3 emissions are higher compared to FY2020. The corresponding GHG emissions in FY2021 totaled 4.312 million tons CO₂. Scope 1, Scope 2, and Scope 3, Category 3 emissions are assured as described in the Sustainability Report.



				(Unit: 10 thousand tons CO_2)
		Item	FY2020 results	FY2021 results
Scope 1 (Direct GHG emissions by the business)		3,114	3,281.5	
Scope 2 (Indirect GHG emissions from use of electricity, heat, and steam supplied by other companies)		0.1	0.1	
Scope 3 (Indirect GHG emissions other than Scope 1 and 2)		849.1	1,359.9	
	Category 1	Purchased goods and services	31.0	27.4
	Category 2	Capital goods	31.9	15.9
	Category 3	Fuel- and energy-related activities	783	1,313.0
	Category 4	Upstream transportation and distribution	1.8	1.8
	Category 5	Waste generated in operations	0.4	0.8
	Category 6	Business travel	0.2	0.2
	Category 7	Employee commuting	0.8	0.8

Calculation methods

Emissions in the following categories are calculated in accordance with Japan's Act on Rationalizing Energy Use, Act on Promotion of Global Warming Countermeasures, and Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.4).

Emissions intensities are derived from the Emissions Intensity Database for Calculation of Organizational Greenhouse Gas and Other Emissions through the Supply Chain (Ver. 3.2) and IDEA Ver. 2.3.

- Category 1: (price data on products and services purchased) × (emissions intensity)
- Category 2: (increase in book value of fixed assets) × (emissions intensity)
- Category 3: (volume of power supplied by other companies) × (alternative CO₂ emission factor) + (volume used by type of fuel) × (emissions intensity)
 - Category 4: (heat consumption by type of vehicle, vessel, etc.) × (emissions intensity)
- · Category 5: (final industrial waste disposal) × (emissions intensity)
- Category 6: (number of employees) × (emissions intensity)
- Category 7: (number of employees by working pattern and urban category) × (number of business days) × (emissions intensity)

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Fuel Procurement, Thermal Power

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Power Supply Business: Fuel Procurement, Thermal Power Generation, Wholesaling

Opportunities

Business

- O Growing customer demand for environmental performance backed by the movement toward carbon neutrality
- Growing customer orientation toward low rates and stable supply (stability of supply itself, price stability) environment
 - Diversification of methods of recovering costs, including the development of capacity markets, demand-supply adjustment markets, and other markets as the result of progressive power system reforms

Risks

- Higher power generation costs due to rising fuel prices Stronger restrictions on wholesaling,
 - both internal and external
- Lower utilization rates of thermal power stations due to growing adoption of renewable energy and polarization of market prices by time of day

We will promote the following initiatives to optimize our power source portfolio with the aim of solid competitive strengths and carbon neutrality while continuing to prioritize safety: • Economical fuel procurement and responding to risks of price fluctuations

• Progress on suspending, closing, and/or replacing inefficient and less eco-

- friendly aging thermal power and developing new, high-efficiency power sources O More advanced deployment of thermal power sources based on the adoption of state-of-the-art digital technologies
- O Optimization throughout the Value Chain of fuel, power generation, demandsupply-related operations, and electricity trading
- O Securing revenue opportunities by utilizing capacity, baseload, non-fossil-fuel value trading, and demand-supply adjustment markets

Fuel procurement to enhance competitive strengths comprehensively

To achieve our goal of "Enhancing competitive strengths through comprehensive reforms in the power supply business," one of the focal points of the Tohoku Electric Power Group's FY2022 Medium-Term Plan, we will secure stable power supplies through measures to reduce fuel procurement risks, including diversification of procurement sources, and strengthen efforts to cut fuel costs and increase flexibility in fuel procurement, while also striving to optimize the Value Chain from fuel procurement through power generation and wholesaling by putting market trading functions to maximum use.

In light of recent dramatic change in the global energy environment, we are responding to fuel procurement risks associated with Russia's invasion of Ukraine and striving to lower costs under conditions of historically high fuel prices. We are also cooperating with Group member company Tohoku EPCO Energy Trading in areas such as hedging against risks and improving our competitive strengths through trading in derivatives. Furthermore, as efforts toward achievement of the goals of the Tohoku Electric Power Group Carbon Neutral Challenge 2050, we are proceeding with studies to establish procurement schemes for new fuels including hydrogen, ammonia, and black pellets. To enhance our functions for researching matters such as power generation fuels and international energy trends, we have

established a representative office in Singapore. These efforts will help enhance stability and economic efficiency in fuel procurement and realize carbon neutrality through utilizing renewables and carbon-neutral fuels.

Efforts to reduce fuel costs

- Procurement of coal of higher than standard ash content but of higher economy overall, such as ash processing costs, and of spec coal*1
- Increasing procurement from local/nearby sources (coal)
- Systematically checking compatibility between ship and on-shore facilities^{*2} (LNG)
- Stabilizing fuel procurement prices through derivatives trading
- Establishing a representative office in Singapore [April 2022]

Efforts to increase flexibility in fuel procurement

- Optimizing procurement volumes using provisions for change of destination (LNG)
- Enhancing cooperation with our alliance partners (LNG)
- Securing further quantitative flexibility to enable adaptation to demand and supply conditions (coal, LNG)
- *1 Spec coal refers to coal designated by specifications (coal grade: thermal value, moisture content, ash content, etc.) suitable for use at our coalfired thermal power plants, without consideration for coal brand
- *2 Checking compatibility between ship and on-shore facilities refers to assessing technological compatibility for facilities on the ship side and receiving facilities

Concluding economical short-term LNG contracts (LNG)

Responding to the Ukraine crisis

The movement toward embargoes against Russian fuels in Europe, North America, Japan, and elsewhere has led to tight fuel supplies and rising costs.

- ⇒ Under these conditions, we are implementing the following measures to enable stable procurement of fuels and control fuel costs:
- Maintaining high levels of stock at power stations (coal, LNG)
- Continuing to diversify procurement sources (coal, LNG)
- Building and strengthening cooperation with partners, including power and gas companies (LNG)



factors (coal)

Continued efforts to diversify contracted prices, volumes subject

to contractual negotiations, timing of negotiations, and other



We procure US-produced natural gas, including shale gas, from the Cameron LNG project in the United States (photo shows the supply ship Diamond Gas Sakura).

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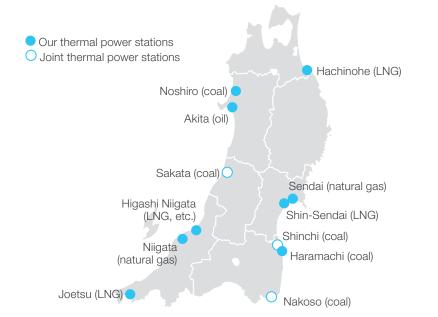
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Courses of

Enhancing competitive strengths in thermal power generation

In addition to steady progress on developing high-efficiency thermal power stations, we're also suspending and decommissioning old and inefficient thermal power stations, enhancing competitive strengths in power sources, and responding to fluctuations in power demand and supply accompanying the growing adoption of renewable energy.



Status of thermal power stations in power source development plans

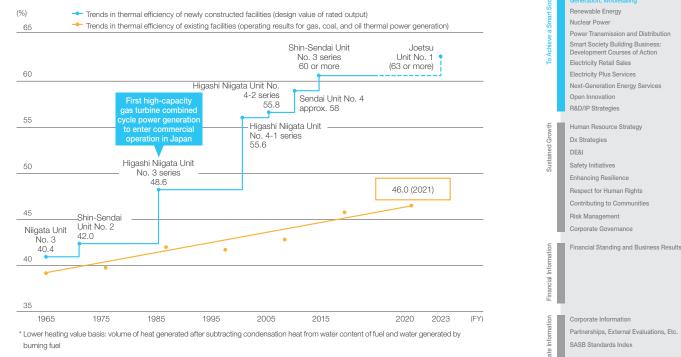


Unit No. 1 at the Joetsu Thermal Power Station

Construction of the new Unit No. 1 at the Joetsu Thermal Power Station began in July 2019, and mechanical and electrical work began in June 2020. Joetsu Unit No. 1 deploys a next-generation gas turbine based on a forced air-cooled combustor system developed jointly with Mitsubishi Power, Ltd. This technology was recognized by a 2018 Energy-Efficient Machinery Award from the Ministry of Economy, Trade and Industry. The unit is designed to improve economic performance and reduce environmental impact by reducing fuel consumption and CO_2 emissions, with the goal of achieving world-leading thermal efficiency of 63% or better. We are also improving the capacity to adapt to fluctuations in power demand and supply due to growing adoption of renewable energy.

We are proceeding with trial operations to launch commercial operations in December 2022. Once it comes online, this facility will contribute to competitive advantages as a new power source providing high economic, environmental, and operational performance, as described above.

Trends in thermal efficiency of our own thermal power stations (based on lower heating value*)



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Advances in the operation of thermal power sources

Seeking to boost operational efficiency of thermal power stations still further, we're adopting advanced digital technologies like Big Data analysis and IoT.

Since 2017, we've moved forward in advanced joint verification efforts with Toshiba Energy Systems & Solutions Corporation for the following two systems, which are intended to contribute to the early detection of equipment anomalies and increased thermal efficiency. Through March 2020, we've deployed and launched these systems at all thermal power stations (16 units at eight stations).

Of these, we believe that systems for early detection of signs of equipment anomalies will contribute to safety and stable operations not just for our own power stations, but for customers with their own power generation equipment, as well as customers in various manufacturing industries. For this reason, in preparation for external sales of advanced equipment monitoring services based on these systems, we're making full use of Group strengths and working with Group members Tsuken Electric Ind. Co., Ltd. and Tohoku Intelligent Telecommunication Co., Inc. to develop related businesses in FY2023. Verification testing at customer facilities is currently underway.

Systems for early detection of signs of equipment anomalies (utilizing Big Data analysis technologies)





Systems to increase thermal efficiency by modifying operating conditions (applying IoT technologies)



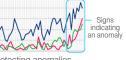
Advanced equipment monitoring services (targeting commercialization in FY2023)



Tohoku Electric Power's high-performance, state-of-the-art digital technologies for a wide range of general applications

Early detection of equipment anomalies and minimizing associated negative costs





Detecting anomalies through real-time analysis

Overseas power generation business

We've applied the technologies, experience, and other resources gathered in Japan in activities related to the power generation business in pursuing business opportunities around the world. We plan to press forward to launch the commercial operation and stable utilization of projects in which we have invested and participated worldwide.

In development and planning for renewable energy and smart society building business we will make full use of the expertise, personnel networks, and other resources accumulated to date in our overseas power generation operations.

Projects in which we have invested and participate

	Falcon Gas Thermal IPP Project*	Lantau Dedap Geothermal Power Project	Nghi Son 2 Coal-fired Power Project
Country	Mexico	Indonesia	Vietnam
Output (thousand kW)	2,233	98	1,200
Our share of output (thousand kW)	223	10	120
Operational commencement	2001-2005	December 2021	July 2022

* Sale procedures are currently underway (slated for completion during FY2022)



Lantau Dedap Geothermal Power Plant (Indonesia)

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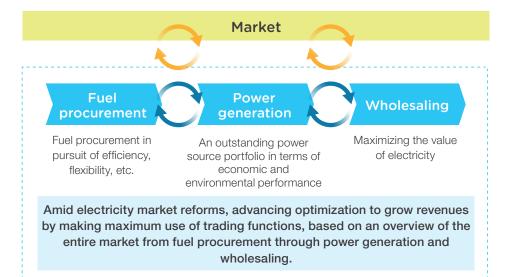
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Value-chain optimization

With the expanding adoption of market mechanisms in electricity trading, we are promoting value-chain optimization utilizing trading activities to secure revenue while accounting for uncertainties in quantities and prices.

Illustration of initiatives to optimize the Value Chain from fuel procurement to power generation and wholesaling



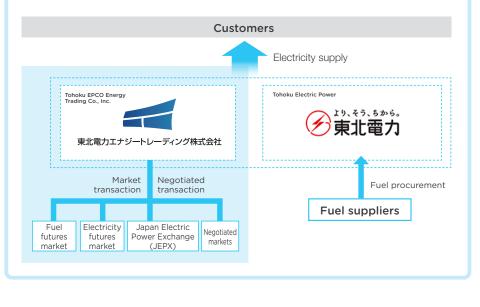
Trading

Seeing electricity market reforms as business opportunities, our strategic subsidiary Tohoku EPCO Energy Trading Co., Inc. engages in integrated trading including trading in the electricity market and fuel futures. It will continue to increase revenues by proposing solutions that deliver added value in aspects such as price levels tailored to the market's perspective and flexible contractual terms and conditions while making the most of its trading functions. We manage a range of risks surrounding the company, including market risk, by building a multilayered system involving the parent company.

Tohoku EPCO Energy Trading Co., Inc.

Since it started operating in April 2018, Tohoku EPCO Energy Trading has engaged mainly in the business of trading in wholesale electricity in the electricity market to boost revenues while also utilizing fuel futures and other means to control the impact of fluctuations in fuel prices.

Address: 8-3 Marunouchi 1-chome, Chiyoda-ku, Tokyo Shareholder: A wholly owned subsidiary of Tohoku Electric Power Co., Inc.



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Fuel Procurement, Thermal Powe Generation, Wholesaling



Power Supply Business: Renewable Energy

The Tohoku Electric Power Group will build a solid position as a responsible renewable energy operator.

> Managing Executive Officer Tohoku Electric Power Co., Inc. Yuji Sasaki

Under the Tohoku Electric Power Group Carbon Neutral Challenge 2050, the Tohoku Electric Power Group is striving to achieve carbon neutrality through maximal use of renewable energy and nuclear power, decarbonization of thermal power sources, and electrification and realization of a smart society.

Among these efforts, we recognize the need to assign a major role to renewable energy as an important power source to achieve carbon neutrality and promote sustainability. Centered on the Renewable Energy Company launched this April, we are accelerating the development of new power sources, making the most of existing ones, and pursuing new business opportunities. To date, the Group has adopted approximately 2,800 MW in renewables, including hydroelectric, solar, geothermal, and wind power. In addition, we are currently working toward a target of developing 2,000 MW in new renewable

energy sources centered on the six Tohoku prefectures and Niigata Prefecture. As of July 2022, we held equity stakes for approximately 650 MW* of the output. To achieve our target, we plan to boost output in which we hold an equity stake still further through means including enhancing in-house development and expanding the business territory, taking advantage of the technological capabilities, expertise, and other strengths accumulated by the Company over 70 years in the electric power business and harnessing numerous business facilities in the six Tohoku prefectures and Niigata Prefecture. As for existing power sources, we will generate maximum value from our hydroelectric, geothermal, and other power sources already in operation by moving forward with comprehensive repairs and other maintenance activities and by boosting generated power, based on the premise of creative cost cutting.

Power Renewable Energy Service, which was established last year, is currently making progress on preparations to launch full-fledged service provision. The goal is to maximize business opportunities throughout the entire facility life cycle, including replacement, based on operations and maintenance services. By comprehensively advancing these initiatives, the Group will realize solutions to the issues faced in our communities, increase the profit-generating potential of our renewable energy businesses, and aim for both the sustained progress of society as a whole and medium- to long-term increases in corporate value.

To pursue new business opportunities, Tohoku Electric

* Assuming commercial operation of all projects currently under development

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Opportunities Growing movement to achieve carbon neutrality by 2050 Business environment Risks

Impacts of changes to regulatory frameworks related to the power business

Enhancing the renewable energy business promotion structure

In April 2022, we established the Renewable Energy Company, an internal organization intended to help draft and implement strategic plans in response to the environmental changes in the electricity business.

Working jointly with the Smart Society Building Business, this organization will promote all processes related to renewables, from development through operation, based on strategies and plans formulated from a global perspective on renewable energy as a whole (i.e., wind, solar, biomass, hydroelectric, and geothermal power).

Accelerating the development of 2,000 MW power sources through means including enhancement of our in-house development and expansion of our business territory

As of July 2022, the Group was participating in 30 new development and business operation projects, with an equity stake in output capacity of approximately 650 MW.* In the area of wind power, as the first initiative of its kind in the Group we are carrying out independent development feasibility studies on the Takko Wind Power Project (tentative name) and have begun feasibility studies with BW Ideol toward joint development of a commercial-

scale floating offshore wind power project off the coast of the city of Kuji, Iwate Prefecture. We also participated in the Tsunase Solar Power Project, a project outside our franchise area of the six Tohoku prefectures and Niigata Prefecture. We are also at work building other wind, geothermal, and biomass power projects.

* Assuming commercial operation of all projects currently under development

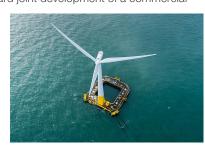


Illustration of a floating offshore wind power facility (courtesy: BW Ideol)

We will advance the following initiatives to strengthen the profitgenerating potential of our renewable energy businesses with the aim of the sustained progress of society as a whole and medium- to long-term increases in corporate value:

- O Enhancing the renewable energy business promotion structure
 O Accelerating the development of 2,000 MW power sources by enhancing in-house
- development activities, expanding the business territory, and other efforts
 Maintaining and expanding kWh capacity via the comprehensive renovation of aging hydroelectric and geothermal power facilities
- O Deploying O&M businesses through Tohoku Electric Power Renewable Energy Service

Maintaining and expanding kWh capacity via the comprehensive renovation of aging hydroelectric and geothermal power facilities

To achieve sustained earnings, we are moving forward with various initiatives to maintain and expand power generation at existing facilities.

The Yokogawa Power Station (a hydroelectric power station with maximum output of 2,000 kW), which first began operation in 1928, began commercial operation again in December 2021, following a replacement project intended to increase its generating efficiency. In addition, Group member company Tohoku Sustainable & Renewable Energy Co., Inc. is carrying out full-fledged renovations on the Chojahara Power Station, (a hydroelectric power station with maximum output of 12,400 kW), which first began operation in 1938. This project is expected to boost capacity to 12,900 kW.

Deployment of O&M businesses* through Tohoku Electric Power Renewable Energy Service

Group member company Tohoku Electric Power Renewable Energy Service (established in April 2021) is making progress on growing its onshore wind power maintenance business in the Tohoku and Niigata region. In June 2022, it began dispatching licensed chief electrical engineers to renewable energy projects. It also plans to establish the Wind Power Equipment Training Center (tentative name) to train maintenance technicians for wind power facilities.

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Courses of

Renewable energy development

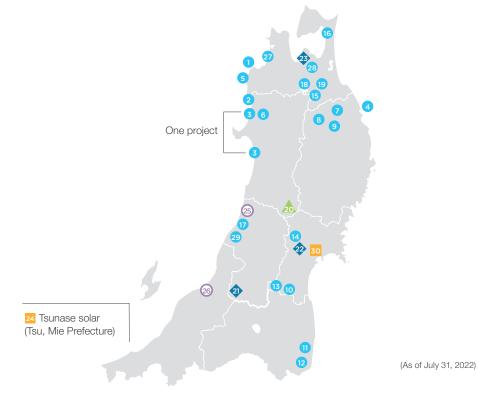
Tohoku Electric Power sees renewable energy as an integral component of its portfolio of power sources. As a responsible business operator, the Group is working to develop renewable energy in the six Tohoku prefectures and in Niigata Prefecture.

To date, including our participation in the following existing projects, we've been engaged in development of 30 projects. As of the end of July 2022, we held an equity stake in total output of about 650 MW*. We plan to continue to work toward our various goals, including enhancing in-house development activities and expansion of business territory, to expand renewable energy.

* Assuming commercial operation of all projects currently under development



● Wind ◆ Hydroelectric ▲ Geothermal ■ Solar ○ Biomass



Power stations currently under development or in which we participate*

		Project name	Output	Scheduled operational start date
	1	Tsugaru offshore	Approx. 480 MW	FY2028 or later
	2	Happo-Noshiro coast offshore	356 MW (max.)	FY2028 or later
Offshore wind	3	Akita port/Noshiro port offshore	Approx. 140 MW	2022
	4	Floating offshore wind power project off the coast of the city of Kuji (TBD)	(TBD)	(TBD)
	5	Fukaura wind	Approx. 70 MW	February 2024
	6	Noshiro-Yamamoto wide area wind	Approx. 100 MW	FY2023 or later
	7	Oritsumedake S. 1 wind	Approx. 44 MW	January 2023
	8	Inaniwa-Takko wind	Approx. 100 MW	FY2025 or later
	9	Inaniwa wind	Approx. 100 MW	FY2025 or later
	10	Shiroishi-Kosugo wind	Approx. 38 MW	FY2024 or later
	11	Abukuma S. wind	Approx. 90 MW	FY2025 or later
Onshore wind	12	Tabito Central Wind Farm	Approx. 54.6 MW	FY2027 or later
	13	Inego Pass Wind Farm	58.8 MW (max.)	May 2028
	14	Miyagi Kami Wind Farm	Approx. 42 MW	FY2024
	15	Takko wind (tentative name)	75.6 MW (max.)	FY2027 or later
	16	Shimokita wind	Approx. 96 MW	2027 or later
	17	JRE Sakata wind replacement project	27.5 MW (max.)	2026
	18	Onakadaibokujo wind	4 MW	November 2024
	19	Fukamochi wind	94.6 MW (max.)	FY2030 or later
Geothermal	20	Kijiyama (tentative name)	14.9 MW	2029
	21	Tamagawa No. 2 hydroelectric	14.6 MW (max.)	October 2022
Hydroelectric	22	Narusegawa Power Station	2.3 MW (max.)	FY2034
	23	Shin-Kamimatsuzawa hydroelectric	9.4 MW (max.)	November 2031
Solar	24	Tsunase solar	35 MW	March 2023
	25	Chokai-minami Biomass Power Station	52.9 MW	October 2024
Biomass	26	Niigata-Higashi Minato Biomass Power Station	50 MW	October 2024

* Includes development feasibility studies.

Power stations where operations have begun

	Name	Output	Operational start date
	27 Wind Farm Tsugaru	121.6 MW	April 2020
Onshore wind	28 Shichinohe-Towada wind	30.5 MW	December 2021
	29 Tsuruoka-Hachimoriyama wind	13.6 MW	November 2021
	30 Miyagi Osato Solar Park	37.5 MW	October 2021

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Promoting green financing

We have aggressively promoted green financing since issuing our first Green Bonds in FY2019. In FY2021, we began raising funds through green loans, with the goal of diversifying means of fund raising in accordance with the characteristics of individual green projects, including their scale and periods. We have employed green loans four times in total.

In addition, June 2022 saw our third issuance of Tohoku Electric Power Green Bonds. We will maintain the course of optimal fund raising to achieve the goals of the Tohoku Electric Power Group Carbon Neutral Challenge 2050.

Overview of green loans

Lender	Development Bank of Japan Inc.	MUFG Bank, Ltd.
Use of funds	Construction costs for the Tamagawa Hydroelectric Power Station No. 2* (Yamagata Prefecture)	Renovation costs for the Chojahara Hydroelectric Power Station* (Yamagata Prefecture)
Date executed	August 30, 2021	October 28, 2021
Photo of power station		
Lender	Akita Bank, Ltd.	Kita-Nippon Bank, Ltd.
Use of funds	Renovation costs for the Shin-Noshiro Thermal Power Station* (Akita Prefecture)	Upgrade costs for the Matsukawa Geothermal Power Station* (Iwate Prefecture)
Date executed	March 30, 2022	March 30, 2022
Photo of power station		

* Power station developed and operated by Tohoku Sustainable & Renewable Energy Co. Inc.

Assessment by external agencies

Our green finance initiatives have been assessed and verified for compliance with various applicable standards (including the Green Bond Guidelines 2020) by the independent agency DNV Business Assurance Japan K.K. The green bonds for Shin-Noshiro Wind Power Station and Matsukawa Geothermal Power Station have also been certified by the Climate Bonds Initiative (CBI)*, an international NGO that establishes strict standards to secure the reliability and transparency of green bonds.

* Refers to the certificate issued by CBI for debt financing verified to be consistent with the standards for climate bonds by a third-party assessment organization. Climate bond standards are international standards formulated to ensure strict confirmation, based on scientific grounds, of the consistency between green bonds and the 2° C target under the Paris Agreement.

		Second Tohoku Electric Power Green Bonds' ¹	Development Bank of Japan Green Loan	MUFG Bank Green Loan	Akita Bank Green Loan	Kita-Nippon Bank Green Loan	Total
Fund	ls raised	10 billion yen	Not disclosed	Not disclosed	Not disclosed	Not disclosed	10 billion yen (loans not included)
	t allocated ge for loans)	10 billion yen	100%	100%	100%	100%	10 billion yen (loans not included)
refin	allocated to nancing Ige for loans)	2.7 billion yen	0%	0%	0%	0%	2.7 billion yen
	ted balance	0 yen	0%	0%	0%	0%	0 yen
(percenta	ige for loans)	(fully allocated)	(fully allocated)	(fully allocated)	(fully allocated)	(fully allocated)	0 yerr
	Geothermal	-				1 (Matsukawa Geothermal)	
Projects	Onshore wind	4			1 (Shin-Noshiro)		10
	Solar	2					
	Hydroelectric		1 (Tamagawa No. 2)	1 (Chojahara)			-
	Geothermal	-				23.5 MW	
Facility	Onshore wind	247 MW			14.4 MW		414 51414/
capacity	Solar	102.6 MW					- 414.5MW -
	Hydroelectric		14.6 MW	12.4 MW			
Annual CO ₂ emissions reductions ^{*2} (FY2021)	Geothermal					Under construction (operation planned to begin in 2025)	
	Onshore wind	177,290t- CO ₂ /y			10,017t- CO ₂ /y	,	- - 376,921t-
	Solar	8,995t- CO ₂ /y					CO ₂ /y
	Hydroelectric		Under construction (operation planned to begin in October 2022)	Under construction (operation planned to begin in December 2023)			-

*1 Since the allocation of the first Tohoku Electric Power Green Bonds was completed in FY2020, they are not subject to annual reporting requirements and are not included above. The projects to which funds raised from the first Tohoku Electric Power Green Bonds were allocated were in stable operation as of 2022.

