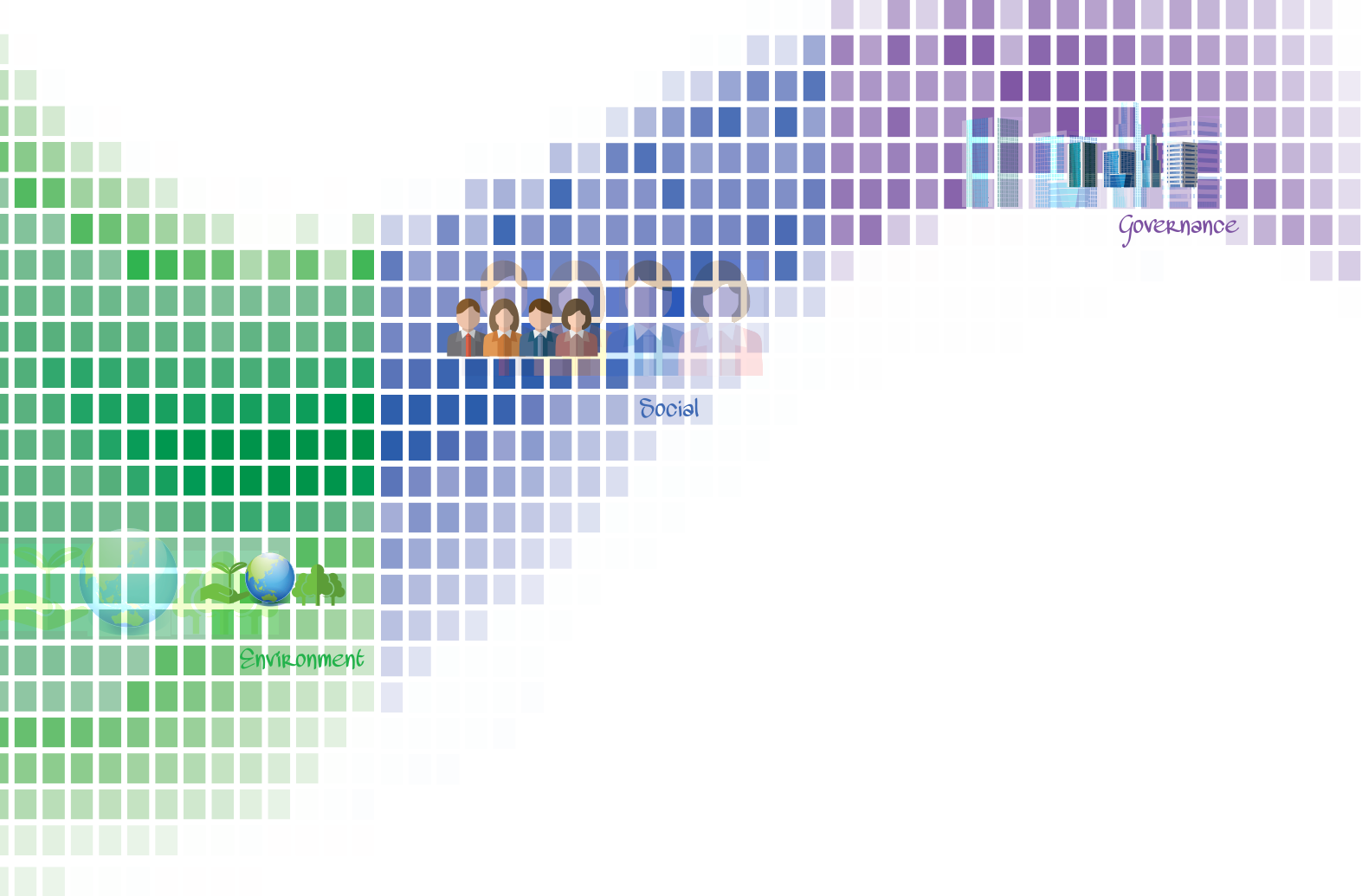


ESG Report 2021

Kansai Electric Power Group ESG Report 2021



Environment

Social

Governance

Message from our executive officer in charge of ESG reports



Toyokazu Misono

Representative Executive Officer,
Vice President

In March 2021, we formulated the new Kansai Electric Power Group Management Philosophy Purpose & Values and we declared to the world how we would implement business activities that foster the Values of Fairness, Integrity, Inclusion, and Innovation to achieve our Purpose of Serving and Shaping the Vital Platform for a Sustainable Society—which we consider to be the overarching tenet that governs everything we do.