*2 Methods for calculating annual CO₂ emissions reductions: FY2021 annual power generated (MWh) × CO₂ emissions factors (t-CO₂/ MWh). Emissions reductions from all projects are estimated through prorating by the amount of funds allocated.

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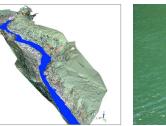
The Tohoku Electric Power Group's comprehensive renewable energy solutions

Measurements and surveys for renewable energy sources

Measurements and surveys for renewable energy sources Measurements and surveys of project sites are an essential part of renewable energy development.

Higashi Nihon Techno Survey Corporation contributes to renewables development by providing advanced measurement technologies using 3D laser scanning, drones, and remote-control boats. It will expand the range of orders received from their current focus on hydroelectric power projects to include surveying in the offshore wind power field using underwater drones and other maintenance surveying.





Drones

Topographical image made using 3D laser scanning

Remote-control boat

Operations and maintenance (O&M) of renewable energy sources

Through operations and maintenance services for renewable energy sources and facilities, Tohoku Electric Power Renewable Energy Service supports safe, stable, reliable operation of power projects, thus contributing to putting renewables to maximum use.



Renewable power generation

While its operations are centered on hydroelectric power, Tohoku Sustainable & Renewable Energy also operates geothermal, wind, and solar power generation facilities in the Tohoku and Niigata region. Its facilities have a total capacity of approximately 150 MW, and it also operates two geothermal steam facilities. In addition to making progress on construction and replacement of hydroelectric power facilities, including Tamagawa Hydroelectric Power Station No. 2 (total capacity 14.6 MW) planned to begin operation in October 2022, it is also proactively developing new geothermal projects.

Construction on renewable energy facilities

Through construction work related to renewable energy facilities, Yurtec has accumulated considerable experience and expertise not just in power stations, but in power transmission and substation facilities for connection to the existing power grid.

In recent years, solar power facilities have tended to be used in local production and local consumption of power, installed at sites such as factory and residential rooftops, while wind power facilities have tended to be large-scale onshore or offshore facilities. Yurtec is leveraging its wealth of experience and expertise to expand orders received for construction related to renewable energy facilities.



Rokkasho Futamata Wind Farm Comprehensive 154 kV power line (1.2 km) construction contract 154 kV/22 kV transformer • 1.500 kW turbines × 34 facility 22 kV power line (20 km)

Example of track record in construction of largescale solar power stations



Watari Solar Power Station Comprehensive 22 kV on-site power lines construction contract 66 kV/22 kV transformer • 79.458 kW facility

Construction on Tamagawa Hydroelectric Power Station No. 2

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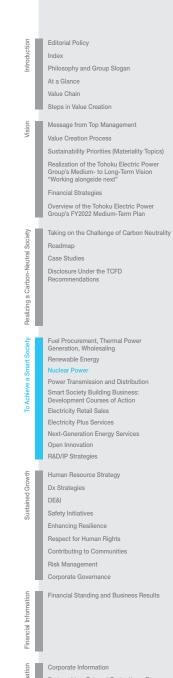
Power Supply Business: Nuclear Power



• Impact of changes to regulatory frameworks related to nuclear power

In addition to accelerating efforts to achieve rapid resumption of nuclear power station operations, based on the paramount precondition of safety, we will continue to improve cost savings and operating efficiency to enhance our competitive strengths.

Steadily implementing measures targeting tangible and intangible aspects in preparation for the rapid resumption of operation of Onagawa Unit No. 2
 Responding appropriately to compliance testing at Higashidori Unit No. 1
 Studies toward applying for compliance testing at Onagawa Unit No. 3, reflecting the progress of compliance testing at Onagawa Unit No. 2
 Decommissioning of Onagawa Unit No. 1, with safety as the highest priority



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Nuclear power station initiatives

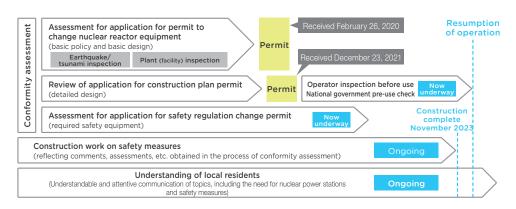
We're moving forward with companywide initiatives to review compliance with new regulatory standards in preparation for the resumption of nuclear power station operations. We aim to resume operation once all preparations are complete, not just in relation to compliance with new regulatory standards, but also as regards achieving greater nuclear power station safety and securing the understanding and consent of local residents.

Unit No. 2 at the Onagawa Nuclear Power Station



In December 2021, construction plans were approved by the Nuclear Regulatory Commission. We are currently making progress on preparations for review of safety regulations and pre-use operator inspection, among other activities. While we had aimed to complete safety construction work during FY2022, following reassessment of the time of completion of the work we have set a new target date of November 2023.

We will continue to respond appropriately to matters such as review of safety regulations and preuse operator inspection, while working toward the goal of completing safety-related construction.



Unit No. 1 at the Higashidori Nuclear Power Station



An inspection is currently underway to assess base seismic vibrations and base tsunami resistance. We will continue to make every effort to complete these inspections at the earliest possible date while working toward our goal of completing safety construction in FY2024.

ssessment	Assessment for application for permit to change nuclear reactor equipment (basic policy and basic design) Resumption of operation Earthquake/ tsunami inspection Now underway Plant (facility) inspection
onformity a	Assessment for application for construction plan permit (detailed design) Operator inspection before use National government pre-use check
Confe	Assessment for application for safety regulation change permit (required safety equipment) Construction FY2024
	Construction work on safety measures (reflecting comments, assessments, etc. Ongoing obtained in the process of conformity assessment)
	Understanding of local residents (Understandable and attentive communication of topics, including the need for nuclear power stations and safety measures) Ongoing

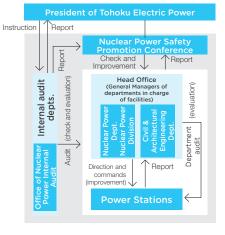
Operation of nuclear power generation without compromising safety

Establishing and strengthening systematic risk management

Tohoku Electric Power recognizes the need to establish and strengthen its risk management systems to further improve nuclear safety. We are currently working to develop and strengthen these internal systems.

Establishing the nuclear risk management system

In July 2014, given the importance of nuclear risk management, we set up the nuclear risk management system led by the President to ensure more direct engagement with nuclear risk management among senior executives. Among other duties, this commission is tasked with analyzing and evaluating nuclear risks and deliberating on measures to mitigate risks, approaches to establishing dialogue with local communities, and the overall direction and management of nuclear risk management.



Enhancing risk communication

We're working to strengthen nuclear risk communication. This means engaging local communities in dialogue concerning the basis of the risks posed by nuclear power generation, an approach that seeks to share risk information while carefully attending to community concerns and opinions on nuclear energy to help forge mutual understanding and build trust. On these occasions, we continue to provide detailed presentations on and measures to reduce nuclear risk as part of efforts to maintain two-way dialogue with local communities. Furthermore, we also proactively communicate information via social media to help people to understand our initiatives to reduce the risks of nuclear power.

We will also reflect the opinions of outside experts and other stakeholders in our nuclear risk management. We plan to reorganize risk information into various categories to improve clarity and to develop the personnel who will be responsible for risk communication. In these and other ways, we plan to continue enhancing risk communication.

Visiting all local households to reflect community feedback in power station operations

It is vital for nuclear power station operators to gather community feedback based on twoway dialogue. Twice each year, as part of the continuing Konnichiwa Visit (Onagawa) and All-household Visit (Higashidori) programs, plant personnel from the Onagawa and Higashidori nuclear power stations visit each household within local communities.

These in-person activities provide residents with more information on power stations and help gather valuable feedback for subsequent reflection into station operations.

We visit some 3,800 households around the Onagawa Nuclear Power Station (in the town

of Onagawa and the Oshika Peninsula area of the city of Ishinomaki) and 2,300 households around the Higashidori Nuclear Power Station.

We will continue these efforts to ensure these power stations are trusted by and have firm roots in their communities.



We use our official Twitter and YouTube accounts to communicate to the broadest possible audience information on our nuclear power stations and efforts to improve plant safety.

We also continually strive to enhance and improve the nuclear power information provided on our website. To expand public understanding of nuclear power, we've added a Q&A page with questions and answers on nuclear power.

We're committed to continuing to advance communication activities that will inform and reassure community residents and the general public by providing timely information and making effective use of social media.



A Konnichiwa Visit at the Onagawa Nuclear Power Station



Communicating information via Twitter



A 360° video introduction to the Onagawa Nuclear Power Station Public Relations Center's exhibits on YouTube

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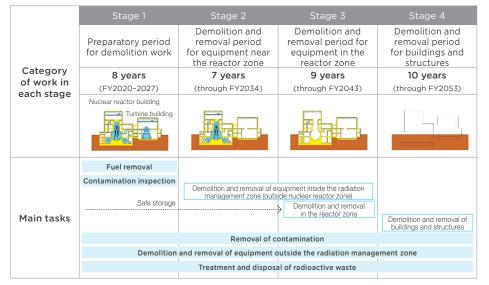
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Decommissioning of Unit No. 1 at the Onagawa Nuclear Power Station

Decommissioning plans for Unit No. 1 at the Onagawa Nuclear Power Station were approved by the Nuclear Regulatory Commission in March 2020. In May 2020, Miyagi Prefecture, the town of Onagawa, and the city of Ishinomaki also granted preliminary approval for the plans in accordance with our safety agreements. In addition to putting safety first in the decommissioning process, we will share information on the status of decommissioning with local residents and other parties through our website and other means.

Background of this decommissioning

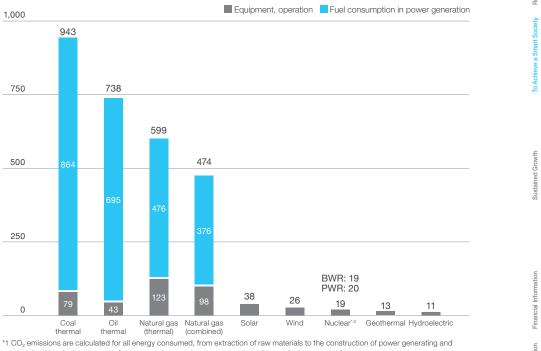
Date	Details
October 25, 2018	Decision made on decommissioning
December 21, 2018	Operation terminated
July 26, 2019	Requested advance discussions with Miyagi Prefecture, the town of Onagawa, and the city of Ishinomaki on application for approval of the decommissioning plan
July 29, 2019	Applied for approval for the decommissioning plan
March 18, 2020	Decommissioning plan approved
May 22, 2020	Received answers to advance discussions with Miyagi Prefecture, the town of Onagawa, and the city of Ishinomaki on application for approval of the decommissioning plan (approval)
July 28, 2020	Decommissioning work begins.



Why nuclear power?

As a nation with limited energy resources, Japan relies on imports for most fossil fuels such as oil, coal, and natural gas. Its energy self-sufficiency is quite low compared to other industrialized nations (11.8% in FY2018). This makes it especially important to target a balanced energy mix that can achieve, at the same time, the S+3E objectives while securing safety (S) as a major consideration: stable energy supply (energy security) (E), environmental safeguards (E), and economic performance (E). From a 3E perspective, we view nuclear power as a key power source. We're making every effort to advance compliance with new regulatory standards and integrate safety measures to permit the rapid resumption of nuclear power station operations.

CO_2 emissions of various power sources'1 (g-CO_2 /kWh)



other facilities, fuel transport, refining, operations, and maintenance, in addition to fuel consumed for power generation. ¹² For nuclear power, results for BWR (19g-CO₂/kWh) and PWR (20g-CO₂/kWh), calculated including factors such as domestic reprocessing and plutonium thermal project use of spent fuel now being planned (assuming recycling once), treatment of highly radioactive wastes, and plant decommissioning, have been averaged based on facility capacity.

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Power Supply Business: Power Transmission and Distribution

Securing a stable supply of electricity alongside our communities —We tackle the challenges of building a nextgeneration network to expand use of renewables

While fulfilling our mission to ensure a stable supply of electricity as the general power transmission franchise for the six Tohoku prefectures and Niigata Prefecture, Tohoku Electric Power Network supports the enriched lifestyles of local residents through ceaseless cost-saving activities and contributing to achieving carbon neutrality by 2050. The business environment in which we operate is undergoing dramatic change, and includes increasingly severe natural disasters, aging of facilities, growing adoption of renewables to achieve carbon neutrality by 2050, and decreased demand for electricity due to the shrinking population.

Given these conditions, we at Tohoku Electric Power Network need to continue to fulfill our mission to deliver a stable supply of low-cost, high-quality electricity to all those in our service area. As we strive day and night to ensure a stable supply of electricity, all members of the organization work together as one to address both the tangibles and the intangibles of our business, in areas including construction, inspection, maintenance, and renovation of power transmission and distribution facilities as well as emergency contingency drills, to strengthen our ability to respond to disasters. We also recognize the need for fullfledged renovation of the large number of power stations built during Japan's postwar years of rapid economic growth, and we are moving forward steadily on measures to address aging infrastructure.

At the same time, we expect the shift to renewable energy as a major power source to accelerate, amid efforts to contribute to realization of carbon neutrality by 2050. Since the six Tohoku prefectures and Niigata Prefecture make up a region with a particularly high renewable energy potential, we need to advance our largescale power transmission grid equipment and our grid stability and demand-supply adjustment technologies. From now on, we will play an active role in building the next-generation power network with an even greater sense of urgency than before. In addition to making progress on such efforts toward stable supply and expansion of adoption of renewables, we also need to fulfill our mission of delivering a stable supply of low-cost, highquality electricity to all those in our service area by enhancing our business foundation through comprehensive cost reduction

and efficiency improvement efforts. To cut costs and improve efficiency, in addition to reducing procurement costs of materials and supplies, we established the Kaizen Promotion Committee, under the leadership of the Chief Kaizen Officer (CKO) in October 2021. Our goal is to achieve further improvements in efficiency and productivity through means including making kaizen a solid part of our corporate culture and ensuing that efforts to identify and address business process wastes and issues will take firm root companywide.

In addition, to grow earnings, we are striving to create new businesses that draw on our network assets, including our facilities and know-how. Our goal is to generate as

 تَارَبَعْنَ مِعْنَ مَعْنَ مُ Company name Tohoku Electric Power Network Co., Inc. Established April 1, 2019 Representative Director & President Capital: 24 billion yen Employees 7,010 (as of March 31, 2022)



many successful case studies as possible through further accelerating these initiatives.

Beginning in FY2023, a revenue cap system will take effect. Under this new system, in addition to making steady progress on various measures in areas such as stable supply, expansion of adoption of renewables, improving service levels, and digitalization, we will strive to provide appropriate, high-quality services to further enrich the lives of our customers and support our communities, while fulfilling our mission to ensure a stable supply of electricity with each of us focusing on the perspective of working alongside customers and our communities and our basis in the six Tohoku prefectures and Niigata Prefecture. 5 Editorial Policy

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	Opportunities	Risks	
	 Greater opportunities for efficiency improvements through digital innovations 	 Impacts of increasingly severe natural disasters on stable supply, facilities, etc. 	
Business environment	 Possibilities for advancement of technological innovations and increased business opportunities in response to 	 Impacts of factors such as changes to regulatory frameworks affecting the power transmission and distribution business 	
	 Possibility of increased electricity demand and growth in transmission revenues in light of changing mindsets and the move 	 Accelerating expansion of adoption of renewables to achieve carbon neutrality by 2050 Manifestation of population decreases and 	
	back to rural communities spurred by COVID-19	changes in power supply and demand structures	

Initiatives to ensure stable supply and enhanced resilience

The area to which the Company supplies electricity-the six Tohoku prefectures and Niigata Prefecture-accounts for about 20% of Japan's land mass and includes the largestscale facility infrastructure of any general power transmission and distribution business in Japan, both in terms of total length of overhead power transmission lines and number of pylons. In addition, the Tohoku and Niigata area poses challenging topographic and climatic conditions, including a long coastline, numerous mountainous areas, and Japan's heaviest snow belts. Given these conditions, in addition to striving to maintain and develop facilities in response to an aging infrastructure through new technologies and other means, we will endeavor to enhance our ability to respond to increasingly frequent and severe natural disasters, based on the lessons of numerous past disasters, including the Great East Japan Earthquake.

Since the Tohoku and Niigata area has numerous locations ideally suited to the generation of wind power and other renewable energy, the number of requests to connect to our grid is growing. Given that renewable energy output varies with weather conditions, we're doing our utmost to maintain the balance between electrical demand and supply through flexible use of thermal power and pumped-storage hydroelectricity. We've also installed large-scale storage cells at the Nishi-Sendai and Minami-Soma substations to smooth out fluctuations in grid frequency and voltage. Accordingly, together with measures intended to put existing power

transmission facilities to maximum use, we are working with the Organization for Cross-regional Coordination of Transmission Operators, Japan (OCCTO), an agency certified by the Japanese government, to improve and expand the grid connecting Tohoku with Tokyo and other areas, as well as implementing a bidding process for connecting to the grid in the northern Tohoku area and other efforts as we strive to expand ways to connect renewable energy to the grid



An exterior view of the large-capacity storage battery system at the Minami-Soma Substation

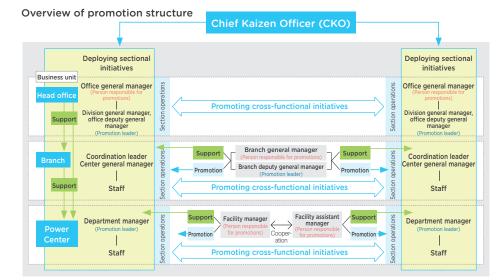
We will promote the following initiatives to fulfill our missions of stable supply of electricity and contribute to solutions for our customers and communities:

- Realizing a stable supply in terms of both tangibles and intangibles, through means including systematic renovation of aging facilities and increasing disaster resilience, including drills Courses of
- based on the lessons learned from past natural disasters Next-generation network development toward the goals of resilience enhancements,
- increased use of renewables, and building a smart society
- O Advancing further improvements in efficiency and productivity achieved by building efficient facilities, leveraging new technologies such as AI and IoT, and establishing kaizen initiatives, in addition to enhancing the business foundation by increasing earnings achieved by developing new businesses and services

Further efficiency improvements achieved by building efficient facilities, leveraging new technologies, and establishing kaizen initiatives

To make progress on efficiency improvements in response to the changing business environment, we have established the Efficiency Promotion Committee, chaired by the President, to advance integrated efficiency improvements companywide from approaches including revisions to equipment and operations, promoting new technologies and digital transformation (DX), organizational reviews, and kaizen activities.

To achieve further improvements in efficiency and productivity, we established the Kaizen Promotion Committee in October 2021 under the leadership of the Executive Vice President as Chief Kaizen Officer (CKO). Our goal is to achieve further improvements in efficiency and productivity by making kaizen a solid part of our corporate culture.



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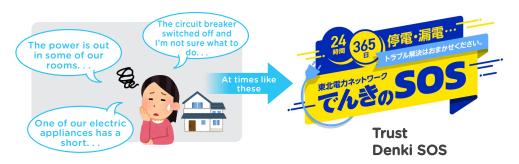
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Increasing earnings achieved by developing new businesses and services

We are making progress on creating new businesses and services utilizing our existing network assets. In April 2022, we launched Denki SOS, a service to handle power failures caused by customer equipment, Yori, Sou Vision @ Sendai, an advertising businesses using exterior walls and other facilities at our business sites, and Yori, Sou Power Pole Search, a geolocation search service using power poles and towers.

We will continue striving to increase earnings through means including creation of new businesses based on our assets and know-how as well as publicizing the benefits of electrification to contribute to carbon neutrality in the future as well.

Denki SOS, launched in April 2022



	Customers living in the six Tohoku prefectures and Niigata Prefecture and using
Eligible customers	low-voltage (100 V or 200 V) power (regardless of the electricity retailer contracted
	with)
	 Inspection, investigation, and stopgap construction measures for customer
	electrical facilities
Services	 Issuing inspection reports and simple consulting on matters such as electricity
	USE
	 Arranging full-fledged construction work (with electrical contractors) as needed
	7,700 yen (tax incl.) per use
Service charge	* Paid based on bill sent later by post
	 Calling the Network Call Center (0120-175-366)
	 Using the chat feature on the Company website (https://touhoku-nw.support-navi.
How to request service	jp/t01)
	* No prior signup required
Hours	24 hours/day, 365 days/year
nours	24 110ur 5/uay, 303 uays/year
Acceptance of orders	April 1, 2022
began	

Next-generation network development toward the goals of resilience enhancements, increased use of renewables, and building a smart society

We're striving to advance the power network to enhance resilience, expand adoption of distributed power sources including renewable energy, and help realize a smart society. Specific examples of expected initiatives in this area include those in areas such as efficient forms of equipment for increasing adoption of distributed power sources, grid operation adapted to changes in supply and demand, and development of a platform for advanced use of smart meter data and telecommunications networks.

Developing efficient configuration of power transmission & distribution facilities suited to growing use of EVs

Developing next generation power networks suited to new methods of using the grid, including VPPs and peer-to-peer (P2P)

Developing efficient configurations of power transmission and distribution facilities suited to growing use of renewable energy and advancing grid operation through use of voltage and power flow controls employing information and telecommunications technologies

Developing and operating microgrids and other power networks independent of the grid

Development of systems to enable advanced use of smart-meter data and the smart-meter telecommunications network

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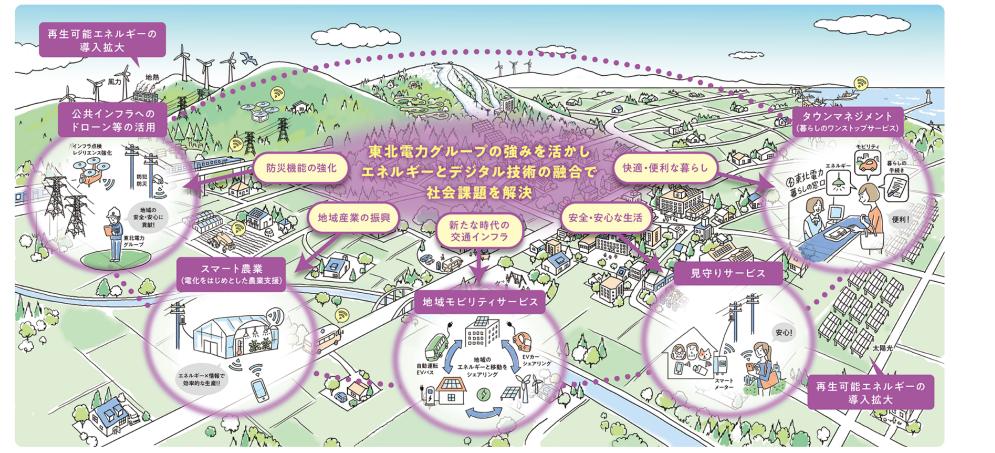
Smart Society Building Business: Development Courses of Action

In the six Tohoku prefectures and in Niigata Prefecture, where the Tohoku Electric Power Group's businesses are based, shrinking populations and an aging society resulting from low birth rates is proceeding at a faster pace than in other regions. As a result, wide-ranging social issues are expected to emerge in the future, including transportation, education, and welfare. Among related issues, the Group considers the following issues as important: effective utilization of energy in the community, consideration for the environment, advancement of digitization, securing safety and peace of mind, making optimal use of diverse human

resources, realizing a sharing economy, expanding flows of non-resident people, rebuilding social infrastructures, and building a transportation infrastructure for the new era. Smart society building business refers to those businesses that can identify and create solutions to the abovementioned social issues through next generation digital technologies and innovations, to enable residents to live in comfort and safety, and with peace of mind without conscious concern over each of the individual services used.

Illustration of Smart Society Building Business





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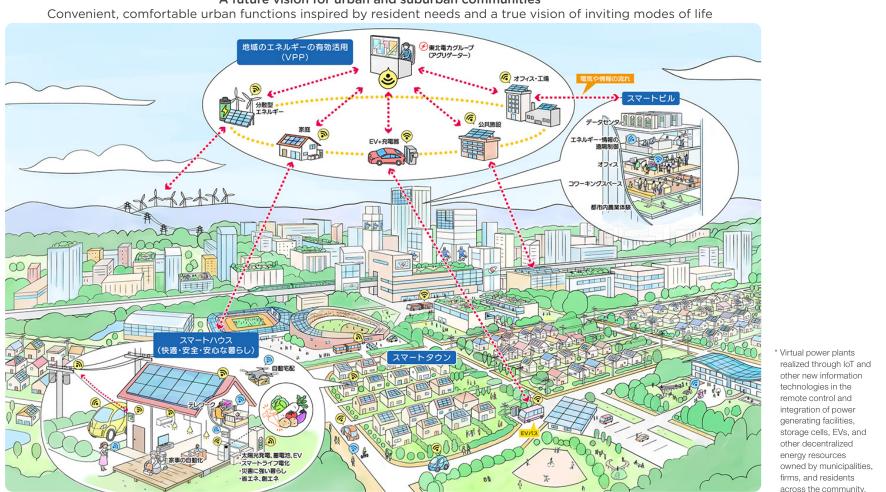
Value Creation Process

By providing services like VPP* that make effective use of decentralized energy resources in the community and various electricity-related services that improve quality and satisfaction in commerce and the lives of residents, the Tohoku Electric Power Group will help realize a smart society and create value only the Group can provide as a utility based in the six Tohoku prefectures and Niigata Prefecture.

The COVID-19 pandemic has brought with it a society characterized by new modes of daily life and working through utilization of digital technologies. Our Smart Society Building Business also helps realize such new ways of living. We will invest in this business strategically as one of growth businesses for the Group.

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Illustration of Smart Society Building Business



A future vision for urban and suburban communities

Swiftly realizing profitability in the Smart Society Building Business

Working alongside next, the Tohoku Electric Power Group's Medium- to Long-Term Vision, calls for a business model transformation to advance structural reforms in the Power Supply Business and move swiftly toward achieving profitability in the Smart Society Building Business. The vision and the goal is to achieve a smart society, starting in Tohoku, by 2030s.

Skyrocketing resource prices have made the business environment even more challenging and turbulent than when we formulated Working alongside next—in terms of both recent conditions and the medium- to longterm outlook. This means we must accelerate the Group's business model transformation initiatives still further.

The Tohoku Electric Power Group's Smart Society Building Business will enhance our competitive strengths as a company chosen by customers through accelerating the cycle from service development through sales and proposing diverse, high value added services built on the foundation of electricity retail sales. Specifically, we are moving forward on initiatives chiefly in the two domains: electricity plus services and next-generation energy. In the domain of electricity plus services, Tohoku EPCO Frontier, established in April of last year, seeks to maximize Group electricity and service revenues by inspiring customers to choose us, through proposing rate plans and services meeting individual customer needs, as a new Tohoku Electric Power brand. Based on the community ties Tohoku Electric

Power has built up to date, we will apply our dynamic service development capabilities and marketing skills together with Tohoku EPCO Frontier's digital technologies to demonstrate Group synergies to the maximum in proposing highly attractive products and services to customers, along with safety and peace of mind.

In the domain of next-generation energy, as electric power professionals and a comprehensive energy firm based in the Tohoku region, we will expand the scope of our services to help realize a carbon-neutral society. Examples include development and provision of services enabling corporate customers in the Tohoku and Niigata region to put the regions' various energy resources to maximum use through virtual power plant (VPP) technologies, as well as enhancing the range of optimal energy management solutions services that we offer to customers in the region.

We will help to establish a smart society, starting in Tohoku, through deployment of various products and services such as these in accordance with the needs of smart-city projects and other local initiatives. Lastly, we believe the Tohoku Electric Power Group's Smart Society Building Business will contribute not just to the growth of the Tohoku Electric Power Group but also to the sustained progress of the Tohoku and Niigata region. Our goal is to maximize customer enrichment by completing this business model transformation by 2025.



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- Ways of living with COVID-19 taking solid root and progress on changes toward the post-COVID-19 age
- Emerging social issues associated with depopulation, low birth rates, and aging populations
- Changes in electricity demand and supply structures attributable to progress with decarbonization, decentralization, and digitalization

Risks

Business

environment

- Rising fuel and power procurement costs and changes in demand and supply structures
- Tough competition

Courses of action in developing the Smart Society Building Business

In addition to efforts to enhance the earnings potential of its base in the retail electricity business through sales approaches that account for the rising fuel and electricity procurement costs and changing demand and supply structures, the Smart Society Building Business is also focusing on the domain of services provided beyond electricity by bundling high value added services with retail electricity sales. In this domain, we will expand the business area of products and services that deliver comfortable, safe, and reliable value by proposing diverse rate plans and various convenient services.

As electricity professionals, we will also focus on business development that draws on our energy expertise in next-generation energy. Through means including use of VPP technologies, distributed renewable energy sources and storage cell installation services, and energy management solutions, we will both expand our business domains and contribute to the establishment of a carbon-neutral society.

To broaden the Smart Society Building Business still further, we will enter new domains through a business incubation process that involves internal and external business contests and enhancement of open innovation functions in cooperation with startups.

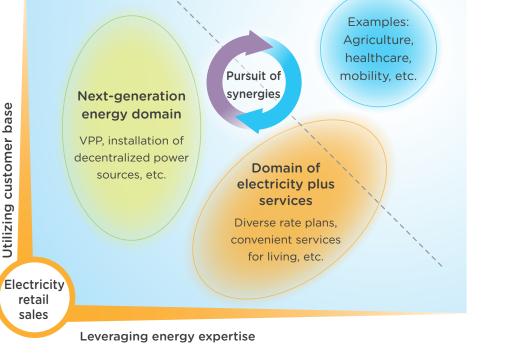
By deploying packages that combine various products and services with local initiatives (community projects) such as smart-city programs in ways that meet community needs, we will realize a smart society, starting in Tohoku while delivering solutions to various issues in the community.

We will advance the following initiatives to transform our business model through swiftly achieving profitability in this business: • Enhancing the earnings potential of the retail electricity business through

Dimarching the earnings potential of the retail electricity business through deploying new sales approaches reflecting the changing business environment
Development of high value added services based on electricity retail sales
Business expansion to the next-generation energy domain, based on VPP technologies

 Expanding into new business fields such as agriculture and healthcare
 Accelerating the cycle from service development through commencing sales and building proprietary service platforms





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Courses of

Smart Society Building Business: Electricity Retail Sales

In addition to deployment of measures to enhance the earnings abilities of the retail electricity business in light of rising fuel and power procurement costs and changing supply and demand structures, we will move forward on proposing solutions for energy conservation, reducing customer electricity charges, and more comfortable living.

Revision of electricity rates for high-voltage power and above and abolishment of the cap on the fuel-cost adjustment system for low-voltage deregulated rate plans

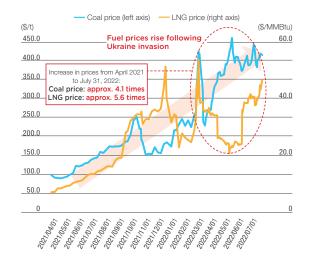
In response to rising fuel prices and high wholesale electricity market prices following Russia's invasion of Ukraine, we are faced with a continued state of a negative profit margin, in which our power supply costs exceed revenues from electricity rates.

While the retail electricity business remains an important pillar of our businesses, continuation of these circumstances could lead to a tough financial situation that could impact the stable supply of electricity due to difficulties in stable fuel procurement and poor investment in upgrading and repairing power facilities.

For this reason, in July 2022 we announced plans for revision of electricity rates for highvoltage power and above and elimination of the cap on the fuel-cost adjustment system for low-voltage deregulated rate plans.

As these measures will place an additional burden on the affected customers, we will make every effort to earn the understanding of customers, through means including setting up special contact points for inquiries in addition to mailing information on the changes to customers directly.

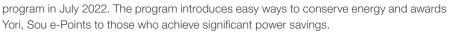
Trends in LNG and coal prices



Activities to propose energy conservation and rate reduction solutions to customers

To alleviate the impact of the changes described at left on electricity costs, we are enhancing activities to propose energy conservation and rate reduction solutions for our customers.

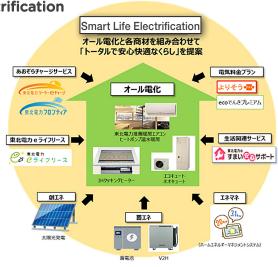
In addition to proposing solutions to corporate customers, we launched a summer energy conservation challenge



In light of expectations of tight demand and supply conditions in winter 2022, we will strive to reduce customer rate burdens and ensure the stable supply of electricity through the Ministry of Economy, Trade and Industry's power efficiency promotion program.

Promoting Smart Life Electrification

To help customers achieve comfortable, eco-friendly ways of life, we encourage the use of heat pumps and propose special rate plans for fully electrified customers. In light of recent increases in fuel prices and changes in demand and supply structures, we will also promote various electrification efforts, including use of solar power and storage cells, to move toward full electrification and carbon neutrality.



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Smart Society Building Business: Electricity Plus Services

Service positioning Value provided

Tohoku Electric Power and Tohoku EPCO Frontier are working together to provide bundled services based on electricity retail sales. We will expand the business area of products and services that deliver comfortable, safe, reliable value, through creating diverse rate plans and various convenient services.

Main initiatives in FY2021 and future courses of action

Establishment of Tohoku EPCO Frontier and commencement of operations

Tohoku EPCO Frontier was established in April 2021 as a core company driving the Smart

Society Building Business. In November of that year, Tohoku EPCO Frontier launched Simple Denki with Netflix, the first service bundle in Japan to offer Netflix, the world's largest video streaming service, and the Aozora Charge Service with Simple e-Denki, as the first of a wide range of services it plans to provide to enrich the lives of our customers.



Simple Denki with Netflix

Enhancing partnerships in plans bundling electricity with gas or electricity with cable TV/Internet (Selling bundles in cooperation with nine partners in total, including existing partners)

We will contribute to community development by supporting enhanced lifestyles and enhancing partnerships with local infrastructure services to offer affordable bundles.

New partner	Sales began	Summary
Shiogama Gas (Shiogama, Miyagi Prefecture)	November 2021	
Sennan Gas (Natori, Miyagi Prefecture)	April 2022	-
Sendai Propane (Tagajo, Miyagi Prefecture)	April 2022	Bundling electricity with gas
Yamagata Gas (Yamagata, Yamagata Prefecture)	April 2022	
Mizusawa Gas (Oshu, Iwate Prefecture)	May 2022	_
New Media (Yonezawa, Yamagata Prefecture)	June 2022	Bundling electricity with cable TV/ Internet

Expanding the Sumai Anshin Support service lineup

Tohoku Electric Power's Sumai Anshin Support is a service that handles operations ranging from dispatching service personnel to identifying and repairing issues when customers report problems with electrical or plumbing equipment. These services are provided for a flat fee. We

began offering this service to residents of Miyagi, Fukushima, and Niigata prefectures in March 2021 and expanded the service area to include Aomori, Iwate, Akita, and Yamagata prefectures in August of the same year. In February 2022, we began offering a new service plan to condominium residents in the city of Sendai.

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	東北電力の すまいをひかサポート
6 つの安心	Ш Ш Ц

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A wide range of services to enrich the lives of our customers

Adding excitement to electricity Tohoku EPCO Frontier will introduce a succession of services to enrich the time customers spend on their own and with their families, including a camping experience and camping supplies rental service and Tohoku EPCO Frontier Insurance service for simple life.



東北電力フロンティア

らしのシンプル保障

Tohoku EPCC Insurance service for simple life



Smart Society Building Business: Next-Generation Energy Services

Service positioning Value provided

Based on VPP technologies, we will expand our next-generation energy service business domain and contribute to carbon-neutral society by providing services to enable maximum use of the region's energy resources and services to install decentralized energy sources and storage cells.

Main initiatives in FY2021 and future courses of action

Virtual power plant (VPP)

Through integration and effective use of regional energy resources, we plan to create win-win relationships in which both customers in the community and we benefit via market trading in electricity on the supply-demand adjustment market opened in April 2021, capacity markets slated to open in 2024, and other markets, as well as through direct transactions. We will return a portion of these gains to customers in the communities providing the resources.



Tohoku EPCO Solar e Charge launched

In April 2021, with momentum accelerating toward carbon neutrality and other decarbonization goals, we established Tohoku EPCO Solar e Charge to propose eco-friendly, disaster-resilient renewable energy solutions. Tohoku EPCO Solar e Charge provides solar power and storage cell services on a subscription basis to households in the Tohoku, Niigata, and greater Tokyo areas. Tohoku EPCO Solar e Charge has expanded alliances with a steadily growing number of home builders. We plan to deliver its services in combination with energy-conservation measures to as many customers as possible by expanding the service lineup and enhancing sales opportunities.

Launching renewable energy aggregation services

Amid expectations for the growing adoption of renewable energy, the termination of the feedin tariff (FIT) program has brought to solar and wind power operators a new responsibility to balance demand and supply.

To support renewable operators facing these challenges, drawing on our accumulated experience and data, we have launched renewable energy aggregation services for integrating and efficiently operating multiple renewable energy resources.





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In addition to enhancing our provision of optimal energy management solutions to individual customers, we take an active role in community initiatives, including initiatives related to smart city development. Our goal is to establish a smart society starting in Tohoku while delivering solutions to various challenges in the community.

Main initiatives in FY2021 and future courses of action

Sustainable agriculture starting in Tohoku

Through a joint project with Plants Laboratory and Nishino Farm at a test facility using a generating/ saving indoor farm system provided as a solutionbased service by Tohoku Electric Power, we've begun shipping lettuce grown in a plant factory using carbon-free electricity to the York Benimaru supermarket chain for retail sale in Miyagi Prefecture.

This test facility realizes vegetable cultivation using carbon-free electricity by combining solar power and storage cell facilities with 100% renewable energy supplied by Tohoku Electric Power. We plan to expand this business, focusing on the Tohoku and Niigata region.





Smart city and town management

Drawing on our knowledge as a general energy company with a focus on electricity, we supply value to help identify solutions to social issues and to achieve sustained growth in local communities through local smart city plans and other efforts.

At Izumi Park Town (Izumi Ward, Sendai), alongside other activities, we're developing state-of-the-art services with a focus on the energy field. We're participating in Super City plans* in the cities of Sendai and Aizuwakamatsu. Our goal is to establish a smart society, starting in Tohoku, by deploying the knowledge and understanding gained through such activities at other locations.

Illustration of the Super City plan



* Super City plan: An effort targeting the development of a true city of the future to take the lead in realizing future ways of living based on state-of-the-art technologies ranging from Al to Big Data, under the Cabinet Office's National Strategic Special Zones program.

exEMS service to support optimal energy experiences

We offer the experience Energy Management System (exEMS) to businesses that contract with us for high-voltage electricity or above as a service furthering energy conservation and cost savings in light of ever-growing awareness of the need to cut energy costs and protect the environment. Drawing on technologies such as Internet of things (IoT) and artificial intelligence (AI), this service helps customers manage daily energy use and draft energy-conservation measures by visualizing the details of electricity use, including changes in demand and electricity consumption.

The greatest strength exEMS offers is its ease of adoption. By realizing battery operation using next-generation telecommunications and other technologies, exEMS makes it possible to visualize electricity use without requiring large-scale installation construction. Since introducing this service in 2018, we've provided it to numerous customers, primarily in the Tohoku and Niigata region. The product lineup includes exEMS with A, which supports air conditioning demand controls, and exEMS Advance, which enables visualization of electricity use per device along with environmental measurements. We plan to continue developing this product line by expanding the range of services provided to meet customer needs.



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Smart Society Building Business: Open Innovation

Creating new value in cooperation with a wide range of businesses

Tohoku Epco Open Innovation Program 2022: A co-creation program with our partners

We're hosting the Tohoku Epco Open Innovation Program 2022 from late May through mid-November 2022 to move us closer to a smart society. In addition to solutions to depopulation, low birth rates, an aging population, and other social challenges, we've chosen three themes related to co-creation to move closer to carbon neutrality and renewable energy in the community. The goals are to recruit a wide range of business ideas and create new businesses and new services through joint efforts and co-creation with our partners. We will proceed with efforts toward the testing and commercialization of highly feasible business ideas that have passed the final screening process, following further refinements of ideas in joint efforts with the companies that submitted them.

Themes on which ideas are sought

- Providing living services to support reliable and comforting ways of life
- Providing services to enable environmental impact reductions by companies
- **3** Realizing platforms to support expansion of renewable energy power generation



Results of Tohoku EPCO Business Build, the 70th anniversary commemorative project

In FY2021, we undertook Tohoku EPCO Business Build, a program intended both to commemorate our 70th anniversary and to help establish a smart society, starting in Tohoku. The goal of this project was to accelerate the creation of new value through joint efforts and co-creation efforts with diverse partners extending above and beyond existing frameworks. Three business ideas were chosen (from Oneday Work, Mysurance, and Women's Kampo) through the final screening process. Of these, the Mysurance service was launched in November 2021, while Oneday Work was launched in July 2022. Studies are underway toward the commercialization of the business ideas proposed by Women's Kampo.

Companies chosen



Oneday Work Co., Ltd.

Offers work styles by the day and with short working hours based on a new employment system.



🍉 損保ジャパン

Mysurance Inc. DeNA SOMPO Carlife Co., Ltd. Sompo Japan Insurance Inc.

Creates new subscription-based services for home and mobility to support life's little luxuries for users in their 20s-30s

Women's Kampo Co., Ltd.

A service that supports appropriate selfmedication using online pharmacist services Editorial Policy Index Philosophy and Group Slogan At a Glance Value Chair Steps in Value Creation Message from Top Managemen Value Creation Process Sustainability Priorities (Materiality Topics) Realization of the Tohoku Electric Power Group's Medium- to Long-Term Vision "Working alongside next Financial Strategies Overview of the Tohoku Electric Power Group's FY2022 Medium-Term Plan Taking on the Challenge of Carbon Neutrality Roadmap Case Studies Disclosure Under the TCFD Recommendation Fuel Procurement, Thermal Power

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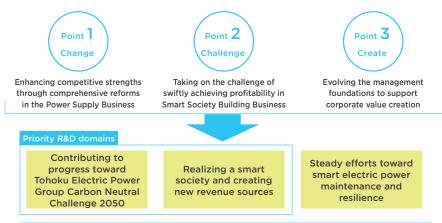
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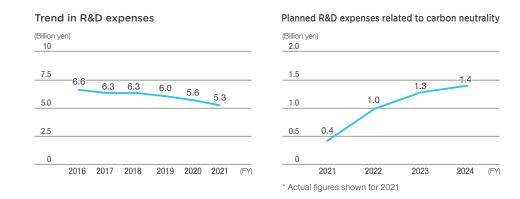
R&D/IP Strategies

R&D vision

We have identified this five-year period (FY2020-2024) as a time in which we will transform our business model to achieve what we want to be in the 2030s identified in Working alongside next, the Tohoku Electric Power Group's Medium- to Long-Term Vision. To this end, we are moving forward with business activities based on the three focal points. The entire Tohoku Electric Power Group is working together as one toward Group growth by promoting R&D to contribute to innovations in society and thorough enhancement of our competitive strengths. In these initiatives, together with careful selection of the details of R&D projects based on profitability and future potential we also have identified three priority domains, and we will focus in particular on R&D to contribute to promoting the Tohoku Electric Power Group's Carbon Neutral Challenge 2050 as well as realizing a smart society and creating new revenue sources.



R&D contributing to a stable supply of electricity to support core businesses



Current state of R&D in priority fields and future courses of action

Contributing to progress toward the Tohoku Electric Power **Group Carbon Neutral Challenge 2050**

To achieve carbon neutrality in 2050, we're pursuing R&D across a wide range of fields, including decarbonization, renewable energy, and power grids. We plan to continue pursuing these initiatives. We're planning 74 R&D projects to help realize carbon neutrality over the coming three years, and 57 projects currently are underway.

Examples of R&D in FY2022

- Research on mixed burning of black pellets in coal-fired thermal power generation
- Research on mixed burning of hydrogen and ammonia in gas-fired thermal power generation
- Research on reduction and effective use of CO₂
- Research on floating offshore wind power

Realizing a smart society and creating new revenue sources

In addition to actively carrying out R&D toward swiftly achieving profitability in new businesses related to realizing a smart society and creating new revenue sources, we will also further advance initiatives toward increasing electrification rates and expanding adoption of electric devices and efforts to help improve business efficiency and cut costs by using means such as digital innovation technologies.

公共(電力・ガス等)システム

スマート家電

情報システム

Examples of R&D in FY2022

- Research on new business creation utilizing smart-meter telecommunications networks and other resources
- Research on automatic control of home appliances
- Research on measures to expand the adoption of solar power
- Research on mobility businesses

Examples of other major R&D efforts

Efforts toward smart maintenance and resilience

Research on digitalization of thermal power station maintenance, operation, and management Research on adoption of new technologies toward enhancing resilience Research on pylon wear using drone photography



Black pellets

- Effects of HVDC connections on the power grid and using them to stabilize the grid
- Research on building power facilities with consideration for decentralized power sources
- Research on improving the precision of short- and medium-term demand projections

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Overview of ECHONET Lite (Source: ECHONET Consortium)

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蓄雷池

電気自動車充電器 /充放電機

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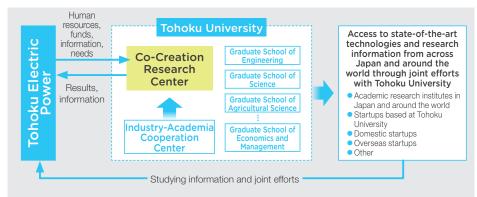
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Accelerated promotion of R&D together with Tohoku University

In November 2021, we opened the Co-Creation Research Center together with Tohoku University to serve as a base for R&D joint efforts. During the period of November 2021 through March 2025, through close joint efforts with the University, we plan to make the most of research results and human resources in cooperative efforts on topics such as carbon neutrality and digital transformation (DX), thereby enhancing competitive strength of the power business.



Collaboration and joint efforts topics

In December 2021, we concluded an agreement to contribute to the progress of the local community by realizing a safe, reliable, sustainable, green, and smart future society, starting from Tohoku, by promoting sustained and systematic joint efforts with Tohoku University. Under this agreement, we will strengthen joint efforts to accelerate realization of the vision targeted by both partners.

Collaboration and joint efforts

R&D related to realizing a safe, reliable. sustainable, green, and smart future society. starting with Tohoku

Collaboration and joint efforts **3**

R&D related to disaster countermeasures and promoting recovery from the Great East Japan Earthquake

Collaboration and joint efforts 2

R&D related to industrial promotion and co-creation

Collaboration and joint efforts 4

R&D related to development of human resources to advance community creativity



President Higuchi (L) and Tohoku University President Ohno (R) hold the signed agreement.

Intellectual property

We see intellectual property s a key management resource in enhancing our competitive advantages. Our R&D activities also comply with the obligation to respect intellectual property rights specified in the Tohoku Electric Power Group Code of Conduct.

Code of Conduct: 3 (1) Protecting intellectual property rights

We protect and utilize the Group's intellectual property rights while respecting those belonging to others.

Policy on intellectual property

We advance strategic intellectual property initiatives throughout the Tohoku Electric Power Group to allow effective use of intellectual property in business activities through its creation, protection, and application.

Initiatives under the intellectual property strategy

Our branding initiatives, new business promotion efforts to realize a smart society, and other activities have led to a significant increase in the number of trademark applications over recent years. In FY2021, we applied for 21 trademarks.

Educational initiatives	To promote efficient R&D and to secure and make proactive use of intellectual property, we provide general employees with introductory and applied training on IP operations. We also provide seminars on searching for patent and trademark information and more specialized training for our IP staff. We have also set up three IP courses in our distance learning program for employees to offer a broad range of opportunities for acquiring knowledge in this area.
Setting up a hotline for patents and other IP rights	We have set up a hotline for the handling of industrial property (IP) rights by a team in the Research and Development Center to help oversee activities involving filing of patent applications and maintaining and managing IP rights.
Supporting the IP activities of Group companies	In addition to introducing the current state of Company IP activities through the Research and Development Center's publicity bulletins, we accept trainees from Group companies for IP training programs and seminars. The goal is to strengthen IP knowledge groupwide.

Patents and other IP rights applied for and registered (end of FY2021)

	Applications	Registrations
Patents	15	286
Utility models	0	4
Designs	0	13
Trademarks	21	95

Example of protected IP rights



Electricity Retail Sales Electricity Plus Services Next-Generation Energy Services Open Innovation Human Resource Strategy Dx Strategies DE&I Safety Initiatives Enhancing Resilience Respect for Human Rights Contributing to Communities

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Power supply vehicle

(registered June 28, 2019) (jointly developed by Aichi

Corporation and Tohoku

Patent no. 6545110

Flectric Power)

Risk Management Corporate Governance

R&D on floating offshore wind power

Floating offshore wind power is better suited than fixed offshore wind power in coastal areas with favorable wind conditions. More opportunities for the adoption of floating offshore wind power than fixed offshore wind power are believed to exist in Japan, which is surrounded by deep seas. On the other hand, given few examples of successful commercial use of floating offshore wind power and the associated high costs, expanded use of floating offshore wind power will require not just the development of fundamental technologies but rapid reductions in costs and scale-up of facilities.