We also developed the Kansai Electric Power Group Medium-term Management Plan (2021–2025)—an action plan for the next five years—that will act as a springboard to make us a corporate group that can provide various social infrastructure services. In addition, as a “leading company in achieving a zero-carbon energy,” we set up the Zero Carbon Vision 2050 so we can better tackle global warming issues, on a voluntary and proactive basis. Based on these new policies, the focus will be on delivering safe, stable, environmentally friendly energy; providing new value to resolve societal issues; and establishing a solid foundation to support those goals. As well as achieving sustainable growth for the Group and helping to resolve global societal issues such as those addressed by the SDGs, we will help bring about a sustainable society.

Going forward, we will push ahead with initiatives that respond to changes in the business environment or in stakeholder expectations and requests, and to help make society more sustainable. Equally, we will work proactively to provide information on those initiatives.

Editorial policies

■ Positioning of ESG Report

This report brings together all ESG-related information disclosed in our Integrated Report, on websites, etc., as well as including content with additional details. With reference to the GRI standards and other ESG reporting guidelines, we have organized the content by item—Environment, Social and Governance—to make it easier to browse through the information.

Please also refer to our Integrated Report for details on the Group’s growth strategy and important initiatives related to sustainability.

● Reference guidelines

The 2016 GRI Sustainability Reporting Standards, Environmental Report Guidelines (2018 Edition), ISO 26000, SASB, etc.

● Place of publication

Sustainability and Quality Promotion Group,
Office of Corporate Planning,
The Kansai Electric Power Co., Inc.
3-6-16 Nakanoshima, Kita-ku, Osaka 530-8270, Japan

● Report publication date

Published October 2021
Next issue: To be published in fall of 2022

● Scope of report

Period covered: April 1, 2020 to March 31, 2021
(We also report on important information that may fall outside of the time frame above.)
Companies covered: The Kansai Electric Power Co., Inc., and Kansai Electric Power Group companies.
 (“The Company” and “Non-consolidated” refer to The Kansai Electric Power Co., Inc.)
Unless otherwise specified, figures given are a combined total for The Kansai Electric Power Co., Inc. and Kansai Transmission and Distribution, Inc.



Contents

◆ Message from our executive officer in charge of ESG reports / Editorial policies	1
◆ Sustainability Management	3

Environment

◆ Environmental Management	10
◆ Environmentally Friendly Business	24
◆ Climate Change	26
◆ Resource Circulation	30
◆ Pollution Prevention	32
◆ Efforts Toward Conserving Biodiversity	35
◆ Water Resources	38

Social

◆ Human Rights	40
◆ Labor Practices	42
◆ Occupational Health and Safety	50
◆ Human Capital Development	52
◆ Responsibilities Toward Customers	56
◆ Disaster Mitigation Efforts	78
◆ Communities	81
◆ Supply Chain Management	90

Governance

◆ Corporate Governance	93
◆ Risk Management	100
◆ Compliance	103



Sustainability Management

Under the ultimate overarching concept of the Kansai Electric Power Group Management Philosophy Purpose & Values, the Group has announced that it will carry out business activities that promote the Values of Fairness, Integrity, Inclusion, and Innovation to achieve its Purpose of Serving and Shaping the Vital Platform for a Sustainable Society for the benefit of its customers and society. We have set out specifically how we should act in accordance with this management philosophy in the Kansai Electric Power Group Code of Conduct. By having all Group employees base their actions on this code, the aim is to achieve both sustainable growth for the Group and to make society more sustainable.

Kansai Electric Power Group Management Philosophy



Kansai Electric Power Group Code of Conduct

● Basic view

The Kansai Electric Power Group Code of Conduct details specifically how our executives and employees should act, providing a foundation for decision-making in our business activities. This code is based on the Kansai Electric Power Group Management Philosophy and takes all in-house company rules as prerequisites.

The business activities of the Kansai Electric Power Group are supported by a variety of stakeholders, including customers, shareholders and investors, business partners, employees and other members of society. The trust we receive from these stakeholders is itself the foundation that allows us to continue fulfilling our duties and pursuing sustainable growth as the Kansai Electric Power Group.

We fulfill our duties as a member of society by acting in accordance with our Management Philosophy and always thinking about what it means to thoroughly implement compliance not only for laws and regulations, but also for the standards expected by modern society.

We want to make our various stakeholders have unshakable trust in us by responding sincerely to their expectations for our group business activities.

Based on this mindset, our employees all work together and combine their individual capacities, enabling the Kansai Electric Power Group to contribute to the sustainable development of society.



1. Thorough compliance implementation

At the Kansai Electric Power Group, we practice thorough legal and ethical compliance as the foundation to all our business activities. Business results and activities are absolutely never prioritized above compliance.