• Floating Wind Joint Industry Programme (FLW JIP)

To expand the adoption of floating offshore wind power, numerous operators in Europe are pursuing testing of floating offshore facilities of various dimensions and form factors. In March 2021, we joined the Floating Wind Joint Industry Programme (FLW JIP) organized by the Carbon Trust of the UK. Through this program, we're taking part in research to advance the commercial use of floating offshore wind power in joint efforts with 16 other firms from Japan and Europe. In July of this year, the FLW JIP published its Stage 2 Phase IV Summary Report. We will continue to pursue research to identify solutions to issues posed by floating offshore wind power, alongside Japanese and European businesses.



Major research subjects covered in Stage 2 Phase IV • Floating wind access and availability

 Assessment of wind turbine generators for floating wind farms
 Numerical modelling guidelines and standards for floating wind

Impact of floater motions on wind

turbine energy vield

Green Innovation Fund projects

In January of this year, joint proposals by a consortium we formed with numerous power companies and manufacturers engaged in technological development were accepted as a projects intended to reduce the costs of offshore wind power under the Japanese government's Green Innovation Fund. This project seeks to reduce installation and operation costs of the facilities themselves and to optimize the power generation system overall, focusing on common issues in floating offshore wind power generation systems, including high-voltage dynamic cables and floating transformer and conversion facilities.

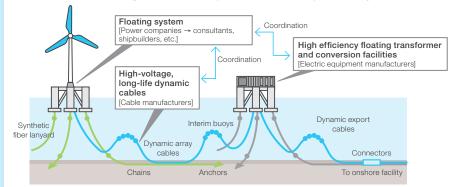


Illustration of floating offshore wind power and the scope of study

Research on responding to fluctuations in the output of renewable energy using hydrogen production technologies

Accompanying the expanding adoption of renewable energy is the need for adjustments in response to fluctuations in output resulting from weather conditions. We have to date addressed output fluctuations based on storage cell technologies. By focusing on hydrogen production technologies, however, this project is intended to verify whether such technologies can be used to absorb large-scale fluctuations in power output from renewable energy sources to the same degree as fuel cells.

Research overview

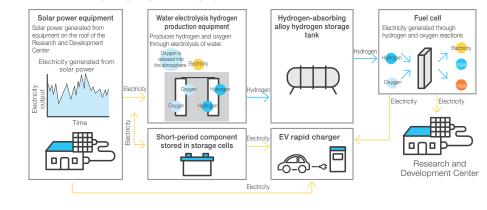
This project involves the production of hydrogen through water electrolysis in solar power generation by setting up solar power and hydrogen production systems. The green hydrogen produced from solar power in this way is used as fuel to generate electricity using fuel cells. This power is supplied to the R&D Center. While it involves energy losses in hydrogen production and power generation, this project has generated a wide range of knowledge on various topics, including the feasibility of smoothing out power supply by absorbing sudden fluctuations in solar power generation through the production of green hydrogen.

Based on future research on topics such as verification of the durability of main equipment and power supply to EV rapid charger using green hydrogen, we will make progress on deepening knowledge on effective use of hydrogen energy, including measures to control renewable energy fluctuations using water electrolysis, and other topics to help develop hydrogen-related businesses.



Hydrogen production system, Research and Development Center (Aoba-ku, Sendai)

Overview of hydrogen generating system



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Human Resource Strategy

For the Tohoku Electric Power Group to grow in step with the sustained progress of society by contributing to the realization of a smart society for a new age, starting in Tohoku, we believe it will be vital to strengthen human resources capable of creating new value and to improve coordination between business and HR strategies. On this basis, we've formulated a human resource portfolio based on our medium- to long-term business portfolio.

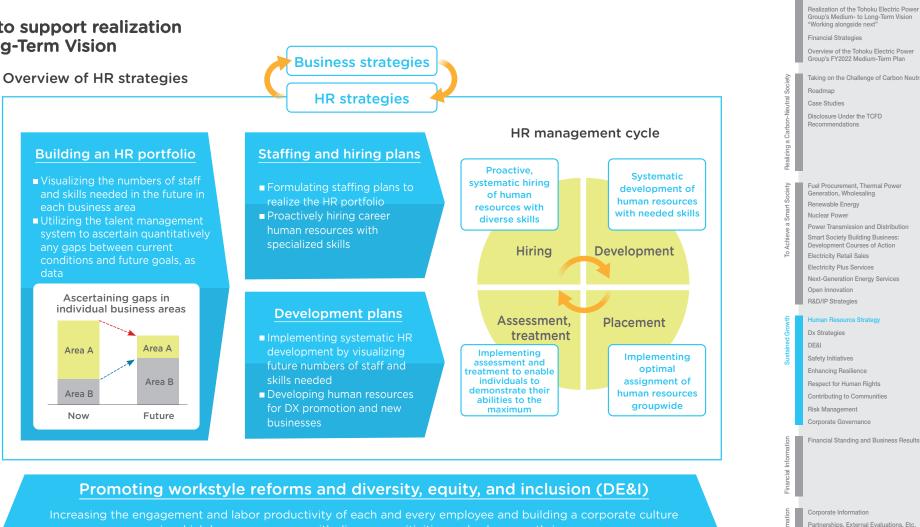
At the same time, we will promote measures in areas such as workstyle reforms and diversity, equity, and inclusion (DE&I) to increase the engagement and labor productivity of each and every employee and build a corporate culture in which human resources with diverse sensitivities and values can thrive.

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The human resource portfolio to support realization of the Group's Medium- to Long-Term Vision "Working alongside next"

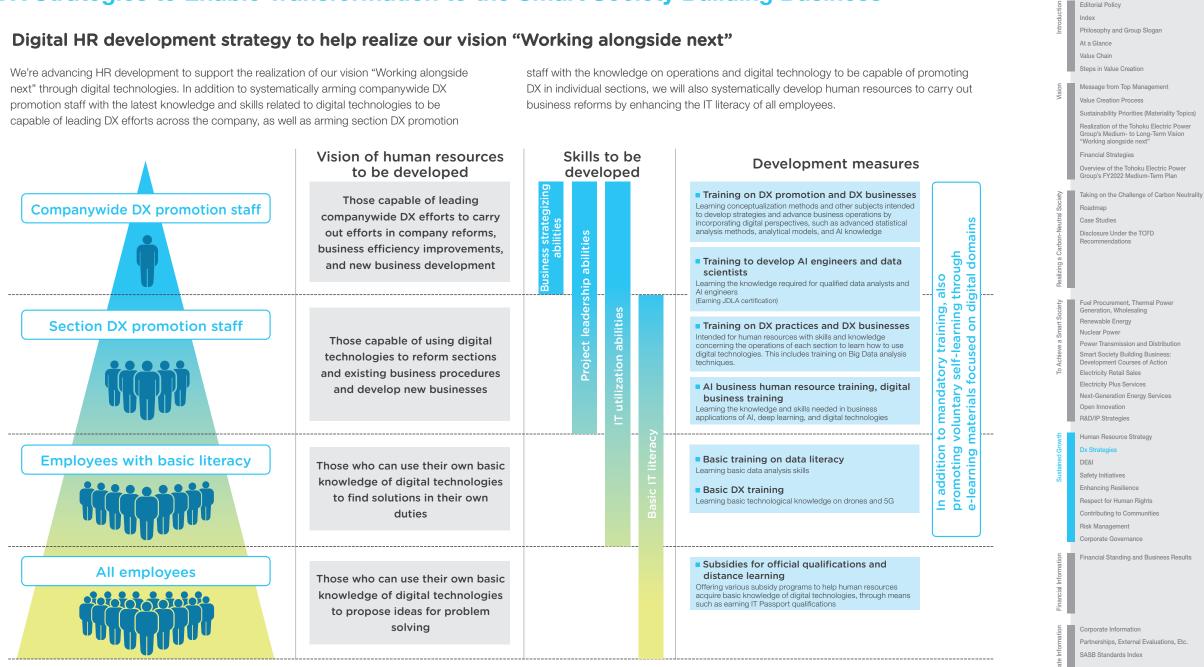
We will utilize our human resource portfolio based on our medium- to long-term business portfolio to deploy HR measures intended to maximize our human capital. Specifically, through adoption of a talent management system we will both promote digital transformation (DX) in HR management and quantitatively ascertain and analyze matters such as the skills of individual employees, reflecting these in staffing plans, hiring plans, HR development and placement.

In addition, in light of the particular need for human resources with digital skills in the areas of data analysis and digital marketing, human resources able to launch and promote new businesses, and human resources to manage the Group in the future, we will carry out systematic hiring and HR development efforts. Through advancing HR management to promote these measures, we will develop the human resources needed to realize our vision "Working alongside next."



in which human resources with diverse sensitivities and values can thrive

DX Strategies to Enable Transformation to the Smart Society Building Business



Diversity, Equity, and Inclusion (DE&I)

Message on diversity from top management

Yori, Sou, Chikara (The Strength to Work Alongside) each other as diverse individuals



Representative Director & President

Hojiro Higuchi

Drawing on our Management Philosophy of Prospering with Local Communities, we strive to contribute to a sustainable society in which each customer and community member can live in comfort, safety, and peace of mind. We do this through our smart society building business, seeking growth and development with local communities as their chosen partner. Important issues in these initiatives include respect for human rights and the need to promote diversity, equity, and inclusion (DE&I). To accommodate the diverse lifestyles and needs of our customers, our employees must be able to work in good health and with vitality, capitalizing on their diverse backgrounds, unique perspectives, and individual experiences. This is why we believe DE&I will drive innovation.

We will maintain our proactive stance on developing and enhancing systems that allow diverse human resource to thrive. At the same time, we will promote awareness of and seek to develop our organizational culture, striving to be an enterprise in which all workers can thrive with vitality, without regard for gender, age, disability status, form of employment, nationality, ethnicity, religion, creed, culture, sexual orientation, or sexual identity.

Through these initiatives, we will work alongside our customers and communities as a strong partner who enables them to live in better comfort, safety, and peace of mind.

Initiatives for further promotion of diversity, equity, and inclusion (DE&I)

To promote DE&I further, we held a panel dialogue led by outside directors Ikuko Miyahara and Akiko Ide. Through dialogue based on their own experiences and current conditions in the Tohoku Electric Power Group, with a focus on promoting women in the workplace, this was intended to elicit ideas for core Group management. About 200 members of Tohoku Electric Power Group management participated, some online.

This dialogue included lively discussions of a wide range of themes, including whether women employees actually do desire managerial positions; what is needed to motivate women to improve their careers; and why it is essential to have numerical targets for percentages of women in management.

In the final stage of the dialogue, Chairman of the Board Masuko addressed the importance of respect for and proactive efforts to capitalize on diverse ways of thinking to achieve the Group's

Medium- to Long-Term Vision and called on members of management to take leadership in promoting DE&I. The entire Group will continue to build workplaces in which diverse human resources can thrive.



Targets and plans to promote diversity, equity, and inclusion (DE&I)

As described below, Tohoku Electric Power has formulated a general employer action plan pursuant to the Act on Promotion of Women's Participation and Advancement in the Workplace and set a new target for the percentage of women managers, as a medium- to long-term goal.

General employer action plan	>	To increase the number of women managers by at least 2.0 times vs. the start of FY2019 by March 31, 2025
Percentage of women managers	>	Aiming for a percentage of 5.0% of all managers being women by the end of FY2035

By enhancing initiatives that support a work-life balance, family, and career formation and success, we will help build workplaces where diverse human resources can thrive as well as accelerate changes in employee awareness of DE&I promotion, aiming to increase the percentage of women as managers.

In addition, in April 2021 Tohoku Electric Power declared it support for the Keidanren's proposal that businesses take on the challenge of increasing the percentage of women directors to 30% or more by 2030.

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Safety Initiatives

Actions for safety that lead to continuous growth and to a medium- and long-term improvement in corporate value

Occupational safety and equipment security are the foundations of the Tohoku Electric Power Group's business activities. We consider securing the safety of our customers and our communities to be the first steps in earning trust in order to fulfill our unchanging mission to deliver stable supplies of low-cost, high-quality electricity to customers.

Through efforts by all our employees and construction workers to put into practice our slogan of "Yori, Sou, Chikara (The Strength to Work Alongside)," we strive to be a group that is trusted and selected.

In accordance with our safety-related policies, we will continue our efforts to build a corporate culture that puts safety first and to increase corporate value.

Relationship between actions for safety and corporate value enhancement





Building a corporate culture that puts safety first

Initiatives to ensure thorough safety and improving business quality

Aiming to firmly establish a corporate culture that ensures thorough safety and boosts business quality, we're striving to improve safety and security groupwide and the quality management system for nuclear power.

Based on our recognition that securing safety is the top priority in all business activities, a key goal is to build a corporate culture that puts safety first through even greater coordination groupwide. In April 2020 we established the Tohoku Electric Power Group Safety and Security Policy, under which we strive to enhance initiatives related to occupational safety and equipment security.

Actions on safety management towards the achievement of zero accidents

For the purpose of reducing industrial accidents, we have introduced the safety and health management system to independently and continuously improve safety management. It is an international standard method of safety and health management. Each office will independently perform management and remove and reduce latent risks and harmful factors in advance to prevent industrial accidents.

If any industrial accident occurs, we will probe into the fundamental cause and background to develop effective measures for the prevention of recurrence and share information within the Company to prevent any similar accident from happening.

Initiatives to ensure equipment security

To avoid the recurrence of improprieties that have occurred before, the status of autonomous security activities in each section is reported to the Safety and Security Promotion Conference, the Nuclear Safety Promotion Conference, and the Committee on Corporate Ethics and Compliance, thereby confirming that they are being implemented according to plan; that systems are in place for identifying and correcting any issues ourselves; and that active communication occurs through dialogue and other measures. In these and other ways, we seek to ensure that autonomous security activities are even more firmly established within the organization.

In addition, through autonomous security activities, we strive to ensure the safety of customers and our communities by ensuring the security of equipment.



See » Actions for entrenching voluntary security activities Sustainability Report 2022 » P73 Editorial Policy Index Philosophy and Group Slogan At a Glance Value Chain Steps in Value Creation

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Enhancing Resilience

Enhancing resilience based on the lessons learned and experience gained in responding to disasters

Tohoku Electric Power Network does business based on the recognition that its most important mission is to deliver a stable supply of low-cost electricity to customers amid the broad geographical area and challenging natural conditions within its service area—the six Tohoku prefectures and Niigata Prefecture, which account for about 20% of Japan's land mass.

Tohoku Electric Power Network has accumulated significant expertise and technological competence through its experience with numerous natural disasters, including the Great East Japan Earthquake. Based on the lessons learned it has enhanced various structures to ensure preparedness for ever more frequent and severe natural disasters.

In addition to securing stable supply of electricity, Tohoku Electric Power Network will continue to develop

facilities efficiently while maintaining and managing them appropriately by reflecting on the lessons learned from past natural disasters in both tangible and intangible measures.



Everyday inspections and repairs and drills to maintain and increase response capabilities

Through everyday inspections and repairs as well as systematic upgrades of aged facilities, we strive to maintain and manage the equipment needed to deliver electricity to our customers.

We organize various drills to pass on skills and to improve technical capabilities and disaster resilience.

Efficient facility maintenance and operations based on digital and other new technologies

We strive to enable more effective and efficient maintenance management of facilities based on digital and other new technologies such as drones and IoT devices. In particular, we are carrying out feasibility testing of drone navigation apps to ascertain power pole locations and feasibility testing of autopilot apps to enable stable flight even along steep slopes and uneven terrain, thereby enabling efficient inspections of equipment in mountainous and other remote locations.



Drills on restoring external power supply in the event of a disaster affecting a nuclear power station

Drills simulating the restoration of external power supplies while wearing safety gear, to ensure preparedness for a disaster at a nuclear power station, are carried out to strengthen skills for restoring external power supplies at a nuclear power station in assumed scenarios.

Responding to power failures following an earthquake off the Fukushima coast and subsequent tight demand and supply conditions

On March 16, 2022, an earthquake with an epicenter off the coast of Fukushima Prefecture resulted in power failures affecting a total of 162,126 households, mainly in the prefectures of Fukushima and Miyagi. The Tohoku Electric Power Group responded with partner companies and others to dispatch support teams to affected areas. Recovery efforts by a total of 2,835 personnel had resolved all power failures by 9:41 pm the next day.

The quake resulted in the suspension of operations of certain thermal power stations, temporarily tightening power demand and supply. In joint efforts with the Japanese government and related parties, we promoted efforts to achieve power conservation. Thanks to the joint efforts of all those involved, we were able to overcome the situation while avoiding any major impediments to power supply.



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See » Governance structure for disasters » P69

Respect for Human Rights

Basic concept

One of the principles of the Tohoku Electric Power Group Code of Conduct calls for "Building a vital corporate culture based on respect for individuals and free and open communication." Holding this principle and the guidelines based on it as a fundamental policy regarding employee human rights, we strive to enhance our relations of mutual trust with stakeholders and Group employees.

Additionally, we call for respect for human rights in our Procurement Policy and Requests to Material Suppliers, as part of our efforts to ensure respect for human rights in joint efforts with suppliers.

Tohoku Electric Power Group Code of Conduct (excerpted)

Building a vital corporate culture based on respect for individuals and free and open communication

We strive to move ever closer to a vital, free, and open corporate culture characterized by free exchange of opinions, in which all employees can work together in mutual respect.

Respect for individuals	We respect the human rights, personality, individuality, and privacy of each and every employee. Personal information on employees held by the Group will not be disclosed without the consent of the individual concerned, except in accordance with legal or regulatory demands or when necessary for purposes of appropriate business operations.
Prohibition of discrimination by gender and other properties	We do not discriminate against employees due to gender, age, disability, race, nationality, place of origin, beliefs, creed, or religion. We have a zero-tolerance policy with regard to acts of violence, abusive speech, sexual harassment, or similar acts in the workplace.
Fostering an organizational culture to build and improve an atmosphere of vitality and free and open communication	In addition to deepening joint efforts among companies, sections, and related parties both inside and outside the organization and freely and actively exchanging opinions in the workplace, we will promote development of an atmosphere of vitality and free and open communication, in which diverse human resources can take on challenges boldly while demonstrating their individuality and abilities. We are committed to fostering an organizational culture by which any inappropriate conduct identified will be stopped immediately and improvements made in response. By doing so, we will strive to prevent any situations that could involve legal or ethical violations.



Ascertaining and responding to potential human rights risks

The Tohoku Electric Power Group carries out a variety of initiatives intended to prevent and mitigate potential human rights risks from our business activities (including procurement). In addition, currently the Sustainability Promotion Committee (chaired by the President) discusses responses to human rights risks from the perspective of sustainability of the Group and society at large, as well as proceeding with assessment and analysis of impacts of human rights risks throughout the entire supply chain in terms of severity, possibility, and connections to the company, through means such as self-assessment surveys and on-site inspections, in joint efforts with outside experts.

	Employees	Customers and communities	Suppliers
Examples of potential human rights risks	 Long working hours On-the-job accidents Insufficient consideration for health Workplace harassment Discrimination against sexual minorities 	 Negative effects on the lives or health of residents due to environmental degradation caused by business operations Leaks of personal information or infringements on privacy Disadvantages due to improper sales activities 	 Child labor, forced labor Discrimination and other human rights violations Inferior working environments Improper labor management (e.g., long working hours, improper dismissal, unpaid salary)
Development of policies	 Tohoku Electric Power Group Code of Conduct Tohoku Electric Power Group Safety and Security Policy Tohoku Electric Power Group Corporate Ethics/ Compliance Action Plan Basic Policy for Health Promotion 	 Tohoku Electric Power Group Code of Conduct Tohoku Electric Power Group Environmental Policy Tohoku Electric Power Group Social Media Policy Personal Information Protection Policy 	 Basic Procurement Guidelines Requests to Material Suppliers Green Procurement Guidelines
Major initiatives	 Efforts to promote diversity and realize work-life balance Implementing health management Providing human rights training Deploying an occupational health and safety management system Setting up a corporate ethics hotline, etc. 	 Environmental assessment, environmental measures (air and water quality, consideration for biodiversity, etc.) Development of systems for managing the security of personal information and implementing security management measures In addition to setting up customer contact points (by telephone and the Internet), establishing rules on internal measures to prevent improper solicitation and sales activities Patrols and awareness raising to prevent accidents involving electric shock 	 Demanding that suppliers make efforts related to human rights and checking on the state of human rights initiatives through CSR surveys Actively requesting improvements by suppliers based on the results of CSR surveys Setting up a corporate ethics hotline
			ect for Human Rights ty Report 2022 » P45,46

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Contributing to Communities

Community contribution activities that contribute to sustainable growth and improve corporate value in the medium to long term

Deploying groupwide measures alongside the community

Based on our management philosophy of prospering with local communities and Yori, Sou, Chikara (The Strength to Work Alongside), our Group slogan, the entire Tohoku Electric Power Group strives to establish a smart society by providing services based on energy and to advance initiatives that deliver solutions to challenges facing our communities and society. In this way, we hope to contribute to the sustained growth and progress of society. Based on this outlook, we implement various social contribution activities, including

Supporting solutions to community challenges and community revitalization

⑦東北電力

Machizukuri Genki Juku[®]

Machizukuri Genki Juku® training courses dispatch appropriate expert Machizukuri Partners to organizations working to solve issues faced by individual communities, thereby contributing to community revitalization and autonomy in the six

Tohoku prefectures and Niigata Prefecture. This program supports highly individual community development in the region.



Machizukuri Genki Juku® https://www.tohoku-epco.co.ip/genki/

Social Contribution Activities

As a member of the community, Tohoku Electric Power engages in numerous initiatives intended to build even stronger relationships of trust with local communities, including activities that promote the healthy growth of children, who will play key roles in the future of the region, and activities in the vicinity of business sites.

乍文コンクール Ф№3#7л1в(ж)~9л25в(±) 「未来の自分に伝えたいこと」

口学生 #280 8478



Tohoku and Niigata Revitalization Support Program

The subsidies granted under this program support organizations engaged in voluntary activities to resolve issues in local communities across the six Tohoku prefectures and Niigata Prefecture, including local industrial promotion, local community restoration and revitalization, and expanding the numbers of visiting non-residents.

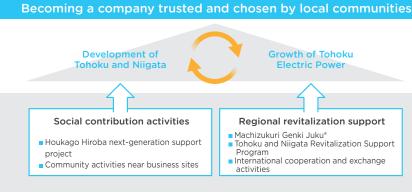


Tohoku and Niigata Revitalization Support Program https://www.tohoku-epco.co.jp/sprogram/

Promoting International Cooperation and Exchange Activities

We promote various international joint efforts and exchange activities. These activities include online seminars for technical trainees from various ASEAN countries, helping to operate the Tohoku Canada-Japan Society, and working with various other organizations to promote international exchange in the Tohoku region.

Machizukuri Genki Juku[®] training courses designed to help identify solutions to community challenges and the Tohoku-Niigata support program to support community vitality. Through these and other measures, we strive to play a role as a member of the community in its sustained progress and to build relations of trust with local communities based on ongoing dialogues in which individual employees take part.



Deploying initiatives that work alongside local communities

Community cooperation initiatives

Examples of results achieved in these initiatives



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Risk Management

Risk management initiatives

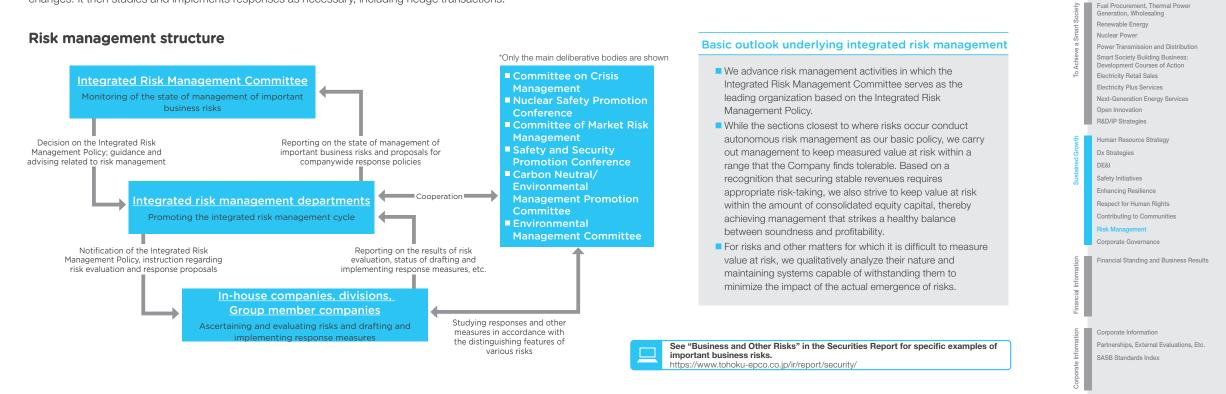
In addition to establishing an Integrated Risk Management Policy, the Company periodically reviews business and financial risks to identify, analyze, and evaluate risks and to study and implement responses.

Particularly for factors that pose major risks to Company businesses, the integrated risk management departments cooperate with various committees and other organizations in accordance with risk characteristics, based on monitoring and risk management by the Integrated Risk Management Committee. Business execution departments such as in-house companies and divisions also identify and evaluate risks periodically and incorporate responses and other measures into their annual business plans to deploy risk management activities specific to their own organizations.