Moreover, anyone who raises questions or reports about issues related to compliance will not be treated unfairly in any way as a result.

Conduct standards for individuals

- Act sincerely with good sense and dignity as one member of the Kansai Electric Power Group.
- In the execution of business, abide by domestic and foreign laws and ordinances that restrict business along with other relevant legal restrictions as well as regulations established by the company and other in-house rules. Never undertake any behavior that is contrary to corporate ethics and accepted social norms.
- Ask yourself the following questions about your conduct.
 - Would the conduct go against your own conscience?
 - Could you speak proudly about the conduct to your family and other people important to you?
 - Could you confidently explain the conduct to customers and other people outside the company?
 - Do you think continuing conduct as you have in the past is fine? Are you assuming that conduct is correct?
 - Are you continuing conduct as before even though you have doubts or feelings of discomfort about it?

When you have doubts about something or feel it is strange, have courage and report to and consult with work superiors or a Compliance Hotline.

Note: In 2019, incidents were revealed in which executives and employees from our company received gifts and cash of significant value from a former deputy mayor of the town of Takahama in Fukui Prefecture and in which executives received problematic payments after retirement. These incidents caused great trouble and seriously betrayed the trust we received from our customers, members of society and our various stakeholders. This article takes this into consideration.

2. Fair business activities

At the Kansai Electric Power Group, we practice fair and free competition and conduct reasonable business transactions. We do not participate in bribery or other corrupt conduct with the goal of obtaining profits unfairly. Moreover, we promote responsible procurement with high levels of sustainability and transparency.

Conduct standards for individuals

- Do not provide or accept inappropriate gifts or entertainments.
- Do not do anything that presents advantages only to specific individuals or businesses.
- Maintain healthy relationships with politicians and government administrators.
- Resolutely refuse inappropriate demands from antisocial (criminal) forces and organizations. Respond to such demands with the fortitude of the organization rather than as an individual. Maintain no relations with such forces and organizations.

3. Appropriate information disclosure, management and discussion

At the Kansai Electric Power Group, we reflect the feedback of society in our business activities appropriately. In addition, we conduct open business activities with high transparency by further advancing suitable and timely information disclosure and transmission along with communication with members of society as we fulfill our explanatory duties to society with sincerity. Furthermore, we manage personal data along with other types of information appropriately.

Conduct standards for individuals

- Proactively communicate with members of society.
- Undertake efforts fairly when providing information to members of society and conducting activities to promote understanding of our business activities.
- Gather a wide range of opinions, desires and other feedback about our business activities from customers and members of society, share this data within the company and apply it to business improvement.
- Manage personal data, customer data, business secrets and similar information appropriately.
- Strictly handle records related to business.
- When problems arise in business operations, report on the facts quickly and accurately.



4. Respect for human rights and promotion of diversity

At the Kansai Electric Power Group, we recognize human rights as a universal value shared by global society. We support international standards related to human rights and respects them in all our business activities. In addition, as we advance diversity, we will continue seeking to realize ways of working and cultivating workplace environments that enable every person to work with peace of mind and exercise their abilities to their maximum potentials.

Conduct standards for individuals

- Respect the human rights of every individual involved in business activities and promote diversity.
 - Never say or do anything that is discriminatory, harassing, defamatory or taunting or that could otherwise cause another person to feel uncomfortable based on race, nationality, religion, gender, sexual orientation, sexual identity, social position, family background, occupation, disability or other personal trait. Moreover, do not sympathize with such words or behavior or allow them to pass.
 - Never be involved in any kind of forced labor or child labor.
 - Endeavor to create workplaces that make the most of diverse senses of value and that enable people to work with vigor and vitality.

5. Assurance of safety

Based on the Kansai Electric Power Group Code of Safety Conduct, we will continue building an unwavering culture of safety.

Conduct standards for individuals

- Protect the safety of every person involved by making the assurance of safety the top priority in all activities.

Note: Taking to heart that safety is the foundation for all our business activities and the source of the trust that we earn, we established the Kansai Electric Power Group Code of Safety Conduct based on numerous lessons learned from accidents and disasters, including the accident that occurred at Mihama Nuclear Power Station Unit 3 in August 2004. This article takes this into consideration.

6. Provision of products and services that customers choose

At the Kansai Electric Power Group, we strive to develop and improve products and services that customers choose through innovation and other efforts, and we contribute to resolving the issues of society.

Conduct standards for individuals

- With self-awareness and pride as a professional, always strive to improve service and respond to customer desires and feedback sincerely, rapidly and accurately, contributing to their satisfaction.
- In the execution of business activities, continuously improve work contents and rules to maintain and improve quality.
- In order to deliver new value to customers and society, advance innovation and seek cooperative creation with stakeholders.
- Endeavor to create and protect intellectual property, and utilize it effectively to develop and provide products and services that are useful to society.

7. Efforts toward the creation of an even better environment

At the Kansai Electric Power Group, we recognize the importance of working to respond to environmental issues ranging from climate change to the advancement of resource circulation and local environmental preservation. As a business with deep connections to the environment, we are striving to reduce the environmental impacts and risks that result from our business activities. Furthermore, we seek the creation of a better environment and actively contribute to the formation of a sustainable society by providing products and services with low environmental impacts.

Conduct standards for individuals

- Recognize the significance of environmental conservation, and thoroughly consider the impacts that our own work has on the environment.
- Practice conduct in our own work that considers the environment, including resource and energy conservation.



8. Problem-solving and development efforts for local communities

As a business that is very close to communities and daily life, we recognize that the advancement of the Kansai Electric Power Group is not possible without the sustainable development of local communities. With this understanding, as we cooperate with various stakeholders, we contribute positively to problem-solving and development in local communities through efforts to invigorate them and their economies. Furthermore, in our business activities overseas, we also contribute to the development of local communities as we consider their cultures and customs.

Conduct standards for individuals

- Cooperate with local communities that have stakes in our business activities, and contribute to solving their problems and invigorating them.
- In addition to listening for feedback from local communities, think about what you can put into practice yourself and participate actively in efforts that contribute to society.

9. Thorough risk management

The Kansai Electric Power Group is a business responsible for lifelines that are indispensable to society. We thoroughly implement systematic risk management in preparation for the occurrence of incidents, disasters and other events that threaten citizen lifestyles and corporate activities, and we make certain that products and services are provided safely and stably every day.

Conduct standards for individuals

- Through daily inspections and other efforts, identify factors that could lead to accidents, disasters and defects, and strive to prevent them.
- Prepare for natural disasters, military attacks, contagious disease spread, cyber attacks and other emergencies by anticipating them and conducting training, drills and other readiness practices.
- In the event that an accident, natural disaster or other emergency occurs, work diligently in cooperation with all employees to realize rapid recovery and otherwise respond. This includes conveying appropriate information to customers in society, coordinating inside and outside the company, and arranging aid supplies.

10. Executive responsibility and thorough implementation of this code

The President and all executives of the Kansai Electric Power Group, recognizing their responsibility to implement this code, seek to build effective governance and make it understood well throughout the Group. Moreover, should any incident occur that violates this code and causes a loss of trust from society, all executives will bear responsibility for responding. This includes taking the lead in resolving resulting problems, investigating the causes and preventing recurrence.