As an example of cooperation with individual committees, the Committee of Market Risk Management appropriately manages market risks in the Company's business activities, including those related to fluctuating fuel prices and wholesale electricity trading prices, in light of the growing importance of revenue management as the Company's business environment changes. It then studies and implements responses as necessary, including hedge transactions.

Integrated Risk Management Committee

Established this fiscal year, the Integrated Risk Management Committee is a joint committee with Tohoku Electric Power Network chaired by the President of Tohoku Electric Power whose membership consists of all directors of both companies. Its purpose is to promote the Company's integrated risk management activities and to deliberate on and study responses to important business risks in the Group from a management perspective. Specifically, it meets twice annually to evaluate the state of management of important business risks and to provide guidance and advice on deployment of risk management activities while striving to enhance risk management activities through feedback to individual business execution sections and related deliberative bodies. It also reports periodically to the Board of Directors and other parties on the state of risk management.



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Crisis management standards

Based on prior anticipation of various crises with potential serious impacts on company management, Tohoku Electric Power and Tohoku Electric Power Network have each established crisis management standards intended to prevent crises from occurring and to minimize damage in the event that they arise.

Crisis Management Committees

We have also established individual Crisis Management Committees (chaired by the respective Vice Presidents) to promote crisis management activities and to run through the corresponding plan-do-check-act (PDCA) cycles. Meeting twice annually, these Crisis Management Committees carry out activities such as assessing activities during the fiscal year and sharing risk information, as well as deliberating on action plans for the next fiscal year. The results are reported to the Management Committee.

In light of the need for a crisis management structure under which both Tohoku Electric Power and Tohoku Electric Power Network can work together even after the statutory division into separate entities, the Crisis Management Committees will meet jointly for both companies.

Crisis management structure

manuals

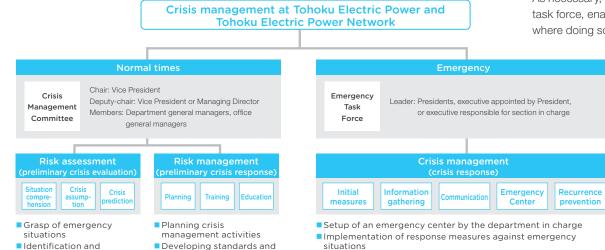
education

Implementing training and

evaluation of risks

offices

Communication with



Preparedness during normal times

During normal times, each section and site strives autonomously to increase sensitivity to risks through awareness raising activities, drills, and other activities, including preventive measures such as equipment-related measures to prevent crises from occurring.

In addition, the Crisis Management Committee Secretariat follows up on the autonomous activities of each section and site through e-learning on crisis management and drills on communication of information in an emergency for all employees. Crisis risks are identified and assessed from multifaceted perspectives through considering the major risks inherent to the Company's business from the three perspectives of financial risks, business risks, and emergencies.

To promote awareness of risk management groupwide, activities seek to intensify cooperation through dialogue with individual Group member companies and drills on communicating information in the event of an emergency.

Responding to emergencies

In the event of an emergency, in addition to performing the necessary initial actions, various actions based on swift and appropriate response are taken in cooperation with related parties to minimize damage.

In the event of an emergency requiring immediate judgement and decision-making by top management, an emergency task force is set up under the leadership of the president of the relevant company or director or other person appointed by the president.

As necessary, related executives or sections of the other company will also join the emergency task force, enabling the two companies to respond to the matter as a united team (except where doing so would violate restrictions on their behavior).

Response system and duties of offices and epartments

Crisis managers (Division managers, and General Managers of offices and departments) Overall control of crisis management operations, including crisis prediction and prevention

Crisis management promotors (deputy general managers of offices, departments, and others)

Overall control of reporting operations in the event of an emergency and implementation of activities to promote awareness of crisis management

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stain	DE&I
ŝ	Safety Initiatives
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Corporate Governance

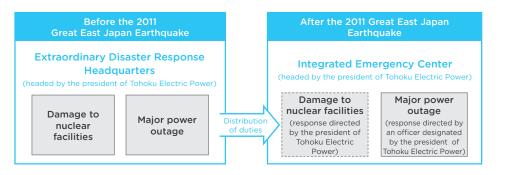
Rick Man

Governance structure for disasters

To deliver a stable supply of electricity to customers, Tohoku Electric Power and Tohoku Electric Power Network have developed a governance structure intended to enhance their abilities to respond to major disasters such as earthquakes and typhoons. While Tohoku Electric Power Network has succeeded to the power transmission and distribution business since its statutory separation into a separate entity in April 2020, to account for the state of damage and social impact of an emergency, both companies respond together to disasters.

Distribution of duties in the event of a complex disaster

Learning from the accident at the Fukushima Daiichi Nuclear Power Station following the Great East Japan Earthquake, Tohoku Electric Power and Tohoku Electric Power Network distribute emergency center duties to ensure an effective response at their head offices in the event of a complex disaster—for example, a nuclear disaster combined with a major power outage. Accordingly, the President of Tohoku Electric Power will prioritize actions to respond to the nuclear disaster, while officers assigned by the President will oversee measures to tackle other disasters. This system is intended to ensure the preparedness needed to respond effectively to multiple concurrent disasters.



Periodic Large-Scale Disasters Countermeasure Meetings

Because we understand the importance of minimizing the impact of any large-scale disaster and achieving early restoration, we hold periodic Large-Scale Disasters Countermeasure Meetings to strengthen the involvement of top executives. Chaired by the President, the meetings engage in companywide studies on business continuity planning (BCP) and various measures to address issues identified from recent emergency disaster training sessions, actual disaster response actions, and discussions of disaster control and management. All these measures are intended to enhance PDCA activities.

Enhancing the capacity to respond to disasters in cooperation with outside organizations

Tohoku Electric Power and Tohoku Electric Power Network have concluded agreements on cooperation with outside organizations, including local governments, the Japan Self-Defense Forces, and the designated public utility East Nippon Expressway Co., Ltd. to facilitate mutual cooperation in the event of a disaster.

Under these agreements, practical drills are carried out to enhance cooperation. The drills carried out to date include drills on the air transport of Company vehicles using Japan Self-Defense Forces helicopters, drills on sea transport using convoy vessels, drills on recovery work in the event of blocked roadways, and drills on transporting emergency teams via expressways, undertaken with East Nippon Expressway Co., Ltd.

By continuing to establish and maintain personal contact with related parties through drills and other activities, we will enhance readiness for natural disasters of growing severity.



[Ground Self-Defense Force]

Drills on transporting emergency teams via expressways [East Nippon Expressway Co., Ltd.]

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Corporate Governance

Message from the Chairman of the Board

The efforts of the Board of Directors in a rapidly changing business environment

One year has passed since I was appointed Chairman of the Board. Over this period, the Group's business environment has undergone dramatic changes. It's easy to fall into nearsighted thinking when faced with bewildering changes in the business environment. But for the sake of its own sustained growth, the Group must respond to such circumstances by taking an overview of matters and carrying out measures based on a medium- to long-term perspective. As a roadmap for doing so, we've identified sustainability priorities (materiality topics) for positioning sustainability as the core of our management. The Board of Directors must demonstrate highly effective oversight functions to address these issues faced by our communities and society, leading our efforts to realize a smart society for the future starting in Tohoku as called for in our vision "Working alongside next" and take on the targets of the Carbon Neutral Challenge 2050, thereby

Representative Director & Chairman of the Board

Juo Masuki

increasing corporate value over the medium to long term and contributing to the sustained progress of society at large.

In addition, since the corporate split in 2020, we've proceeded to reorganize our internal companies and pursued other efforts to achieve the current structure under which we are able to carry out the plan-do-checkact (PDCA) cycle based on the highly independent operations management structure of each Group member and internal company. At the same time, I recognize that the higher the independence within the organization, the more important it will be for me to perform my oversight role as Chairman of the Board, looking at topics such as whether or not individual organizations are moving forward in alignment with each other and whether they incorporate the perspective of overall optimization toward clear future goals.

Further improving our governance structure and the efficacy of the Board

Transparency is the most important element of corporate governance. I believe transparency can be achieved through lively debate in the Board. On our Board, seven outside directors with diverse backgrounds engage in free and open discussions with internal directors to incorporate in management decisions diverse views and judgments from outside the organization. In the Board's activities, we strive to prevent information disparity among directors by thoroughly explaining matters to outside directors in advance and holding study meetings, as well as by helping them to better understand the thoughts and aims of executives through this process.

Structurally, we're taking steps to accelerate the decisionmaking process by delegating authority from the Board to individual directors in stages. This has led to improvements in autonomy and speed. At the same time, it is essential to monitor the Board from the perspective of overall optimization, as referred to above. We will continue our unceasing efforts to improve the efficacy of the Board in the future as well.

Message to stakeholders

Due to factors including rising power procurement costs following the earthquake off the Fukushima coast, rising global fuel prices due to Russia's invasion of Ukraine, and higher market prices for wholesale electric power transactions, we expect to record considerable losses in FY2022, on the heels of having recorded final losses in FY2021 as well. The current financial situation is a very challenging one that could even affect stable power supplies. In light of these conditions, we've decided to refrain from paying dividends in FY2022 and to revise electricity rates for customers in liberalized sectors beginning in November 2022. We recognize that these steps are significant concerns for our stakeholders, and we will strive to enhance our capacity to respond to rising uncertainties in the business environment through raising the levels and increasing the speed of our efforts to generate profits, on a groupwide basis. Under such conditions of rising opacity, we believe that development of human resources is an important topic. Diverse human resources, and the wide range of views and ideas generated by such diversity, represent a powerful force that will help us respond to environments such as the one we face today. I am enthusiastic about personally taking leadership to build workplaces in which diverse human resources can thrive by working with vitality. By continuing to pursue efforts to enrich this human capital and deepen communication with stakeholders still further, we will ensure that the Tohoku Electric Power Group will serve as a bridge to future generations while enhancing corporate governance from the perspectives of transparency, management dynamism, and soundness, with the aim of sustained progress for society as a whole and medium- to long-term increases in corporate value. We appreciate the continuing guidance and support of all of our stakeholders.

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Basic concepts of corporate governance

The Tohoku Electric Power Board of Directors establishes basic corporate governance policies to clarify our basic corporate governance concepts and related practical initiatives. Under our management philosophy of prosperity in partnership with the community, as identified in Working alongside next, the Tohoku Electric Power Group's Medium- to Long-Term Vision and the Group slogan Yori, Sou, Chikara (The Strength to Work Alongside), we seek to grow in step with sustained progress within society by helping to establish a smart society in various ways: providing services centered on energy, working alongside customers, and engaging in sustained dialogue with stakeholders.

To ensure appropriate management consistent with this heading, the Company implements initiatives that enhance corporate governance, including those that ensure exhaustive compliance with corporate ethical standards and laws and regulations, promoting fair, honest, and transparent business administration, and improving internal control and risk management. The Company sees strengthening and improving corporate governance as one of its priority management issues. Based on this perspective, the Company will advance initiatives to ensure sustained growth and enhanced corporate value on a medium- and long-term basis to meet the expectations of its stakeholders. Company initiatives will include activities that make management more flexible, sound, and transparent.

Guarantee of shareholder rights and equitable standing

The Company handles all matters based on laws and regulations, thereby guaranteeing shareholder rights and equality in real terms. At the same time, the Company advances efforts to prepare conditions that permit shareholders to exercise their rights, with due regard for minority and foreign shareholders.

2 Appropriate joint efforts with stakeholders beyond shareholders

Based on safety, consideration for the environment, and compliance with corporate ethical standards, laws, and regulations, we stress activities based on two-way dialogue with a diverse array of stakeholders. The Company targets sustained growth and medium- to long-term growth in corporate value.

8 Appropriate information disclosure and transparency

(1) In addition to the appropriate disclosure of information pursuant to laws and regulations, we engage in the timely disclosure of accurate and highly useful information through our website and various other media, in addition to press conferences and, as necessary, briefings, held by the representative director.



Corporate Governance https://www.tohoku-epco.co.jp/ir/policy/governance/index.html

- vww.tohoku-epco.co.jp/ir/policy/governance/index.html
- (2) We disclose financial, non-financial, and other information through fair, detailed, and simple methods, in accordance with the Companies Act, the Financial Instruments and Exchange Act, and other laws and regulations, as well as our own Disclosure Policy and other policies.
- (3) To the extent feasible, we also strive to disclose this information in English.

4 Responsibilities of the Board of Directors

- (1) The roles and responsibilities of the Board of Directors include measures to achieve the sustained growth of the Company and increasing corporate value over the medium to long term while soliciting diverse neutral and objective opinions from independent outside Directors, in light of the duties entrusted to them by shareholders and associated accountability and responsibilities. The Board of Directors also strives to foster a culture that encourages free and constructive debate and exchange of opinions and welcomes issues raised by outside Directors.
- (2) In addition to its important role as a Company supervisory body, the Audit and Supervisory Committee serves as a statutory independent body charged with auditing the discharge of management responsibilities on behalf of shareholders by the Representative Director and other Executive Directors. By fulfilling these responsibilities, it contributes to a sound corporate governance structure commensurate with society's trust in the Company and promotes sound, sustained growth and medium- to long-term value creation.

See » Internal controls, corporate governance chart » P72

5 Shareholder dialogue

To further sustained growth and medium- to long-term growth in corporate value, the Company establishes opportunities for dialogue with shareholders beyond the General Meetings of Shareholders, while Directors and other members of top management strive to explain clearly in management policies and elsewhere matters such as the Company business environment and initiatives. The ultimate goal is to ensure understanding, and to promote constructive dialogue with shareholders.

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Internal Control and Corporate Governance Diagram (Tohoku Electric Power)

1 Board of Directors

The Board of Directors consists of 16 Directors, including seven independent outside Directors unimpeded by potential conflicts of interest that may arise with general shareholders.

In principle, the Board meets once a month to decide on important matters related to management and matters and essential for Company operations. The Directors also report on the status of business execution to the meetings of the Board of Directors and monitor these reports and business implementation carried out by other Directors. The Board of Directors delegates certain important decisions on business execution to the Directors through a system whereby the Representative Director & President, Representative Directors & Executive Vice Presidents, and Managing Executive Officers (collectively referred to as "Executive Officers with titles") take charge of business execution.

2 Nomination and Compensation Advisory Committee

The Company has established a Nomination and Compensation Advisory Committee comprised of two internal Directors (Representative Director & Chairman of the Board Jiro Masuko and Representative Director & President Kojiro Higuchi) and four independent outside Directors (Directors Tsutomu Kamijo, Osamu Kawanobe, and Mikito Nagai who do not sit on the Audit and Supervisory Committee, and Director Ikuko Miyahara, a Committee member). To ensure the objectivity, timeliness, and transparency of nomination and compensation, the organization of this body is based on a majority of its membership consisting of independent outside Directors and an independent outside Director serving as its chairperson. It deliberates and advises on consultation received from the Board of Directors regarding nomination and compensation of Directors and other executives. The Nomination and Compensation Advisory Committee fulfills the functions of both a voluntary committee equivalent in function to a nomination committee and a voluntary committee equivalent in function to a compensation committee.

3 Management Committee

Consisting of Executive Officers with titles, the Management Committee meets weekly to discuss overall business administration policies and plans and the execution of important business based on basic management policies set by the Board of Directors. The Management Committee also promotes the development of effective, efficient business processes through an in-house company system, in which the Power Generation Company, Sales Company, Renewable Energy Company, the Nuclear Power Division, and the Internal Services Division independently explore autonomous business expansion.

4 Audit and Supervisory Committee

To ensure objectivity and neutrality in management supervision functions, three of the four members of the Audit and Supervisory Committee are outside members. One full-time member of the Committee is appointed to carry out, on a daily basis, activities such as attending important meetings of the Executive Committee and other bodies, inquiring with business execution sections concerning the state of business execution, inspecting sites, and joint efforts with internal audit sections, thereby making auditing and supervisory functions more effective. In addition to meeting monthly, the Audit and Supervisory Committee meets at other times when necessary to deliberate and report on matters relevant to its functions as an auditing and supervisory body.

In addition to attending meetings of the Board of Directors, the Executive Committee, and other important meetings, the fulltime member also inquires with business execution sections concerning the state of business execution, reviews important documents, inspects the state of business and finances at business sites, and otherwise strives to ensure that auditing of matters such as the performance of Directors' duties and the maintenance and operation of internal control systems is fully addressed. He or she also strives to improve audit results by attending discussions with the Representative Director and engaging in the periodic exchange of viewpoints with the internal audit sections and the accounting auditors, as well as enhancing cooperation with the statutory auditors of affiliate companies. In particular, in the area of enhancing cooperation with internal audit sections and accounting auditors, tripartite auditors. By providing information obtained through auditing activities and other activities, the full-time member helps ensure full and effective cooperation with outside members.

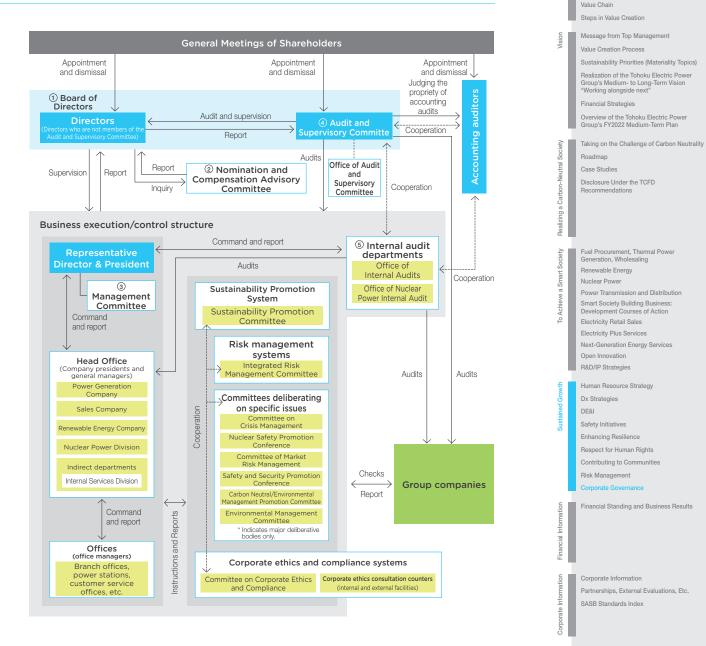
The outside members of the Audit and Supervisory Committee attend discussions of the Board of Directors and Representative Directors, asking questions and presenting views based on a wide range of perspectives and drawing on their wealth of personal experience, as well as touring facilities to inspect the state of operations. Member Miyahara attends the voluntary Nomination and Remuneration Advisory Committee as a member.

In addition to the assignment of specially appointed auditing officers responsible for assisting in the duties of the Audit and Supervisory Committee, the Audit and Supervisory Committee Office functions as an organization charged with supporting the Committee in its duties.

6 Internal audit departments

At the Company, the Office of Internal Audits conducts internal audits on businesses from various perspectives, including the effectiveness and appropriateness of organizations and management systems, the economy and efficiency of business administration, and the effectiveness and efficiency of facility preservation activities. The Office of Nuclear Power Internal Audit performs internal audits associated with safety guarantees and reliability enhancements for nuclear power generation within the Company. These internal audit departments perform internal audit through interviews with the individuals concerned at the Company, its subsidiaries, and principal affiliates, documentary research, and on-site confirmation. The internal audit departments report their internal audit fundings to the Representative Director & President, the Management Committee, the Board of Directors, and the Audit and Supervisory Committee. In addition, the departments urge the divisions concerned to resolve problems and issues that require improvement or correction. The departments also seek to raise the effectiveness of internal audits in cooperation with the Audit and Supervisory Committee and accounting auditors.

The internal audit departments are independent from the respective executive bodies. The Office of Internal Audits and the Office of Nuclear Power Internal Audit fall under the direct control of the Representative Director & President.



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Changes in corporate governance systems

Commencement of initiatives to strengthen governance and achieve flexible business administration

Reducing the numbers of Directors and terms of office
 Introducing the Executive Officer system
 Introducing the system of stock options for stock-based compensation

Promoting governance reforms based on corporate governance codes
Appointing two or more outside Directors
Initiating assessments of the Board of Directors'

effectiveness Establishing the voluntary Nomination and Compensation Advisory Committee Strengthening governance to account for rapidly changing management environment Editorial Policy Index

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- Establishing Executive Officers with titles
 Changes in status to a company with an audit and supervisory committee
 Appointment of female Directors
- Adopting a stock-based compensation program linked to business performance

	April 2005 to March 2015	April 2015 to March 2018	April 2018 to the present	Group's FY2022 Medium-Term Plan
Governance system	Company with an audit and supervisory board	Company with an audit and supervisory board	June 2018 Changes in status to company with an audit and supervisory committee	Taking on the Challenge of Carbon Neutrality Roadmap
Committee		January 2017 Establishing the voluntary Nomination and Compensation Advisory Committee (consisting of two members from the Company and two additional members from outside the Company)	 June 2018 Increase in the number of Nomination and Compensation Advisory Committee members from outside the Company (to change the numbers of members from the Company and those from outside the Company to two and four, respectively) January 2020 Outside Director chosen as Chair of the Nomination and Compensation Advisory Committee 	Case Studies Disclosure Under the TCFD Recommendations
Chairman of the Board of Directors	Representative Director & Chairman of the Board	Representative Director & Chairman of the Board	Representative Director & Chairman of the Board	Fuel Procurement, Thermal Power Generation, Wholesaling
Separation of supervision and execution	June 2005 Introducing the Executive Officer system Decrease in the number of Directors specified in the Articles of Incorporation from 25 or fewer to 18 or fewer		April 2018 Establishing Executive Officers with titles June 2018 Delegation of a portion of the Board of Directors' authorities to Directors April 2020 Expanding the authority delegated by the Board of Directors to Directors	Renewable Energy Nuclear Power Power Transmission and Distribution Smart Society Building Business: Development Courses of Action Electricity Retail Sales Electricity Plus Services
Nomination of Directors	June 2007 Reducing the term of office for Directors from two years to one year	November 2015 Establishing criteria for judging the independence of outside Directors Establishing policies for nominating Directors	November 2020 Clearly defining the abilities and qualities demanded of Directors	Next-Generation Energy Services Open Innovation R&D/IP Strategies
Compensation for Directors	June 2007 Abolishing Retirement Benefits for Directors June 2010 Introducing the system of stock options for stock-based compensation	November 2015 Establishing policies for determining compensation for Directors	June 2020 Adopting stock-based compensation program linked to business performance Stock option compensation program abolished	Dx Strategies DE&J Safety Initiatives Enhancing Resilience Respect for Human Rights
Assessment of the Board of Directors' effectiveness		February 2016 Start of the assessment of the Board of Directors' effectiveness (using a questionnaire survey)		Contributing to Communities Risk Management Corporate Governance
Basic policies regarding corporate governance		November 2015 Establishment	March 2020 Basic Policy on Corporate Governance established	Financial Standing and Business Results
Outside Directors (Figures in 🗔 are the ratios of outside Directors to total number of Directors.)	From June 1 outside Dire		From June 2018 From June 2019 Since June 2020 Since June 2021 6 outside Directors 35% 6 outside Directors 40% 7 outside Directors 44% Including three outside Directors 10 cluding three outside Directors 40% 10 cluding three outside Directors 44% Including three outside Directors 40% 10 cluding three outside Directors 44% and Supervisory Committee Audit and Supervisory Committee Audit and Supervisory Committee Audit and Supervisory Committee	Financial In
Outside Statutory Auditors	3 outs	ide Statutory Auditors		Corporate Information Partnerships, External Evaluations, Etc. SASB Standards Index

Policies and procedures for appointing and dismissing executive team members and nominating candidates for Directors by the Board of Directors

The Company seeks to administer businesses to reshape their value alongside local communities by adapting to anticipated changes in the management environment and engaging in sustained dialogue with stakeholders, thereby maintaining the role of Tohoku Electric Power Group a group of companies that grow alongside and provide essential functions within communities. The Company has adopted the following policies and procedures for nominating and dismissing Directors to administer its businesses appropriately.

Policies

- The Board of Directors shall have members whose numbers are necessary and appropriate for building effective management systems in a company active in the electricity business and for monitoring substantive discussions and business execution. The Board of Directors shall consist of an appropriate number of members, totaling 18 or fewer, as specified in the Articles of Incorporation.
- In selecting and dismissing Directors, the Nomination and Compensation Advisory Committee, including two or more independent outside Directors, shall convene discussions to secure the objectivity, timeliness, and transparency of their selection and dismissal.
- Candidates for internal Directors (excluding candidates for Directors serving as members of the Audit and Supervisory Committee) are chosen from individuals with a wealth of experience in each field, based on a consideration of a sound balance of specialties, technical expertise and business experience in particular in the electric power industry, which involves high specialization and a broad range of business domains, knowledge concerning the electricity business in general, and new business fields, among others, thereby helping to achieve Working alongside next, the Tohoku Electric Power Group's Medium- to Long-Term Vision. The desired traits are:
- The imagination needed to envision a forward-looking vision and creative business models and to lead the organization
- The decisiveness needed to take personal responsibility for decision-making based on knowledge, experience, and principles
- The tenacity needed to achieve goals without giving up, tackling challenges boldly, while bringing together wisdom and resources from inside and outside the organization
- The sensitivity needed to identify business opportunities without overlooking signs indicating risk
- The character needed to combine a strong sense of mission with lofty ethics as leaders of a business serving the public interest
- Candidates for outside Directors (excluding candidates serving as members of the Audit and Supervisory Committee) shall be selected by evaluating whether candidates can work to realize proper decisionmaking and management supervision by the Board of Directors, based on practical experience grounded in corporate management and other factors and insights into social, economic, and other trends.
- Candidates for Directors serving as members of the Audit and Supervisory Committee shall be selected by evaluating whether the candidates can apply their respective experience and insights to the proper execution of their duties as Audit and Supervisory Committee members and to the audit and supervision of job execution by Directors. Candidates for outside Directors serving as members of the Audit and Supervisory Committee shall be selected by evaluating whether the candidates can perform audits and supervision from an objective and neutral perspective.
- Whether candidates for outside Directors are independent or not shall be judged on the basis of the Independence Criteria for Outside Directors set by the Company.

Procedures

Based on the above policies, to enable more objective, timely, and transparent decision-making, the Nomination and Remuneration Advisory Committee, whose members include multiple independent outside Directors, including the chair, deliberates on the appointment. A decision is made by the Board of Directors. For candidates for Directors serving as members of the Audit and Supervisory Committee, the consent of that Committee is obtained before submission to the Board of Directors. The Audit and Supervisory Committee may also present opinions on candidate Directors (not including candidates for Directors serving as members of the Audit and Supervisory Committee) and submit them to the General Meeting of Shareholders

Policies and procedures for determining compensation for Directors

Policies and procedures for determining compensation for Directors (excluding Directors serving as members of the Audit and Supervisory Committee) are as follows:

Policies

To help realize Working alongside next, the Tohoku Electric Power Group's Medium- to Long-Term Vision, decisions are made on the remuneration of Directors (not including Directors serving as members of the Audit and Supervisory Committee) in accordance with the following policy, intended to strengthen motivation among Directors to improve business performance and contribute to improvements in business performance over the medium to long term, by clarifying the relationship between remuneration and business performance and stock prices.

- The remuneration structure consists of fixed remuneration, remuneration linked to short-term performance, and remuneration linked to medium-/long-term performance. Remuneration amounts are determined for each position based on a consideration of Company business results, the business environment, and other factors, while also referring to remuneration at other publicly traded firms.
- To incentivize improved business results, the percentages of total compensation accounted for by fixed remuneration, remuneration linked to short-term performance, and remuneration linked to medium-/long-term performance are set to roughly 70%, 10%, and 20%, respectively, at the time the goals are achieved.
- Fixed remuneration is paid monthly as monetary remuneration in annual amounts determined so as not to exceed the total approved by the General Meeting of Shareholders.
- Remuneration linked to short-term performance is paid as annual remuneration that varies with the degree to which business performance objectives are achieved, so as not to exceed the total approved by the General Meeting of Shareholders.
- Remuneration linked to medium-/long-term performance is paid by awarding one share of Company common stock per point based on the total points earned annually during the time of service, at the time of retirement or resignation through an investment-trust- based remuneration system. This, too, is not to exceed the total approved by the General Meeting of Shareholders. Points are awarded as fixed points and variable performance-linked points awarded in accordance with the extent to which business performance objectives are achieved. If a recipient becomes ineligible to receive this remuneration, for example by having committed any of the acts prohibited under the Rules on Issue of Shares, and such fact has been discovered prior to the date of finalization of beneficiary rights, then the shares of common stock will not be issued. If the violation has been discovered after the date of finalization of beneficiary rights, then the Company may demand return of the amount corresponding to the remuneration paid.
- The indicator used in the portion corresponding to variable performance-linked points in remuneration linked to shortterm and medium-/long-term performance is the financial target of consolidated cash income (excluding factors such as time lag effects of the fuel-cost adjustment system, an external variable factor) identified in Working alongside next, the Tohoku Electric Power Group's Medium- to Long-Term Vision. The target is set to 320 billion yen for each fiscal year. Amounts paid and other matters vary with the extent of achievement of this target and other factors.
- Remuneration of outside Directors, whose perspectives are independent of business execution, consists of fixed remuneration only.
- Allotments for the respective Directors shall be decided in accordance with the sizes of the roles assigned to the respective title holders, the details of deskwork and duties assigned to the respective Directors and their respective scopes of responsibility.

Procedures

- Overseeing the business as a whole, the President makes decisions each year regarding the amounts paid to each individual and other matters, through a Board of Directors resolution delegating full authority to him or her. To ensure its objectivity and transparency, the resolution on delegation of authority to the President is deliberated on by the Nomination and Remuneration Advisory Committee, whose members include multiple independent outside Directors, including the chair. The amounts paid to each individual and other matters, decisions related to which are delegated to the President as described above, cannot exceed the total payment amounts and other amounts for Directors (excluding Directors serving as members of the Audit and Supervisory Committee) as specified in advance through deliberation by the Nomination and Remuneration Advisory Committee. The actual amounts paid are reported to the Nomination and Remuneration Advisory Committee.
- The Audit and Supervisory Committee may state its decided opinion on compensation for Directors (excluding Directors serving as members of the Audit and Supervisory Committee) at a General Meeting of Shareholders.
- Policies and procedures for determining compensation for Directors serving as members of the Audit

and Supervisory Committee are as follows:

Remuneration for Directors serving as members of the Audit and Supervisory Committee, whose positions are independent of business execution, consists of fixed remuneration only, paid monthly so as not to exceed the total approved by the General Meeting of Shareholders. The amount paid to each Director is determined through negotiation among the Directors serving as members of the Audit and Supervisory Committee. Editorial Policy

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Compensation for Directors, etc.

						(FY2021
		Monetary re	emuneration		Nonmonetary	remuneration
Classifications for	Fixed rem		Remunerati short-term p	nked to medium-/ performance		
Directors	Number of compensation recipients	Amount paid (millions of yen)	Number of compensation recipients	Amount paid (millions of yen)	Number of compensation recipients	Amount paid (millions of yen)
Directors (excluding Directors serving as members of the Audit and Supervisory Committee and Outside Directors)	13	347	—	—	11	41
Members of the Audit and Supervisory Committee	5	73	_	_	_	_

- (Notes) 1. As of March 31, 2022, there were 12 Directors (including four outside Directors), excluding those serving as members of the Audit and Supervisory Committee. The Company has four additional Directors serving as members of the Audit and Supervisory Committee, including three outside Directors. Compensation for the Director specified above includes compensation for one Director not serving as members of the Audit and Supervisory Committee who stepped down at the end of the 97th Ordinary General Meeting of Shareholders held June 25, 2021 and for one Director serving as a member of the Audit and Supervisory Committee who resigned.
 - 2. The total compensation paid to the eight outside Directors above was 81 million yen, all paid as fixed remuneration.
 - 3. In light of the consolidated ordinary loss recorded this fiscal year, we have not paid the entire amount of remuneration linked to short-term performance and the portion corresponding to performance-linked points of remuneration linked to medium-/long-term performance. In addition to the figures shown above, we also recorded as expenses in this fiscal year a 2 million yen difference between the amount recorded last year for remuneration linked to short-term performance and the amount actually paid, for eight Directors (including two Directors [excluding Directors serving as members of the Audit and Supervisory Committee] who resigned on March 31, 2021).
 - 4. The Company has issued a total of 122,800 shares of stock as payment for execution of duties to two Directors (excluding Directors serving as members of the Audit and Supervisory Committee) who resigned on March 31, 2021 and one Director (excluding Directors serving as members of the Audit and Supervisory Committee) who stepped down at the end of the 97th Ordinary General Meeting of Shareholders held June 25, 2021. Each of these was paid under the stock-based compensation program linked to business performance.

Fixed remuneration, remuneration linked to short-term performance

Directors (excluding Directors serving as members of the Audit and Supervisory Committee)	cluding Directors serving as mbers of the Audit and (including up to 60 million yen/		Up to 12 million yen/ month
(Based on resolution passed at Meeting of Shareholders held Ju affects 11 Directors.)		(Based on resolution passed Meeting of Shareholders held resolution affects four Directo	I June 27, 2018. The

Remuneration linked to medium-/long-term performance

 Directors excluding outside Directors
 Under t amount

 (excluding Directors serving on the Audit and Supervisory
 million y million y committee)

 (Based on resolution passed at the 96th eight Directors.)
 96th

Under the investment-trust- based remuneration system, Company stock and monetary amounts equivalent to the convertible value of Company stock are issued/granted at the time of resignation. The trust contribution amount per three fiscal years is not to exceed 540 million yen in total; the total number of points awarded to Directors per fiscal year is not to exceed 400 thousand points (equivalent to 400 thousand shares of stock).

(Based on resolution passed at the 96th Ordinary General Meeting of Shareholders held June 25, 2020. The resolution affects eight Directors.)

CEO (President) succession plan

The Board of Directors overseas the development of successors to the position of Chief Executive Officer (President) to ensure this occurs systematically and with an adequate investment of time and resources. The Nomination and Remuneration Advisory Committee, whose members include multiple independent outside Directors, including the chair, deliberates on the development of successors in a systematic and continuous manner, to ensure its objectivity and transparency, while taking into consideration matters such as the Company's changing business conditions.

Message from the chair of the Nomination and Remuneration Advisory Committee

About the Nomination and Remuneration Advisory Committee

Our Nomination and Remuneration Advisory Committee was established in 2016. This marks its seventh year. The committee's membership currently stands at four outside Directors, including myself, and two internal Directors. The committee met eight times in FY2021. Each meeting featured active discussions among internal and outside Directors.

Initiatives in FY2021

In FY2021, based on the five abilities and qualities required for candidate Directors chosen last year—imagination, decisiveness, tenacity, sensitivity, and high character—we deliberated on ways to develop the next generation of management so that it will possess these abilities and qualities, among other properties, and began initiatives toward establishment of concrete succession plans, including training for core members of management.

In consideration of executive appointments, we assessed human resources based on the above five abilities and qualities through means including opportunities for dialogue between the executives and outside Directors. We also used the newly formulated skills matrix to select appointments with consideration for balance in terms of the skills, specializations, and other qualities needed of the Board of Directors as a whole.

Furthermore, to ensure transparency in management and improve corporate governance, we discussed which roles to delegate to former chairpersons and presidents. In these ways, our governance structure is steadily evolving to become ever more effective

Matters considered in FY2022

In FY2020, we adopted a stock-based compensation program linked to business performance, as an incentive toward achieving medium- to long-term performance on the way toward "Working alongside next," the Tohoku Electric Power Group's Medium- to Long-Term Vision goals. This is the third year of this program. We will continue discussing ways to increase the Board of Directors' motivation to contribute to improving medium- to long-term business performance and growing corporate value.

Alongside efforts to improve the succession plan for purposes such as training the next generation of management, we believe that we must promote reforms to raise the level of employee awareness of the need to increase the percentage of women as managers.

Message for stakeholders

I believe the mission of the Nomination and Remuneration Advisory Committee is evolving from one of securing objectivity, transparency, and fairness in the process of making decisions on executive nomination and remuneration to one that covers a broader range of deeper responsibilities. These include developing the next generation of management and studying remuneration programs to improve incentives to executives.

To ensure sound governance, it is vital to have an awareness of issues at all times and look at current conditions from new perspectives. As chair of the Nomination and Remuneration Advisory Committee, I will continue to value new insights from an external perspective.

Director (Independent Outside Director) Chairperson, Nomination and Remuneration Advisory Committee Tsutomu Kamijo Editorial Policy Index Philosophy and Group Slogan At a Glance

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Assessment of the Board of Directors' effectiveness

The Company undertakes a questionnaire survey of Directors to assess the Board of Directors' effectiveness and reports the findings of the survey to the Board of Directors annually. Based on the survey findings, the Board of Directors shares its understanding of the existing conditions and opinions for bettering the conditions and the like, assesses the effectiveness of the Board of Directors as

a whole, and confirms initiatives for improving the Board's effectiveness, among other things.

Survey topics

The survey questions are grouped into the following main categories. Directors are asked to choose one of five answers for each question. A space is provided in each category for freeform comments.

- I. Number of members and composition of the Board of Directors
- II. Scope of matters submitted to the Board of Directors

IV. Operation of the Board of Directors, etc.

III. Decision-making and oversight at the

- V. Support structures for Directors and members of the Audit and Supervisory Committee, provision of information to them, etc.
- VI. Operation of the Nomination and Remuneration Advisory Committee VI. Priority initiatives for FY2021

FY2021 initiatives

Board of Directors

In FY2021, we sought to increase the efficacy of the Board of Directors via the following initiatives:

- Providing outside Directors with summaries of deliberations in the Management Committee, in which internal Directors participate, and other efforts to deepen further the content of Board deliberations
- Efforts to achieve a shared understanding of the issues among both internal and outside Directors, through means including providing opportunities outside of the regular Board meetings for internal Directors to explain to outside Directors matters such as the management issues the Company faces

Process of assessing the efficacy of the Board



Overview of results of evaluation

The results of the survey carried out in February 2022 showed improvements from the two previous surveys in terms of overall average scores, as well as strong results in all evaluation categories. Based on this survey we have judged the efforts conducted in FY2021 to increase the efficacy of the Board to have generated positive results.

Referring to the results of exchange of opinions among all outside Directors in March 2022, after totaling the results of this survey, deliberations in a May 2022 Board of Directors meeting confirmed that the Board had demonstrated satisfactory efficacy in FY2021.

At the same time, to increase efficacy even more they recognized the need for initiatives on the following matters:

- Implementing validation of the plan-do-check-act (PDCA) cycle concerning business administration to enhance monitoring of the medium-term plan
- Osystemically holding colloquia and other activities outside of the Board of Directors, to enhance free discussions and exchange of opinions among inside and outside Directors

The Company Board of Directors will continue to strive to maintain and improve the efficacy of the Board of Directors on these and other points, thereby ensuring appropriate management oversight by the Board and to realize sustained growth in corporate value.

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Directors (as of July 2022)



Representative Director & Chairman of the Board

Jiro Masuko

Status of attendance at Board of Directors meetings 11/11 (100%) Reasons for appointment

Since joining the Company, Masuko has worked in businesses centered on those assigned to the nuclear power divisions. He is familiar with the Company's businesses in general, as demonstrated by past service as an Executive Officer and the General Manager of the Aomori Branch Office, and as Executive Officer and General Manager of the Nuclear Power Department. Masuko has served as Managing Director since June 2015, as a Representative Director and Executive Vice President since April 2018, and as a Representative Director and Chairman of the Board since April 2021. The Company reappointed him as Director in light of his extensive business experience within the Company and general knowledge of electricity business management.



Representative Director & Executive Vice President

Hiromitsu Takano

Status of attendance at Board of Directors meetings 9/9 (100%) Reasons for appointment

Since joining the Company, Takano has worked in businesses centered on those assigned to the general-affairs divisions. He is familiar with the Company's businesses in general, as demonstrated by past service as General Manager of the General Affairs Department, Senior Executive Officer and General Manager of the Niigata Branch Office, and Managing Executive Officer from June 2021 and as a Representative Director and Executive Vice President from April 2022. The Company reappointed him as Director based on his extensive business experience within the Company and general knowledge of electricity business management.



Representative Director & President

Kojiro Higuchi

Since joining the Company, Higuchi has worked in businesses centered on those assigned to the thermal power divisions. He is familiar with the Company's businesses in general, as demonstrated by past service as the General Manager of the Haramachi Thermal Power Station and as an Executive Officer and General Managing Director from June 2016, as a Director and Managing Executive Officer from April 2018, as a Representative Director and Executive Vice President from June 2019, and as a Representative Director and President since April 2020, in light of his extensive business experience within the Company and general knowledge of electricity business management.



Director & Managing Executive Officer

Isao Kato

Status of attendance at Board of Directors meetings 9/9 (100%) Reasons for appointment

Since joining the Company, Kato has worked in businesses centered on those assigned to the nuclear power divisions. He is familiar with the Company's businesses in general, as demonstrated by past service as Executive Officer and General Manager of the Nuclear Power Department and Managing Executive Officer. Kato served as Director and a Managing Executive Officer from June 2021. The Company reappointed him as Director based on his extensive business experience within the Company and general knowledge of electricity business management.



Director & Managing Executive Officer

Sadahiro Ohno

Representative Director & Executive Vice President

Since joining the Company, Abe has worked in businesses centered

with the Company's businesses in general, as demonstrated by past

service as General Manager of the Human Capital Department and

Office. Abe served as Managing Director from June 2017, as Director

as Executive Officer and General Manager of the Tokyo Branch

Representative Director and Executive Vice President from April

2021. The Company reappointed him as Director based on his

and a Managing Executive Officer from April 2018, and as a

on those assigned to the human resources divisions. He is familiar

Toshinori Abe

Reasons for appointment

Status of attendance at Board of

Since joining the Company, Ohno has worked in businesses with a focus on those assigned to the thermal power divisions. He is familiar with the Company's businesses in general, as demonstrated by past service as an Executive Officer and General Manager of the Thermal Power Department and a Managing Executive Officer. The Company appointed him as Director based on his extensive business experience within the Company and general knowledge of electricity business management.



* Actual attendance is shown for FY2020. Sadahiro Ohno and Satoshi Isagoda took office on June 28, 2022.

* Attendance for Kazuhiro Ishiyama, Hiromitsu Takano, and Isao Kato is for meetings of the Board held since June 25, 2021.

Representative Director & Executive Vice President

Kazuhiro Ishiyama

Since joining the Company, Ishiyama has worked in businesses centered on those assigned to the planning divisions. He is familiar with the Company's businesses in general, as demonstrated by past service as Executive Officer and General Manager of the Corporate Planning Department and Managing Executive Officer. Ishiyama served as Director and Managing Executive Officer. Ishiyama as a Representative Director and Executive Vice President from April 2022. The Company reappointed him as Director based on his extensive business experience within the Company and general knowledge of electricity business management.



Director & Managing Executive Officer

Satoshi Isagoda

Since joining the Company, Isagoda has worked in businesses with a focus on those assigned to the business administration divisions. He is familiar with the Company's businesses in general, as demonstrated by past service as an Executive Officer and General Manager of the Human Resources Department, an Executive Officer and General Manager of the Iwate Branch, and a Managing Executive Officer. The Company appointed him as Director based on his extensive business experience within the Company and general knowledge of electricity business management.

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Directors (as of July 2022)



Director (Outside Director) (Independent Director)

Tsutomu Kamijo

Reasons for appointment and summary of anticipated roles

Kamijo has served in positions including Chairman and Director of Sapporo Holdings Ltd. and brings experience in managing a company that manufactures and sells beverages, foods and other products. The Company appointed Kamijo as an Outside Director based on expectations that he will apply his extensive experience and rare insights to the management of the Company based on his past career and performance record.

Kamijo brings a wealth of experience as a corporate manager, playing a leading role in areas including large-scale domestic and international M&A and business alliance activities and global business development. He is expected both to oversee Company management and to offer advice on management policies and businesses from an independent perspective.



Director & Audit and Supervisory Committee Member

Katsuaki Fujikura

Status of attendance at Board o	f
Directors meetings	
Status of attendance in Audit ar	
Supervisory Committee meeting	gs ····· −/− (−%)

Reasons for appointment

Since joining the Company, Fujikura has worked in businesses with a focus on those assigned to the fuel divisions. He is familiar with the Company's businesses in general, as demonstrated by past service as an Executive Officer and General Manager of the Fuel Department, an Executive Officer and Special Remuneration Audit Executive, and a Senior Executive Officer and General Manager of the Niigata Branch. The Company appointed him as Director & Audit and Supervisory Committee Member based on his extensive business experience within the Company and general knowledge of electricity business management.



Director (Outside Director) (Independent Director)

Osamu Kawanobe

Reasons for appointment and summary of anticipated roles

Kawanobe is Representative Director and President of JR East Mechatronics Co. Previously held positions include those of Representative Director and Vice President of the East Japan Railway Company. He brings a wealth of experience in managing public-interest businesses and in other areas. The Company appointed Kawanobe as an Outside Director based on expectations that he will apply his extensive experience and rare insights to the management of the Company based on his past career and performance record. Kawanobe brings a wealth of experience as a corporate manager, playing a leading role in business diversification efforts based on the rail transportation business. He is expected both to oversee Company management and to offer advice on management policies and businesses from an independent perspective.



Director & Audit and Supervisory Committee Member (Outside Director) (Independent Director)

Ikuko Miyahara

As university professor, Miyahara has experience in the real-world use of regional resources, research on support for reconstruction following major earthquakes, and joint industry, government, and academic projects. The Company appointed Miyahara as Outside Director and Audit and Supervisory Committee Member based on expectations she will apply her extensive experience and rare insights gained in her academic career toward the objective of providing impartial audits and supervision, drawing on her past career and performance record. Miyahara brings a wealth of insights as an experienced academic and experience based on involvement in disaster recovery in the Tohoku region. She is expected both to audit and oversee Company management from an independent perspective.



Director & Audit and Supervisory Committee Member (Outside Director) (Independent Director) **Kazuo Kobayashi**

Director (Outside Director) (Independent Director)

Reasons for appointment and summary of anticipated roles

Nagai's previous positions include Representative Director and President

of Nippon Steel Kowa Real Estate. He has also served as a Director and

Vice President of Mizuho Corporate Bank, Ltd. (now Mizuho Bank, Ltd.),

and he brings a wealth of experience in managing the real estate and

as an Outside Director based on expectations that he will apply his

extensive experience and rare insights to the management of the

Company based on his past career and performance record.

offer advice on management policies and businesses from an

banking businesses and in other areas. The Company appointed Nagai

Nagai brings a wealth of experience and financial insights as a corporate

manager. He is expected both to oversee Company management and to

Mikito Nagai

Directors meetings

independent perspective.

Status of attendance at Board of

Razuo Robayasiii

Status of attendance at Board of Directors meetings 11/11 (100%) Status of attendance in Audit and Supervisory Committee meetings 13/13 (100%) Reasons for appointment and summary of anticipated roles Kobayashi is a Standing Statutory Auditor of the Nippon Life Insurance

Company. He offers considerable knowledge of financial affairs and accounting. He has also served in posts including a Representative Director and Executive Vice President of the Nippon Life Insurance Company, and he has experience in management of the life insurance business. The Company reappointed him as an Outside Director and an Audit and Supervisory Committee Member based on expectations that he will apply his extensive experience and rare insights toward the objective of providing impartial audits and supervision of the Company based on his past career and performance record. Kobayashi brings knowledge of financial affairs and accounting and financial insights. He is expected both to audit and oversee Company management from an independent perspective.



* Actual attendance is shown for FY2021. Keiko Uehara and Katsuaki Fujikura were appointed on June 28, 2022.

* Attendance for Akiko Ide is for meetings of the Audit and Supervisory Committee held since June 25, 2021. * The independence of independent Directors is judged based on the standards for independence established by the

* Attendance for Mikito Nagai and Akiko Ide is for meetings of the Board held since June 25, 2021

financial instruments exchange on which Company shares are listed.

Director (Outside Director) (Independent Director)

Keiko Uehara

Reasons for appointment and summary of anticipated roles

Uehara's previous positions include Executive Director of Daiwa Securities Business Center Co. Ltd., where she managed back-office business operations, and Executive Officer of Daiwa Securities Group Inc. The Company appointed Uehara as an Outside Director based on expectations that she will apply her extensive experience and rare insights to the management of the Company based on her past career and performance record.

Uehara brings a wealth of experience and financial insights as a corporate manager. She is expected both to oversee Company management and to offer advice on management policies and businesses from an independent perspective.



Director & Audit and Supervisory Committee Member (Outside Director) (Independent Director)

Akiko Ide

and Executive Officer of NT Decomo, Inc. The Company appointed or protection of the company appointed or protection and a Audit and Supervisory Committee Member based on expectations that she will apply her extensive experience and rare insights toward the objective of providing impartial audits and supervision of the Company based on her past career and performance record.

de brings a wealth of experience in management of public utilities and auditing experience and insights. She is expected both to audit and oversee Company management from an independent perspective. Editorial Policy

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Areas of specific expectations for skills individual Directors have (skills matrix)

Our outlook on areas of expectations for individual Directors

The seven items below have been identified as skills essential to Company Directors in general and skills essential for future strategic implementation to realize "Working alongside next," the Tohoku Electric Power Group's Medium- to Long-Term Vision:

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		Nomination and				Areas o	f particular expe	ctations¹				Realization of the Tohoku Electric Power Group's Medium- to Long-Term Vision "Working alongside next"
Name	Title	Remuneration Advisory Committee member?	Gender	Planning and management	Technology'2	Finance and accounting	Legal and risk management	Business development and marketing	Social communication ⁻³	Personnel and human resource development		Financial Strategies Overview of the Tohoku Electric Power Group's FY2022 Medium-Term Plan
Jiro Masuko	Representative Director & Chairman of the Board	0		•	•				•		iety	Taking on the Challenge of Carbon Neutr
Kojiro Higuchi	Representative Director & President	0		•	•		•				eutral Soc	Roadmap Case Studies
Toshinori Abe				•				•		•	Carbon-Ne	Disclosure Under the TCFD Recommendations
Kazuhiro Ishiyama	- Representative Director & Executive Vice President				•	•	•				Realizing a	
Hiromitsu Takano	_						•		•		ociety	Fuel Procurement, Thermal Power Generation, Wholesaling
Isao Kato					•				•		a Smart S	Renewable Energy Nuclear Power Power Transmission and Distribution
Sadahiro Ohno	 Director & Managing Executive Officer 				•				•		o Achieve	Smart Society Building Business: Development Courses of Action Electricity Retail Sales
Satoshi Isagoda	-					•		•		•		Electricity Plus Services Next-Generation Energy Services
Tsutomu Kamijo		٠		•			•	•				Open Innovation R&D/IP Strategies
Osamu Kawanobe	-	0		•	•		•				2 2	Human Resource Strategy Dx Strategies
Mikito Nagai	- Director (Outside Director)	0		•		•	•				Sustainec	DE&I Safety Initiatives
Keiko Uehara	-		\bigcirc			٠				•		Enhancing Resilience Respect for Human Rights Contributing to Communities
Katsuaki Fujikura	Director & Audit and Supervisory Committee Member						•		•			Risk Management Corporate Governance
Ikuko Miyahara		0	\bigcirc					•	•	•	mation	Financial Standing and Business Results
Kazuo Kobayashi	- Director & Audit and Supervisory Committee Member			•		•		•			ancial Infor	
Akiko Ide	- (Outside Director)		0								Line	Corporate Information

*1 The above list describes the top three areas of particular expectations based on the skills possessed by individual Directors. It does not indicate all areas of specialization and experience of each Director.