■ Activities to implement the management philosophy and code of conduct

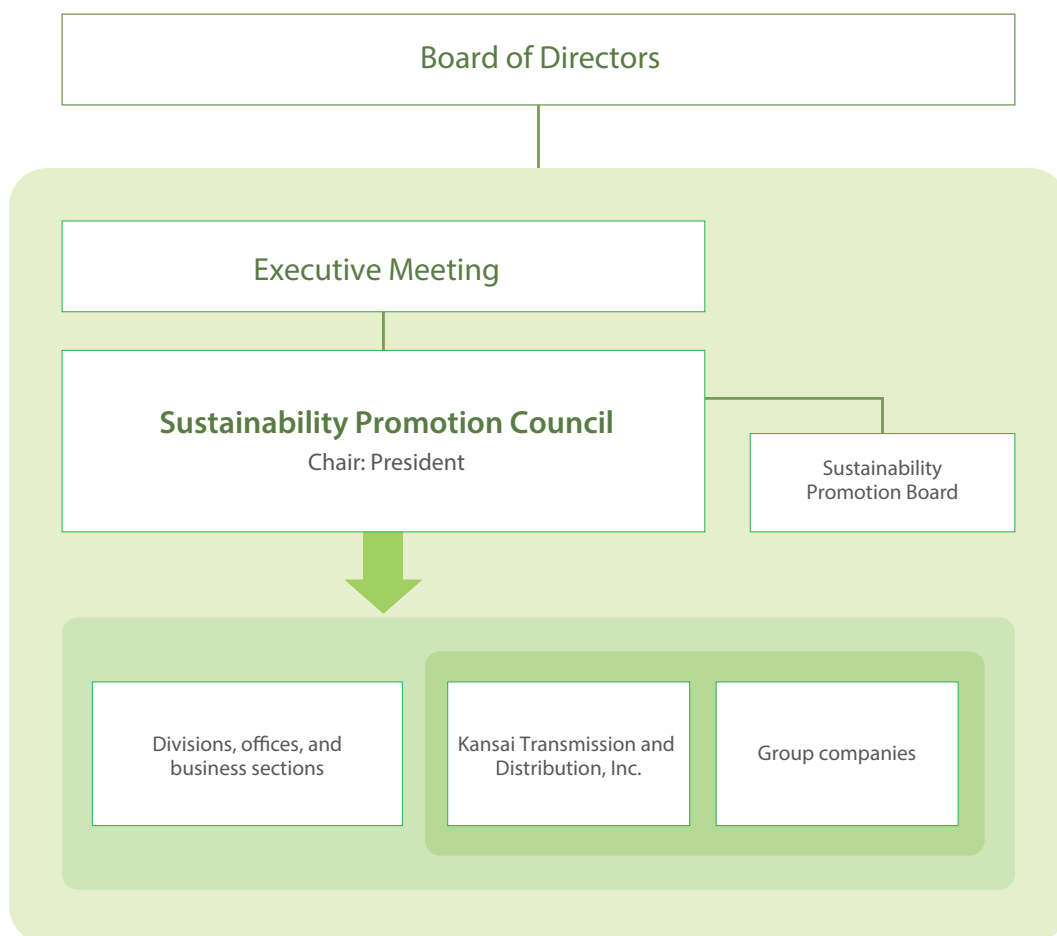
We have established an activity plan to spread awareness of the new management philosophy as well as the new code of conduct among all employees and to promote putting them into practice in daily tasks. Based on this plan, we are actively working on activities that include opinion exchanges between management and employees, varied types of training, workplace-specific discussions, and support activities for group companies. One aspect of the activities is the Conduct Cards, which list the Management Philosophy, Compliance Checklist, and Safe Action Declaration, that we distribute to all employees to carry. The backs of the cards display each employee's personal conduct vows, and employees use these cards to check their conduct and goals in their own work.

■ Sustainability promotion system

As a corporate group that aims to be of benefit to our customers and communities, we promote sustainability-focused initiatives to achieve growth and development for ourselves, but also to resolve global societal issues and so contribute to making society more sustainable. To further advance these initiatives, we have established the Sustainability Promotion Council, which is chaired by the President. In addition to formulating a series of comprehensive measures for the entire Group, the Sustainability Promotion Council establishes extensive initiatives that allow the Group to contribute to the sustainable development of society and deploys a range of concrete activities.

Issues of a specialized nature are sent to committees such as the Sustainability Promotion Board for deliberation. The policies formulated by the Sustainability Promotion Council are communicated to each operating division and business location, which then develop their own activities accordingly.

Each group company also develops its own sustainability promotion activities independently, while staying in communication with the Kansai Electric Power Company.



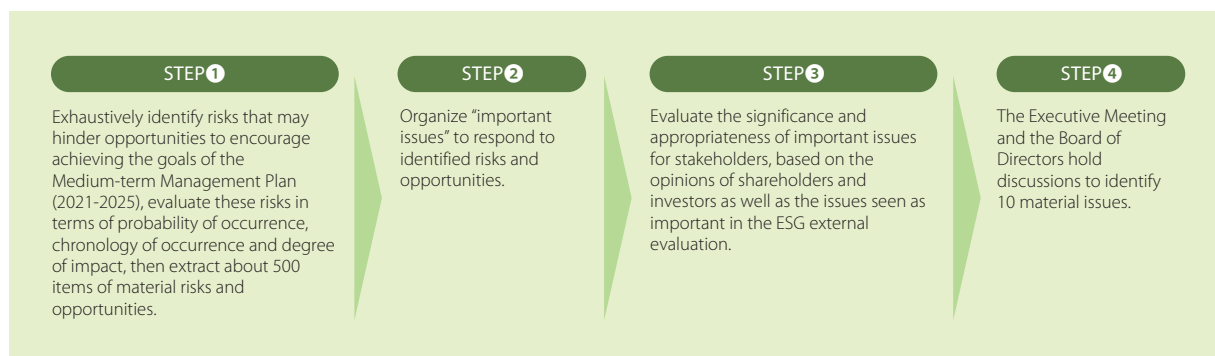
Materiality for the Kansai Electric Power Group (Important issues)

To contribute to the achievement of a sustainable society through the pursuit of SDGs and the resolution of other global issues, we have identified the following 10 themes for the Group's ESG materiality (important issues) in line with our Medium-term Management Plan.

- E** • Committed to realizing the Zero Carbon Vision 2050, the Kansai Electric Power Group is shifting to “zero-carbon power sources,” which include nuclear, renewable energy and zero-carbon thermal power generation, to contribute to decarbonization.
- S** • We will speed up digitalization, innovation, and workstyle innovation; introduce reforms to make our corporate constitution more robust; and continue to provide new value to customers and society.
- G** • We have positioned recovering trust as the basic premise of our business operations, and by establishing appropriate governance and furthering compliance, we are building a solid management foundation.



Materiality identification process



We refer to the GRI standards (including aspects specific to power) as fundamental requirements that should be considered in reviews.



Environment

E

Environment

- ◆ Environmental Management
- ◆ Environmentally Friendly Business
- ◆ Climate Change
- ◆ Resource Circulation
- ◆ Pollution Prevention
- ◆ Efforts Toward Conserving Biodiversity
- ◆ Water Resources

Environmental Management



ENVIRONMENT



Policy and Concept

Environmental policy

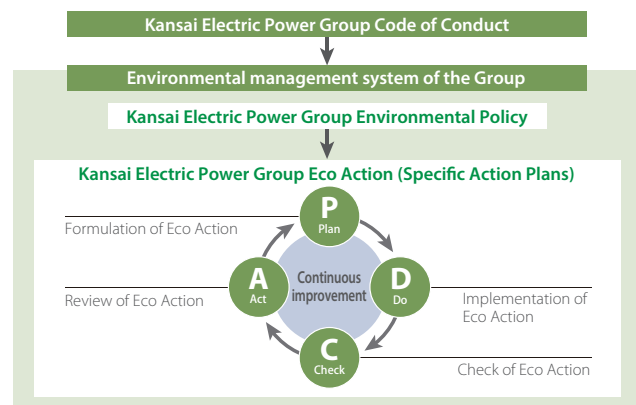
As a responsible energy business deeply involved with the environment, we recognize the importance of addressing various environmental issues, such as climate change, resource recycling promotion and local environmental conservation. We are also committed to reducing the environmental burden and risks related to our business activities in line with the Kansai Electric Power Group Code of Conduct, which aims to proactively contribute to building a better environment and a sustainable society by providing environmentally friendly products and services. Moreover, in line with our conduct standards for individuals, we fully recognize the significance of environmental conservation, pay due consideration to the environmental impact of our business operations and support environmentally friendly practices with an emphasis on resource and energy conservation.

The Kansai Electric Power Group Environmental Policy sets the direction of our medium- to long-term environmental management plans, featuring seven approaches to address climate change, each of which is being promoted. The Environmental Policy is subject to review and examination by the Sustainability Promotion Board as necessary, and the results of which are communicated to our employees as well as to employees of group companies.

Environmental management system

Our Group has an environmental management system in place, incorporating the ISO 14001 guidelines, in order to promote measures for building a better environment and manage environmental risks. Our environmental management system, supervised by top management, is being upgraded through a continuous PDCA cycle—i.e., development of environmental policies; development, implementation, check and review of our Group's Eco Action (an action plan for environmental management); and management review by the Sustainability Promotion Board. Eco Action covers both our business activities and office activities while the latter concerns group-wide efforts to conserve resources and save energy.

Environmental management system of the Kansai Electric Power Group (PDCA cycle)



Kansai Electric Power Group Environmental Policy

1. Adhering to environmental laws, regulations and related rules

At the Kansai Electric Power Group, we adhere to laws, regulations and other rules related to the environment.

2. Responding to climate change

At the Kansai Electric Power Group, recognizing climate change as a key business challenge, we actively work to reduce greenhouse gas emissions. We pursue the goal of carbon neutrality throughout the entirety of our business activities and support our customers and society in achieving decarbonization by 2050.

In addition, we also work to adapt in preparation for the harmful impacts of climate change.

3. Promoting resource circulation

At the Kansai Electric Power Group, recognizing that natural resources are limited, we advance efforts toward resource circulation in society as a whole. Our efforts include reducing natural resource consumption in our business activities, proactively promoting 3R (reduce, reuse, recycle) practices, and providing products and services that contribute to resource circulation.

4. Protecting local community environments

At the Kansai Electric Power Group, we seek to prevent environmental pollution while working to strictly manage and reduce toxic chemicals in our business activities in order to promote the environmental protection of local communities.

5. Conserving biodiversity

At the Kansai Electric Power Group, we recognize the importance of biodiversity. We properly assess, analyze and evaluate the impacts of our business activities and work to preserve biodiversity.