*2 Technology refers to capabilities related to electricity, machinery, and other technologies in general, including environmental knowledge, to contribute to carbon neutrality.

*3 Social communication refers to capabilities related to communication with local communities and other stakeholders.

Messages from outside Directors

Osamu Kawanobe

Director (Outside Director) (Independent Director)



At Board of Directors meetings and executive study meetings, internal Directors make statements concerning not just their own areas of responsibility, but related fields. Outside Directors participate actively from their own specialized perspectives, resulting in lively discussions in these meetings. In today's dramatically changing business environment, as seen in developments such as COVID-19, the Ukraine crisis, yen depreciation, and damage from successive earthquakes, a sense of urgency and resolve are essential to realizing "Working alongside next," the Group's Medium- to Long-Term Vision. The roles of the Board are growing increasingly important. I try to visit business sites as often as possible to hear the true voice of the employees, as well as provide my own perspectives as an outside Director, based on my experience with the JR Group.

While the Company has established a governance structure based on the electricity business, it seems to me that it is a little too cautious in some areas regarding new businesses. But today there is a need to build concrete business models quickly to help realize a smart society starting in Tohoku and a carbon-neutral society. For this reason, I intend to provide proactive support for reforming the corporate culture to enable it to take on new challenges boldly and without fear of failure. It is at a time of difficult challenges like the present that we should implement a variety of measures based on thinking positively about the future.

Mikito Nagai

Director (Outside Director) (Independent Director)



One year has passed since I took office as an outside Director. The Board of Directors is implementing improvements based on annual assessments of its efficacy, and authority is being delegated to the executive side as appropriate, to enable the Board to devote sufficient time to in-depth discussions of important matters. In addition, I believe that the efforts the Company has made to share information and communication with outside Directors, through means including prior explanations of agenda items, off-site theme-specific small-group dialogues, and study meetings, are worthy of commendation. The current business environment is extremely difficult. Factors such as skyrocketing fuel costs following Russia's invasion of the Ukraine, dramatic yen depreciation, and suspension of some thermal power stations due to the earthquake in March of this year off the coast of Fukushima Prefecture have had major impacts on both stable supply and financial performance.

Instead of mere transitory disorder, certain large-scale structural issues in the global energy situation are now becoming visible to all. At the same time, certain issues that need to be revised to balance both stable supply and financial performance without stopping on the road toward decarbonization as a medium- and long-term goal have become apparent. I see a time of challenge as an opportunity for reform. I intend to support the Company in its efforts to boldly review conventional business practices from a medium- and long-term perspective and proceed swiftly in tackling the various challenges ahead.

Keiko Uehara

Director (Outside Director) (Independent Director)



The management topics that power companies must address have grown more widespread in recent years, and a look at the rapid environmental changes over the past half-year remind me once again of the responsibility of an outside Director.

The Company strives to employ corporate management that will earn the approbation of stakeholders by contributing to the development of the local Tohoku region and diversifying revenue sources through realizing smart cities, while also balancing stable supply with responding to challenges in areas such as natural disasters, fuel procurement, and decarbonization. This can be considered quite a challenging formula. Today, as everything seems to be more complex than ever before and the rate of change only accelerates. I believe that not only vertical but also horizontal and diagonal connections and sharing of issues above and beyond sectional and Group boundaries will guide the organization toward new solutions that extend beyond existing concepts. We can say it's a smart grid of knowledge. I will aim to advise management from objective and multifaceted points of view, to support these initiatives. As an element of the public infrastructure, the position of a power company differs completely from that of a securities company, where I have worked through now. But I believe that there are numerous commonalities between the two. These include the need to rebuild management foundations, spurred by the liberalization of stock commissions; the fact that products have no physical shape, and depend on the daily on-site work and the trust of customers; and intensifying competition due to the entry of operators from other industries. While I am in the process of seeking out ways to put to use in power company management my experiences riding the waves of the markets in the securities industry, I intend to effect a positive chemical reaction to contribute to the sustainable growth of both Tohoku Electric Power and the region.

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Messages from outside Director/Audit and Supervisory Committee Members

Ikuko Miyahara

Director/Audit and Supervisory Committee Member (Outside Director)



A look back at the past year shows that the electricity industry has faced challenging issues including the need to respond to rising energy prices and changing procurement methods, due to the effects of the continuing COVID-19 pandemic and Russia's invasion of Ukraine. In addition, the Company's financial results were impacted strongly by damage to power stations caused by another major earthquake in March 2022. We've held colloquia in addition to regular Board of Directors meetings on our response to these changing social conditions, disasters, and other factors. In these efforts, we have shared information across the entire management team, including executives as well as outside Directors, and discussed matters such as responses to changes in business results and future outlooks.

We have also held training sessions on diversity and inclusion for management groupwide, as we come to recognize that the roles of women and younger employees are growing ever more important.

The electricity business must respond to major global changes in the future, and I see this as a time in which our slogan "Yori, Sou, Chikara (The Strength to Work Alongside)" will be put to the test. I will continue striving to ensure we will play a role as a company that supports the local community and economy in the Tohoku region, through even stronger communication with those in the field and members of management.

Kazuo Kobayashi

Director/Audit and Supervisory Committee Member (Outside Director)



This summer, many localities across Japan experienced tight electricity demand and supply conditions, and this difficult situation continued for some time due to rising demand during a heat wave as power transmission between different territories was not able to cover falling reserve margin. In addition, the Russian-Ukrainian situation has brought into sharp focus the issues that Japan faces as a resource-poor nation due to rising fuel prices and other effects.

To date, the electricity industry has been charged with the responsibility of delivering S+3E—that is, a safe energy supply that balances energy security, environmental conservation, and economic efficiency. Under the conditions described above, each power company has sought to steer a challenging course.

Tohoku Electric Power also sustained damage to thermal power stations due to an earthquake with an epicenter off the coast of Fukushima Prefecture, which struck in March. The entire Group is addressing current conditions concurrently with working to make progress toward medium- to long-term responses to ensure S+3E. Our Audit and Supervisory Committee checks and comments mainly on whether the Board of Directors makes decisions through appropriate processes and proper risk evaluation.

In FY2022, when we need actively to deploy concrete efforts toward the Group's Medium- to Long-Term Vision "Working alongside next" while also responding to the recent sudden worsening of revenues, we're faced with a crucial challenge. I intend to do all I can to fulfill my responsibilities as a Director and Audit and Supervisory Committee member in light of these conditions.

Akiko Ide

Director & Audit and Supervisory Committee Member (Outside Director)



One year has passed since I took office as an outside Director. During this period, the environment of the electric power business has undergone dramatic changes. Rising fuel procurement costs spurred by the Ukraine situation, the impact of suspension of thermal power stations due to the earthquake off the Fukushima coast, and other factors have led to expectations that the Company will record massive losses in FY2022. To ensure stable supplies of electricity, we have revised unit rates for high-voltage power services and above and requested the abolition of the cap on the fuel-cost adjustment system for low-voltage free rate plans. I will carefully monitor the state of implementation of improvements to revenues and expenditures to balance both efficient management and stable power supply. Given such dramatic change, it is important to ensure the swift permeation of management policies all the way to the front lines in the field, and I intend through the activities of the Audit and Supervisory Committee to pay close attention to communication with those in the field, including those at Group companies.

To promote diversity, we held dialogues on career-building for women employees in the Group and panel discussions for management on the theme of promoting the role of women in the workplace. Through such efforts, I will seek to contribute to creating workplaces in which diverse employees can work with vitality, an important topic of sustainability management. Editorial Policy

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Financial Standing and Business Results

Enhancement of Group governance

The Board of Directors has established a basic policy on a structure to secure appropriate business operations, under which we're striving to enhance governance at subsidiaries and other members of the Group.



Enhancement of compliance

Tohoku Electric Power and Tohoku Electric Power Network have always pursued business efforts with an understanding that compliance with business ethics, laws, and regulations is the fundamental basis of all business activities. As such, we established a Committee on Corporate Ethics and Compliance chaired by the President and diligently run through the PDCA cycle to ensure that our initiatives are adequate in light of social needs and to make any improvements identified as necessary.

The Group formulated the Tohoku Electric Power Group Corporate Ethics and Compliance Activity Policy to establish basic courses of action for corporate ethics and compliance activities. The Group is currently pursuing activities in which all Group member companies comply with three priorities: eliminating all violations; acting in ways acceptable to society; and autonomous activities at individual workplaces.

Under this policy, we are pursuing various initiatives, including training targeting specific tiers of staff. Related efforts include Tohoku Electric Power Group Corporate Ethics Month and groupwide employee surveys on corporate ethics and compliance.

In the future as well, we will continue efforts to ensure that each and every employee implements thorough compliance in accordance with the Tohoku Electric Power Group Code of Conduct, keeping firmly in mind at all times the need to do business in fair and appropriate ways, paying close attention to how our customers see us, to continue to be worthy of the trust of customers in our community.

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Policy on constructive dialogue with shareholders

To contribute to sustained growth and medium- to long-term increases in corporate value, we respond to various topics that interest and concern shareholders through opportunities for dialogue, in addition to opportunities provided by the general meetings of shareholders. Core members of management and directors strive to explain management policies as clearly as possible, to ensure that shareholders understand our efforts in light of our business environment.

We are also advancing the following initiatives as we continue to promote constructive dialogue with shareholders.

- 1 Appointment of a director in charge of IR, to coordinate dialogue with shareholders and investors overall
- Organic coordination with individual sections through IR Promotion Committee meetings in which personnel from internal accounting, planning, legal, environmental, and other sections participate in addition to the director in charge of IT
- 3 Holding events such as shareholder colloquia and briefings on financial results, to enhance dialogue other than individual meetings
- 4 Sharing information with executives and related internal parties on summaries of dialogue with shareholders and investors and striving to put comments and requests received to use in Company management
- 5 Establishing Standards on Control of Insider Trading and asking executives, executive officers, employees, and others to manage material facts thoroughly as well as carrying out timely, fair, and appropriate disclosure in line with the Disclosure Policy of information that could have a material impact on decisions by shareholders and investors

Posting IR information to the Company website

We proactively disclose information on topics such as management policies, financial and business results, and documents used in briefings on financial results.





IR activities

				Value Chain
Audience	Initiative	Details of FY2021 activities		Steps in Value Creation
			Vision	Message from Top Manageme
	- Halding briefings on financial words for		>	Value Creation Process
Analysts, institutional investors	 Holding briefings on financial results for analysts and institutional investors twice annually (at the end of the second quarter and the fiscal year) Holding individual meetings on ESG and stewardship and individual meetings with bond investors to grow ESG finance Timely feedback to the Management Committee, IR Promotion Committee, and other bodies of views and requests from investors and the latest trends related to ESG investment and disclosure Efforts to enhance disclosure to improve our evaluations in capital markets 	 Briefings on financial results held for analysts and institutional investors Small meetings Individual meetings held on ESG and stewardship ESG briefings on the Integrated Report Individual meetings with bond investors (debt IR) 	Pealizing a Carbon-Neutral Society	Sustainability Priorities (Mater Realization of the Tohoku Elect Group's Medium- to Long-Ter "Working alongside next" Financial Strategies Overview of the Tohoku Elect Group's FY2022 Medium-Term Taking on the Challenge of Ca Roadmap Case Studies Disclosure Under the TCFD Recommendations
Individual shareholders, individual investors	Holding online briefings to maintain and secure new individual shareholders	Company briefings for individual investors	- To Achieve a Smart Society R	Fuel Procurement, Thermal Pr Generation, Wholesaling Renewable Energy Nuclear Power
Company k 東北電力 Ata	29, 49, 59-6, 東北電力 出約2-F 9504	dual investors 2 T	Sustained Growth	Power Transmission and Distr Smart Society Building Busine Development Courses of Actic Electricity Retail Sales Electricity Plus Services Next-Generation Energy Servi Open Innovation R&D/IP Strategies Human Resource Strategy Dx Strategies DE&I
REPORTED	個人投資家のみなさまへ 東北電力株式会社 会社説	明会	Sustain	Safety Initiatives Enhancing Resilience



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Realizing a Carbon-Neutral Society	Taking on the Challenge of Carbon Neutralit Roadmap Case Studies Disclosure Under the TCFD Recommendations
To Achieve a Smart Society	Fuel Procurement, Thermal Power Generation, Wholesaling Renewable Energy Nuclear Power Power Transmission and Distribution Smart Society Building Business: Development Courses of Action Electricity Retail Sales Electricity Plus Services Next-Generation Energy Services Open Innovation R&D/IP Strategies
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Financial Information	Financial Standing and Business Results
Corporate Information	Corporate Information Partnerships, External Evaluations, Etc. SASB Standards Index

Financial Standing and Business Results

Financial data for most recent 11 years (consolidated)

maneia	radia for most recent if ye		induced)										At a Glance Value Chain
oillion yen)		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 (FY)	Steps in Value Creation
	Operating revenue*	1,684.9	1,792.6	2,038.8	2,182.0	2,095.5	1,949.5	2,071.3	2,244.3	2,246.3	2,286.8	2,104.4	Message from Top Management
	Electric utility operating revenue	1,455.0	1,575.7	1,815.4	1,932.2	1,853.2	1,727.2	1,854.3	2,012.7	2,022.2	2,067.0	1,840.3	 Value Creation Process Sustainability Priorities (Materiality Topics)
	Other business operating revenue	229.9	216.9	223.4	249.7	242.3	222.3	216.9	231.6	224.1	219.7	264.1	Realization of the Tohoku Electric Power Group's Medium- to Long-Term Vision
	Operating expenses	1,826.9	1,848.5	1,953.2	2,012.3	1,905.8	1,819.1	1,963.7	2,160.6	2,130.0	2,198.8	2,133.1	"Working alongside next" Financial Strategies
Business results	Electric utility operating expenses	1,607.5	1,626.4	1,732.4	1,782.0	1,686.3	1,618.7	1,763.7	1,943.0	1,916.4	1,995.6	1,888.5	Overview of the Tohoku Electric Power Group's FY2022 Medium-Term Plan
	Other business operating expenses	219.4	222.1	220.7	230.2	219.4	200.4	199.9	217.6	213.5	203.2	244.6	Taking on the Challenge of Carbon Neutrali
	Operating income	(142.0)	(55.9)	85.6	169.7	189.7	130.4	107.6	83.6	116.3	87.9	(28.7)	용 Roadmap 말 Case Studies
	Ordinary income	(176.4)	(93.2)	39.0	116.6	152.6	104.7	88.4	65.7	99.9	67.5	(49.2)	Disclosure Under the TCFD Recommendations
	Net income attributable to owners of parent	(231.9)	(103.6)	34.3	76.4	97.3	69.9	47.2	46.4	63.0	29.3	(108.3)	ing a Ca
	Cash flows from operating activities	(61.3)	46.6	236.4	374.2	371.8	278.1	324.0	262.8	371.5	217.6	97.1	Realiz
Cash flow	Cash flows from investing activities	(278.4)	(236.7)	(247.5)	(247.7)	(250.5)	(256.3)	(273.9)	(250.5)	(310.6)	(254.9)	(322.1)	Fuel Procurement, Thermal Power
	Cash flows from financing activities	382.2	262.6	45.4	(211.2)	(104.1)	(55.9)	(36.2)	(69.3)	6.7	(5.7)	293.2	Renewable Energy
	Total assets	4,196.8	4,284.3	4,243.0	4,131.2	4,152.4	4,145.9	4,222.1	4,258.6	4,323.0	4,471.0	4,725.6	Power Transmission and Distribution
	Property, plant, and equipment	3,608.0	3,645.1	3,536.5	3,497.2	3,502.7	3,475.4	3,557.4	3,620.9	3,679.0	3,731.3	3,809.1	Q Development Courses of Action P Electricity Retail Sales
Financial standing	Current assets	588.7	639.2	706.4	633.9	649.7	670.5	664.6	637.6	644.0	739.7	916.5	Electricity Plus Services Next-Generation Energy Services
-	Net assets	629.8	522.7	574.5	651.2	684.3	755.6	798.7	833.7	864.1	901.5	778.9	Open Innovation R&D/IP Strategies
	Interest-bearing debt	2,446.9	2,714.5	2,763.9	2,561.9	2,471.3	2,435.5	2,424.4	2,381.1	2,412.6	2,433.2	2,760.3	Human Resource Strategy
	Consolidated cash income	116.5	187.9	360.4	376.2	368.2	357.5	345.3	317.4	321.9	302.3	257.3	ق Dx Strategies و DE&I
	Equity ratio (%)	13.9	11.3	12.6	14.6	15.2	16.8	17.3	17.9	18.3	18.5	14.8	Safety Initiatives Enhancing Resilience
Main	Free cash flow	(305.6)	(152.8)	31.8	179.2	151.8	44.5	71.1	30.6	77.1	(22.6)	(211.5)	Respect for Human Rights
indicators	Return on assets (ROA) (%)	(3.5)	(1.3)	2.0	4.1	4.6	3.1	2.6	2.0	2.7	2.0	(0.6)	Contributing to Communities Risk Management
	Return on equity (ROE) (%)	(32.8)	(19.4)	6.7	13.6	15.8	10.6	6.6	6.2	8.1	3.6	(14.2)	Corporate Governance
	Return on invested capital (ROIC) (%)	-3.2	1.2	1.8	3.7	4.4	3.0	2.5	1.9	2.6	2.0	(0.6)	Financial Standing and Business Results
	Payout ratio (%)	_	-	7.3	9.8	12.8	25.0	42.3	43.0	31.7	68.0	_	gia di anti di
Per-share	Dividend yield (%)	0.00	0.00	0.47	1.10	1.72	2.32	2.81	2.83	3.84	3.83	4.92	E E
information	Net earnings per share (EPS) (yen)	(465.16)	(207.97)	68.78	153.35	195.01	140.10	94.61	93.12	126.32	58.81	(216.84)	Corporate Information Partnerships, External Evaluations, Etc.
	Book value per share (BPS) (yen)	1,173.21	969.97	1,073.45	1,206.38	1,261.40	1,392.24	1,463.42	1,526.66	1,584.30	1,654.46	1,399.90	SASB Standards Index

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Business Overview

2022)

Company Name Tohoku Electric Power Co., Inc.

Head Office 1-7-1 Honcho, Aoba-ku, Sendai, Miyagi 980-8550, Japan

Date established May 1, 1951

Capital 251.4 billion yen

Total Assets (as of the end of March 2022) 3,928.9 billion yen (consolidated: 4,725.6 billion yen)

Operating revenue (for FY2021) 1,566.2 billion yen (consolidated: 2,104.4 billion yen)

Ordinary income (for FY2021) -86.8 billion yen (consolidated. -49.2 billion yen)

Representatives (as of the end of July 2022) Jiro Masuko, Representative Director & Chairman of the Board Kojiro Higuchi, Representative Director & President

Total Number	Total Number of Issuable Shares	1,000,000,000
of Shares (as of the end of March	Total Number of Issued Shares	502,882,585

Name	Number of shares owned (thousand)	Ratio of shares owned to the total number of issued shares (%)
The Master Trust Bank of Japan, Ltd. (trust account)	71,313	14.24
Custody Bank of Japan, Ltd. (trust account)	28,940	5.78
Tohoku Electric Power Employee Shareholding Association	16,741	3.34
Nippon Life Insurance Company	13,727	2.74
Mizuho Bank, Ltd.	10,238	2.04
The 77 Bank, Ltd.	6,468	1.29
JP Morgan Chase Bank 385781 (Standing proxy: Settlement & Clearing Services Department, Mizuho Bank)	5,981	1.19
City of Sendai	5,196	1.04
STATE STREET BANK WEST CLIENT- TREATY 505234	5,124	1.02
Miyagi Prefecture	4,439	0.89
Total	168,167	33.57
	The Master Trust Bank of Japan, Ltd. (trust account) Custody Bank of Japan, Ltd. (trust account) Tohoku Electric Power Employee Shareholding Association Nippon Life Insurance Company Mizuho Bank, Ltd. The 77 Bank, Ltd. JP Morgan Chase Bank 385781 (Standing proxy: Settlement & Clearing Services Department, Mizuho Bank) City of Sendai STATE STREET BANK WEST CLIENT- TREATY 505234 Miyagi Prefecture	Nameshares owned (thousand)The Master Trust Bank of Japan, Ltd. (trust account)71,313Custody Bank of Japan, Ltd. (trust account)28,940Tohoku Electric Power Employee Shareholding Association16,741Nippon Life Insurance Company13,727Mizuho Bank, Ltd.10,238The 77 Bank, Ltd.6,468JP Morgan Chase Bank 385781 (Standing proxy: Settlement & Clearing Services Department, Mizuho Bank)5,981City of Sendai5,196STATE STREET BANK WEST CLIENT- TREATY 5052345,124Miyagi Prefecture4,439

* Due to rounding, the sum of individual figures may not equal the total.

Number of Shareholders (as of the end of March 2022) 189.131

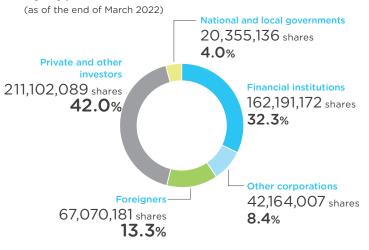
Service Areas

Aomori Prefecture, Iwate Prefecture, Akita Prefecture, Miyagi Prefecture, Yamagata Prefecture, Fukushima Prefecture, Niigata Prefecture and other areas

Number of Employees (as of the end of March 2022) 4,927 (consolidated: 24,833)

Electricity Sales (for FY2021) Lighting: 20,990 GWh Power: 46,356 GWh Total: 67,346 GWh

Distribution of Shares by Type of Shareholders

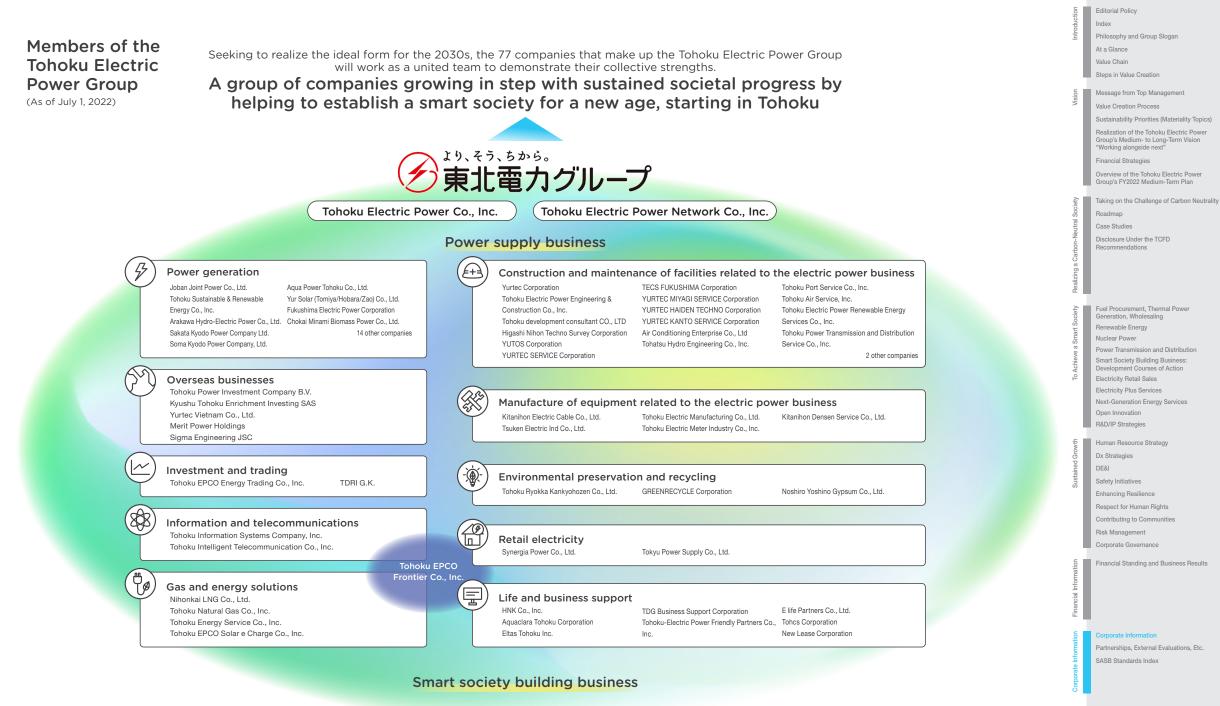


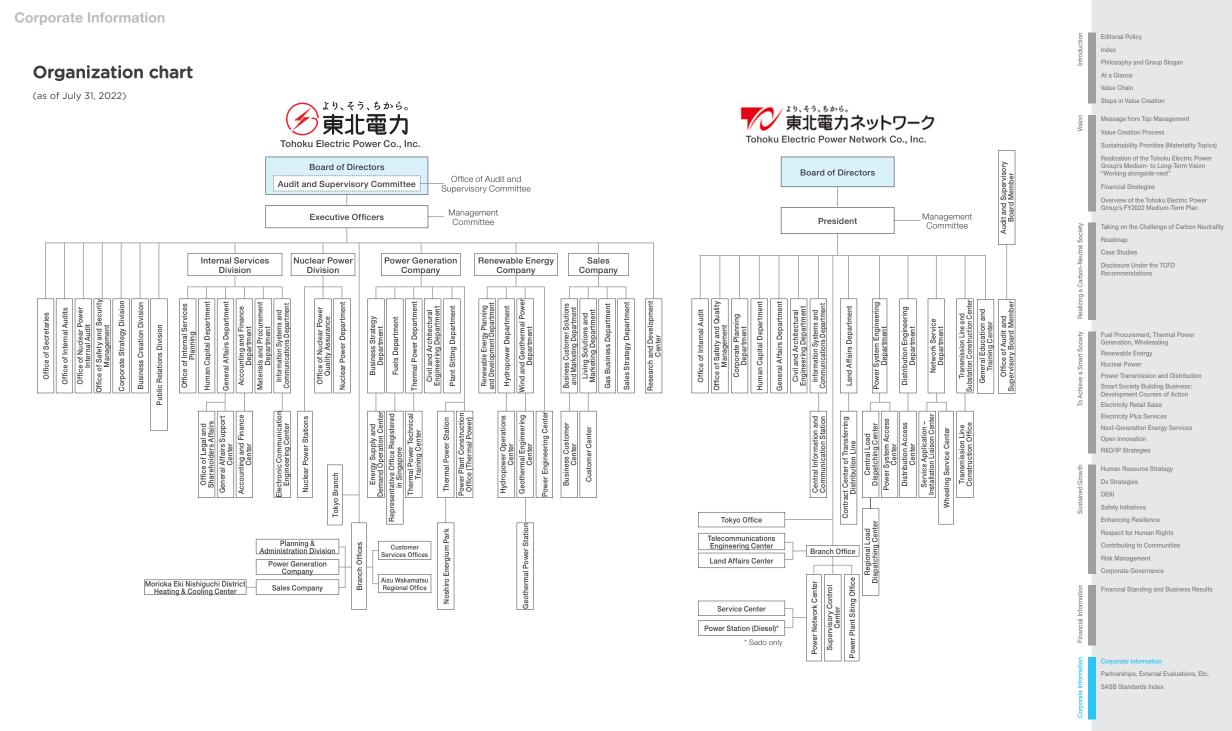
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Participation in initiatives

UN Global Compact signatory

Seeking to build a sound global society through joint efforts between the United Nations and the private sector (companies and other organizations), the UN Global Compact is the world's largest sustainability initiative. Signatory



organizations are required to conform to and put into practice 10 principles in the four areas of human rights, labor, the environment, and anti-corruption.

Participation in Plastics Smart

Plastics Smart is a campaign launched by the Ministry of the Environment to promote ioint efforts and partnership



among a wide range of parties including individuals, NGOs, corporations, research institutes, and government agencies, to resolve the issue of ocean plastic wastes.

Inclusion in ESG indices

FTSE Blossom Japan Sector Relative Index

This index developed by the global index provider FTSE Russell includes Japanese firms with outstanding ESG (environmental, social, and governance) initiatives in each industry.

Sompo Sustainability Index

This index developed by Sompo Asset Management Co., Ltd. includes about 300 issues chosen for their outstanding ESG initiatives, through a combination of annual ESG



Sompo Sustainability Index

FTSE Blossom

Relative Index

Japan Sector

assessments and stock price assessments.

Participation in Challenge Zero

Challenge Zero is an initiative to communicate across the world and support innovative actions



Keidanren

Biodiversity

Keidanren Initiative for

by companies and other organizations to take on the challenge of realizing a carbon-neutral society, a longterm goal under the Paris Agreement, through joint efforts between Keidanren and the Japanese government.

Support for the Keidanren Initiative for **Biodiversity Conservation**

The Keidanren Initiative for Biodiversity Conservation is an initiative launched by Keidanren and the Keidanren Committee on Nature Conservation. By promoting the Keidanren **Biodiversity Conservation Statement** and Guidelines, it strives to promote further mainstream

adoption of efforts to preserve biodiversity.

External evaluations on sustainability

CDP^{*} evaluation

We continually respond to the CDP climate change questionnaire. In 2022, we responded to the CDP water



security questionnaire. Through these and other efforts, we're proactively disclosing environmental information. * An international NGO (formerly known as Carbon Disclosure Project) that promotes and assesses disclosure by companies and local governments on climate change and other fields

2022 Certified Health & Productivity Management **Outstanding Organizations Recognition Program**

We've been chosen to the 2022 Certified Health & Productivity Management



Outstanding Organizations (Large Enterprise Category) Recognition Program by the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi

Support for the Challenge Initiatives for 30% of Executives to be Women by 2030

The Challenge Initiatives for 30% of Executives to be Women by 2030 program was launched by



Keidanren to accelerate efforts to promote diverse human resources for inclusion and co-creation based on diverse values, the key to sustainable capitalism. The goal is to ensure that 30% of executives will be women by 2030.

Kurumin certification

Under this certification program based on the Act on Advancement of Measures to Support Raising Next-Generation Children, the Minister of Health, Labour and Welfare certifies companies that actively support employees raising children.

Eruboshi certification

Under this certification program based on the Act on the Promotion of Female Participation and Career Advancement in the Workplace, the Minister of Health. Labour and Welfare certifies companies that carry out outstanding initiatives to promote women in the workplace.



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Partnerships with local governments

Joining the Akita SDGs Partnership

In November 2021, the Tohoku Electric Power Akita Branch was registered as a Phase One partner of the Akita SDGs Partnership program, a program of Akita Prefecture whereby companies, other organizations, and local governments making active efforts to achieve the Sustainable Development Goals (SDGs) through their business activities and other efforts are registered and publicized for their initiatives. This program is intended to promote the SDGs in the prefecture, build a positive autonomous cycle, and realize a sustainable community powered by public-private partnerships on the SDGs through various efforts, including promoting joint efforts among registered companies and other organizations, increasing their corporate value, and enhancing their competitive strengths. We've announced our aim of contributing to the SDGs as a responsible corporate group in addition to efforts to enhance our competitive strengths in the Power Supply Business and implement efforts in the Smart Society Building Business.



Akita SDGs Partner registration certificate

Participation in the Fukushima SDGs Promotion Platform

In June 2022, the Tohoku Electric Power Fukushima Branch joined the Fukushima SDGs Promotion Platform, an activity targeting the SDGs. This platform was established in April 2022 to promote prefectural development by creating opportunities for joint efforts and partnership among organizations in the prefecture, founded on the SDGs. It has 155 members (as of July 31, 2022), including municipalities, companies, associations, and NPOs. It also promotes joint efforts and partnership toward the prefecture's own unique additional SDG, "Fukushima's recovery," and addresses community issues such as rapid depopulation and aging.

Based on "Working alongside next," the Tohoku Electric Power Group's Medium- to Long-Term Vision, we will contribute to solutions to local issues and achievement of the SDGs through the Power Supply Business and the Smart Society Building Business.

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Smile Design Gathering) 🔜
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6月13日、ふくしまSDGs推進プラットフォーム始動!
A14つれ近している化学としてきない。 などもに、県内外の企業、団体、行政等の皆様と連携・協働を深め、SDG sの 推進を共通目標とした豊かな県プロ学術に進めてい税運館成を図ってよります。
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テーマ:世代を超えてつながるSDGs 福島にとってのSDGSとは何か
和授 中科特的特殊 あたか規定部分校 福祉的お事 (1本計算ない) 村田 田利 用来 会議氏 代表法(の)(3.5.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.
開催日6月13日(月)13時~15時15分
オンライン視聴 YouTube配信 ※事前申込制 (@約頁版料) となります。

プログラム日程、オンライン視聴のお申込み方法については、
「日のうな日程、オンライン税認めの中区の方法については、
主催:福島県、第2部共催:(株)東邦銀行、東原海上日動火災保険(株)
後援:福島県教育委員会 新聞コロナウイルス感染性の汚染性況により、中止する場合があります。
最新情報は福島県のホームページをご覧ください。
Poster for a Fukushima SDGs Promotion Platfor

event

Sustainability Priorities (Materiality Topics) Realization of the Tohoku Electric Power Group's Medium- to Long-Term Vision "Working alongside next Financial Strategies Overview of the Tohoku Electric Power Group's FY2022 Medium-Term Plan Taking on the Challenge of Carbon Neutrality Roadmap Case Studies Disclosure Under the TCFD Recommendation Fuel Procurement, Thermal Power Generation, Wholesaling Renewable Energy Nuclear Power Power Transmission and Distribution Smart Society Building Business: Development Courses of Action Electricity Retail Sales Electricity Plus Services Next-Generation Energy Services Open Innovation R&D/IP Strategies Human Resource Strategy Dx Strategies DE&I Safety Initiatives Enhancing Resilience Respect for Human Rights Contributing to Communities Risk Management Corporate Governance Financial Standing and Business Results

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In joint efforts with Art Link Uchinoakari, an organization that focuses on supporting artistic expression by people with disabilities and others, we offered the use of our windows to support social participation by people with disabilities and provided opportunities for contact with the community. Works of art on the theme of bubbles, printed on film coatings, were displayed on the windows of our buildings.

SASB Standards Index

Summarized below are Tohoku Electric Power Group results related to the Electric Utilities and Power Generators industry standard provided by the Sustainability Accounting Standards Board (SASB) of the United States.

Since the SASB standards were prepared primarily for use by US firms and in US markets, they include accounting metrics that do not apply to the Group's business activities. Nevertheless, we strive to disclose information to the fullest extent possible in line with the spirit of these standards.

					spirit of these standards.	sion	Message from Top Management
Disclosure topic	Accounting metrics	Category	Unit	Code	Performance	ii/	Value Creation Process
Environment							Sustainability Priorities (Materiality Topics)
Livionitent	 Gross global Scope 1 emissions Gross global Scope 1 emissions, percentage covered under emissions limiting regulations Gross global Scope 1 emissions, percentage covered under emissions reporting regulations 	Quantitative	t-CO₂·%	IF-EU- 110a.1	(1) 32,815,000t-CO2 (2) 0% (because Japan lacks regulated markets) (3) 100%		Realization of the Tohoku Electric Power Group's Medium- to Long-Term Vision "Working alongside next" Financial Strategies Overview of the Tohoku Electric Power Group's FY2022 Medium-Term Plan
	Greenhouse gas (GHG) emissions associated with power delivery	Quantitative	t-CO ₂	IF-EU- 110a.2	32,550,000t-CO ₂ (33,410,000t-CO ₂) * Figure in parentheses represents base CO ₂ emissions not reflecting adjustments, etc. under the feed-in tariff (FIT) program for renewables.	al Society	Taking on the Challenge of Carbon Neutrality Roadmap
Greenhouse Gas Emissions and Energy Resource Planning	Long-term and short-term strategy or plans to manage Scope 1 emissions, emissions reduction targets, and analysis of performance against these targets	Discussion and Analysis	_	IF-EU- 110a.3	In March 2021, in the Tohoku Electric Power Group Carbon Neutral Challenge 2050, we summarized our long-term course of action to achieve carbon neutrality by 2050. We have also set a CO ₂ emissions target of halving CO ₂ emissions by FY2030 vs. actual FY2013 levels. Under the Tohoku Electric Power Group Carbon Neutral Challenge 2050, the Group will accelerate CO ₂ emissions reductions primarily by maximizing use of renewable energy and nuclear power and development of smart society building business, in addition to decarbonizing thermal power sources. Specifically, we will seek to swiftly achieve and expand 2,000 MW in renewable power generating capacity, based primarily on wind power, to make effective use of the wealth of renewable energy sources in the six Tohoku prefectures and Niigata Prefecture. We will also enhance the power network and make progress in aspects such as the use of storage cells and hydrogen in preparation for growing use of renewables. We will strive to advance energy management and put distributed energy to effective use in the region, by developing smart society building business, including providing VPP services. Our Scope 1 emissions were 31.9 million t-CO ₂ in FY2018, 30.6 million t-CO ₂ in FY2019, and 31.1 million t-CO ₂ in FY2020. We plan to maintain this course through the above measures to achieve these goals.	To Achieve a Smart Society Realizing a Carbon-Neutr	Case Studies Disclosure Under the TCFD Recommendations Fuel Procurement, Thermal Power Generation, Wholesaling Renewable Energy Nuclear Power Power Transmission and Distribution Smart Society Building Business: Development Courses of Action Electricity Retail Sales
	 Number of customers served in markets subject to renewable portfolio standards (RPS) Percentage fulfillment of RPS target by market 	Quantitative	Number, Percentage (%)	IF-EU- 110a.4	The RPS system was abolished in Japan in 2012 when the nation migrated to a FIT program. We purchase electricity generated from renewables under the FIT program.	- 1	Electricity Plus Services Next-Generation Energy Services Open Innovation R&D/IP Strategies
Air Quality	Atmospheric emissions of the following pollutants: (1) NOx (excluding N ₂ O) (2) SOx (3) Particulate matter (PM10) (4) Lead (Pb) (5) Mercury (Hg) Percentage of each in or near densely populated areas	Quantitative	t-%	IF-EU- 120a.1	 (1) 10,837t, 100% (2) 8,252t, 100% (3) Not disclosed (4) Not disclosed (5) Not disclosed (5) Not disclosed * Although particulate matter, lead, and mercury are treated as part of the normal flow of powerplant operations, figures for these pollutants are undisclosed because their atmospheric emissions are not analyzed. 	Sustained Growth	Human Resource Strategy Dx Strategies DE&I Safety Initiatives Enhancing Resilience
	(1) Total water withdrawn (2) Total water consumed Percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	1000m ^{3.} %	IF-EU- 140a.1	(1) 10,495,000 m ³ , 0% (2) 302,000 m ³ , 0%	Risk Management Corporate Governance	Contributing to Communities Risk Management
Water	Number of incidents of noncompliance associated with water quantity and/or quality permits, standards, and regulations	Quantitative	Number	IF-EU- 140a.2	0		Financial Standing and Business Results
Management	Water management risks and strategies and measures to mitigate such risks	Discussion and Analysis	_	IF-EU- 140a.3	In use of river water and other water sources, we strive to manage water resources in various ways, including compliance with water intake volumes permitted under laws and regulations. Measures to confirm water stress in the Tohoku and Niigata region using the WRI Aqueduct Water Risk Atlas tool to identify water risks resulted in a "low-medium" assessment at maximum. As such, the expected frequency of water-related risks, including drought, is low.	Financial Informs	
	Amount of coal combustion residuals (CCR) generated, percentage recycled	Quantitative	t∙%	IF-EU- 150a.1	1,036,000 t, 83.7%	ormation	Corporate Information Partnerships, External Evaluations, Etc.
Coal Ash Management	Total number of coal combustion residual (CCR) impoundments broken down by (EPA) hazard potential classification and structural integrity assessment	Quantitative	Number	IF-EU- 150a.2	Five sites	Corporate Info	SASB Standards Index

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Торіс	Accounting metrics	Category	Unit	Code	Performance	Philosophy and Group Slogan At a Glance
ocial capital						Value Chain
Energy Affordability	Average retail electric rate (per kWh) for: (1) residential (2) commercial (3) industrial customers	Quantitative	Yen	IF-EU- 240a.1	(1) Residential: 25.81 yen (2) Commercial: 22.06 yen (3) Industrial: 20.20 yen	Steps in Value Creation Message from Top Managemen Value Creation Process Sustainability Priorities (Materi
	Typical monthly electric bill for residential customers for (1) 500 kWh (2) 1,000 kWh of electricity delivered per month	Quantitative	Yen	IF-EU- 240a.2	(1) 500 kWh: 12,865 yen (2) 1,000 kWh: 26,720 yen	Realization of the Tohoku Elect Group's Medium- to Long-Tern "Working alongside next" Financial Strategies
	Number of residential customer electric disconnections for nonpayment Percentage reconnected within 30 days	Quantitative	Number, Percentage (%)	IF-EU- 240a.3	 (1) Number of residential customer electric disconnections for nonpayment a. Disconnections under specific retail supply agreements: FY2021: 156,733 b. Cancellations of demand and supply contracts based on low voltage electricity standard agreements: FY2021: 7,450 (2) Percentage reconnected within 30 days N/A 	Overview of the Tohoku Electri Group's FY2022 Medium-Term Taking on the Challenge of Car Roadmap Case Studies Disclosure Under the TCFD Recommendations
	Discussion of the impact of external factors on affordability of electricity, including economic conditions within the territory served	Discussion and Analysis	_	IF-EU- 240a.4	Japan's Electricity Business Act stipulates the following: "A General Electricity Utility shall not refuse to provide power transmission in its service area without due cause." In general, if an application is submitted for the supply of electricity in the Tohoku Electric Power Network service area, electricity is supplied to the subject location. We believe consumers should have equal opportunity to access affordable energy services. It is our understanding our service area lacks any areas not served by electricity. Factors affecting electricity rates include levies assessed by government policy to encourage use of renewables and amounts of fuel-cost adjustments on thermal power.	Fuel Procurement, Thermal Po Generation, Wholesaling Renewable Energy Nuclear Power Power Transmission and Distri
Human capital						Smart Society Building Busines
Employee Occupational Safety and Health	 Total recordable incident rate (TRIR: incidents/200,000 hours worked) Fatality rate (incidents) Near-miss frequency rate (NMFR: incidents/200,000 hours worked) 	Quantitative	%	IF-EU- 320a.1	 (1) 0.03% (employees of Tohoku Electric Power and Tohoku Electric Power Network) (2) 0 (employees of Tohoku Electric Power and Tohoku Electric Power Network) (3) Not disclosed (not disclosed because we have no calculation made on a groupwide basis) 	Development Courses of Actio Development Courses of Actio Electricity Retail Sales Electricity Plus Services Next-Generation Energy Service Open Innovation R&D/IP Strategies
Business-model i	innovation					Human Resource Strategy
End-Use Efficiency and Demand	Percentage of electric utility revenues from rate structures that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)	Quantitative	%	IF-EU- 420a.1	Not applicable (since there are no subject customers in Japan) * To make up for lost revenue from progress in energy conservation, we aim to increase revenues through means such as provision of various services to meet customer needs.	DE&I DE&I Safety Initiatives Enhancing Resilience
	Percentage of electric load served by smart grid technology	Quantitative	%	IF-EU- 420a.2	Penetration of smart meters at end of FY2021: 81.2%	Respect for Human Rights Contributing to Communities
	Customer electricity savings from efficiency measures in each market	Quantitative	MWh	IF-EU- 420a.3	We propose solutions to the various challenges facing our customers, centered on energy. Specific examples include joint development with the manufacturer of Heat Edge air chillers, which offer improved capacity during times of harsh cold and improved energy conservation performance; provision of exEMS services with demand control functions that visualize electricity usage; and home solar power services supplied through one-stop services from adoption through maintenance, with no need for initial investment. Other activities include the development of equipment and services intended to help conserve energy and reduce CO ₂ emissions. We disclose the following quantitative data in place of customer electricity savings: O Number of energy solutions proposed (FY2021): 294 O Number of views of the Shou-ene Life service providing information on energy conservation (FY2021): 160,941 viewers (https://www.tohoku-epco.co.jp/suggestion3/)	Pisk Management Corporate Governance Financial Standing and Busines Upper

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Торіс	Accounting metrics	Category	Unit	Code	Performance	PT 1	Philosophy and Group Slogan At a Glance
	-	<u> </u>					Value Chain
Leadership, gove Nuclear Safety and Emergency Management	Total number of nuclear power units, broken down by US Nuclear Regulatory Commission (NRC) Action Matrix Column	Quantitative	Number	IF-EU- 540a.1	4 units (breakdown: 3 units at the Onagawa Nuclear Power Station*, 1 unit at the Higashidori Nuclear Power Station) * Unit No. 1 at the Onagawa Nuclear Power Station is in the process of decommissioning and is currently not operational.	io	Steps in Value Creation Message from Top Management
	Description of efforts to manage nuclear safety and emergency preparedness	Discussion and Analysis	_	IF-EU- 540a.2	Quality policies for nuclear safety (excerpt) We have a duty to enhance nuclear safety and reduce risks based on the keen safety awareness inherited from our predecessors and the many lessons gained from the Great East Japan Earthquake and other disasters.	Ň	Value Creation Process Sustainability Priorities (Materiality Topics) Realization of the Tohoku Electric Power Group's Medium: to Long-Term Vision "Working alongside next"
					For this objective, each employee has resolved to gain the understanding and trust of society by demonstrating a strong sense of responsibility, contributing to the safety culture, and continually conducting PDCA activities, based on the formulated policies set forth below.		Financial Strategies Overview of the Tohoku Electric Power Group's FY2022 Medium-Term Plan
					 Put safety first at all times. Comply with laws, regulations, and rules. Establish a habit of constant review. Enhance information sharing. Take a proactive approach to improvements. See the following link for more on our quality policies for nuclear safety:	zing a Carbon-Neutral Society	Taking on the Challenge of Carbon Neutrality Roadmap Case Studies Disclosure Under the TCFD Recommendations
Grid Resiliency	Number of incidents of noncompliance with physical and/or cybersecurity standards or regulations	Quantitative	Number	IF-EU- 550a.1	https://www.tohoku-epco.co.jp/electr/genshi/safety/quality/index.html Physical risk incidents: 0 Cybersecurity incidents: not disclosed (in light of risks posed by such disclosure)	siety Reali	Fuel Procurement, Thermal Power Generation, Wholesaling
	 (1) System Average Interruption Duration Index (SAIDI) including major event days (2) System Average Interruption Frequency Index (SAIFI) including major event days (3) Customer Average Interruption Duration Index (CAIDI) including major event days 	Quantitative	Minutes, Number	IF-EU- 550a.2	 (1) 18 minutes (including interruptions for work purposes) (2) 0.13 times (including interruptions for work purposes) (3) 140 minutes (including interruptions for work purposes) 	To Achieve a Smart Soc	Renewable Energy Nuclear Power Power Transmission and Distribution Smart Society Building Business: Development Courses of Action Electricity Retail Sales Electricity Plus Services
						- 1	Next-Generation Energy Services Open Innovation
Activity Metrics		Category	Unit	Cod	e Performance	- 1	R&D/IP Strategies
Number of: (1) re served	esidential, (2) commercial, and (3) industrial customers	Quantitative	Number	IF-EU-00	0.A Left undisclosed for reasons involving competition	owth	Human Resource Strategy

	earege.j					R&D/IP Strategies
Number of: (1) residential, (2) commercial, and (3) industrial customers served	Quantitative	Number	IF-EU-000.A	Left undisclosed for reasons involving competition		Human Resource Strategy Dx Strategies
Total electricity delivered to: (1) residential customers, (2) commercial customers, (3) industrial customers, (4) all other retail customers, and (5) wholesale customers	Quantitative	MWh	IF-EU-000.B	Retail: Lighting: 20,990,000 MWh Power: 46,356,000 MWh Wholesale: 16,718,000 MWh Wholesale and retail total: 84,064,000 MWh	Sustained (DE&I Safety Initiatives Enhancing Resilience Respect for Human Rights
Length of transmission and distribution lines	Quantitative	km	IF-EU-000.C	Transmission lines (circuit length)Aerial: 24,384 km Underground: 812 kmDistribution lines (route length)Aerial: 145,318 km Underground: 3,802 km		Contributing to Communities Risk Management Corporate Governance
Total electricity generated, percentage by major energy source, percentage in regulated markets	Quantitative	MWh, %	IF-EU-000.D	Total electricity generated: 60,531,591 MWh (volume at transmission destination) Incudes: 13.3% from hydroelectric power 85.7% from thermal power None from nuclear power 1.0% from renewables Percentage in regulated markets: Not applicable (because Japan lacks regulated markets)	n Financial Information	Financial Standing and Business Results
Total wholesale electricity purchased	Quantitative	MWh	IF-EU-000.E	Left undisclosed for reasons involving competition	nformatic	Partnerships, External Evaluations, Etc.

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