6. Promoting environmental communication

At the Kansai Electric Power Group, we work proactively to raise environmental awareness and disclose information related to the environment.

7. Continuously improving our environmental management systems

At the Kansai Electric Power Group, we seek to continuously improve our environmental management systems in order to increase our environmental performance.



ENVIRONMENT

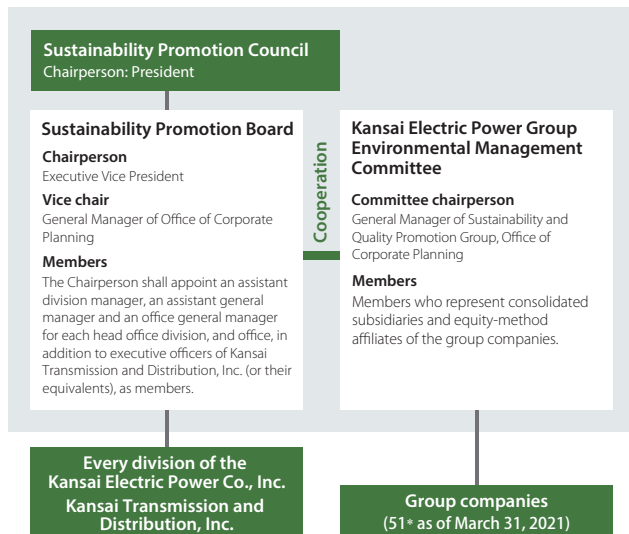


System

Environmental management efforts are ongoing, with the President (as Chief Environmental Management Officer) leading the environmental officers of each division and organization. Meanwhile, the Office of Corporate Planning and the Office of Energy and Environmental Planning are promoting corporate environmental management, utilizing their expertise in environmental issues while providing assistance and guidance to each division (support for independent environmental management).

The Sustainability Promotion Board, which is in principle held twice a year, reviews our environmental management system, the results of which are reflected in the system itself. At the same time, the Kansai Electric Power Group Environmental Management Committee, comprised of representatives from consolidated subsidiaries and equity-method affiliates, usually holds an annual meeting to exchange information on issues concerning our Group's environmental management activities while cooperating as needed with the Sustainability Promotion Board.

◆ Environmental management promotion system of the Kansai Electric Power Group



* 51 companies, which are selected from 86 consolidated subsidiaries and 4 equity-method affiliates, excluding those that have low environmental impacts and Kansai Transmission and Distribution, Inc.

Goals

● Environmental Management System (list of Eco Action)

Kansai Electric Power Group Eco Action (results in fiscal 2020 and targets for fiscal 2021)

◆ Responding to climate change

Item	FY 2020		FY 2021
	Targets	Results	Targets
Advancing efforts to control CO ₂ emissions	<ul style="list-style-type: none"> Keep the top spot for the amount of CO₂-free power generation in Japan Halve CO₂ emissions associated with power generation in Japan in FY 2030 (compared to FY 2013) 	<ul style="list-style-type: none"> We kept the top spot for the amount of CO₂-free power generation in Japan (based on surveys and comparisons made in the electric power statistics) Reduction of about 40% from fiscal 2013 levels of CO₂ emissions associated with power generation in Japan (Emissions: About 30.4 million t-CO₂) 	<ul style="list-style-type: none"> Keep the top spot for the amount of zero-carbon power generation in Japan Halve CO₂ emissions associated with power generation in Japan in FY 2025 (compared to FY 2013)
Continuing safe and stable operation of nuclear power plants*1	<ul style="list-style-type: none"> Safety-first nuclear power plant operations 	<ul style="list-style-type: none"> We continued the safe and stable operations at running plants 	Continue safe and stable operation of nuclear power plants (zero unplanned shutdowns)
Further development and utilization of renewable energy	<ul style="list-style-type: none"> Achieve 6 million kW of installed capacity by 2030s (2 million kW or more new development in Japan and abroad) 	<ul style="list-style-type: none"> Accumulated installed capacity with a total of 4.75 million kW (Capacity of facilities that have begun operation (completed construction): about 4.14 million kW; Project underway: about 0.61 million kW) 	Continued
Maintaining and improving the thermal efficiency of thermal power plants*1	<ul style="list-style-type: none"> Achieve benchmark indicators*3 (A: 1.00, B: 44.3%) 	<ul style="list-style-type: none"> We achieved benchmark indicators 	Continued
Reducing transmission and distribution loss*2	<ul style="list-style-type: none"> Maintain or reduce transmission and distribution loss 	<ul style="list-style-type: none"> 5.1% 	Continued
Promoting use of innovative forms of energy among customers and communities	<ul style="list-style-type: none"> Contribute to making energy use by customers and communities more sophisticated 	<ul style="list-style-type: none"> We worked to expand use of devices and services that contribute to more sophisticated utilization of energy by customers and communities Smart meters deployed: 0.72 million/year (Cumulative total: 12.25 million), progress rate: about 93% 	Continued
Controlling SF ₆ emissions (calendar year basis) (gas recovery rate upon inspection/removal of equipment)	<ul style="list-style-type: none"> 97% (upon inspection) 99% (upon removal) 	<ul style="list-style-type: none"> 99.6% (upon inspection) 99.3% (upon removal) 	Continued

*1 Targets and results apply only to our Company. *2 Targets apply only to Kansai Transmission and Distribution, Inc.

*3 Indicators based on the benchmark system of the Law Concerning the Rational Use of Energy

◆ Promoting resource circulation

Item	FY 2020		FY 2021
	Targets	Results	Targets
Maintaining industrial waste recycling rate	• 99.5%	• 99.8%	Continued

◆ Protecting local community environments

Item	FY 2020		FY 2021
	Targets	Results	Targets
Maintaining sulfur oxide (SOx) and nitrogen oxide (NOx) emission factors	SOx	Emission factors: maintain the lowest levels in the world Emissions: strictly adhere to agreed values at each power plant	Continued
	NOx		
Proper processing of PCB wastes	• Proceed with certainty to achieve processing before the legal deadline	• Amount of high-level PCB processed (Cumulative total): 5,415* Zero PCB waste (processing completed)	Continued

* Number of high-voltage transformers, condensers and other electrical equipment that were subcontracted to the Japan Environmental Storage & Safety Corporation (JESCO).

◆ Conserving biodiversity

Item	FY 2020		FY 2021
	Targets	Results	Targets
Conservation of biodiversity	• Consideration of biodiversity through business activities	• We worked on activities to conserve biodiversity (field surveys, monitoring of the effect of extermination programs, etc.), seeking guidance and advice from experts	Continued

◆ Office energy and resource conservation activities (group-wide items)

Item	Reducing office electricity consumption	Reducing office water consumption	Improving fuel efficiency of company vehicles	Reducing copy paper consumption
	Reduce by 1% or more from previous year	Reduce as much as possible	Improve as much as possible	Reduce as much as possible
Record of results	<p>(GWh) 80 60 40 20 2018 2019 2020 (FY)</p>	<p>(1,000 m³) 600 400 200 0 2018 2019 2020 (FY)</p>	<p>(km/L) 12.0 11.0 10.0 9.0 2018 2019 2020 (FY)</p>	<p>(t) 800 700 600 500 400 2018 2019 2020 (FY)</p>
	<p>(GWh) 80 60 40 20 2018 2019 2020 (FY)</p>	<p>(1,000 m³) 600 400 200 0 2018 2019 2020 (FY)</p>	<p>(km/L) 12.0 11.0 10.0 9.0 2018 2019 2020 (FY)</p>	<p>(t) 800 700 600 500 400 2018 2019 2020 (FY)</p>

* Calculated for 38 consolidated subsidiaries (excluding Kansai Transmission and Distribution, Inc.) for which three-year data (FY 2018–2020) is available.

Efforts

● Environmental education (practical knowledge and awareness raising)

We conduct education for our employees in order to develop human resources that understand the Kansai Electric Power Group Environmental Policy and are able to implement it.

Specifically, we are conducting specialized education to provide practical knowledge, etc.

● Environmental compliance

Recognizing “strict enforcement of compliance” as part of materiality (important issues), our Group is committed to eliminating any major violations of environmental compliance.

Major violations of environmental compliance reported in fiscal 2018 to 2020 are summarized below.

◆ Major environmental compliance violations

Item	Targets	Results		
		FY 2018	FY 2019	FY 2020
Major environmental compliance violations	0	1	4	1

• Major violations of environmental compliance occurred or reported in each fiscal year are included.

• “Major violations of environmental compliance” are defined as “violations that have impacted (or could impact) the surrounding environment and/or human health.”

Major violations of environmental compliance occurred or reported in fiscal 2020 are summarized below.

◆ Summary of major violations of environmental compliance

- Inappropriate processing of PCB contaminated transformer insulating oil when analyzing its performance

We are implementing efforts to identify root causes, review in-house rules (observance of relevant laws and regulations), and educate employees to prevent any recurrence of these violations.

In addition, details of these incidents are communicated company-wide and preventive measures are shared between all those concerned to prevent similar violations from taking place at other offices.

● Performance data

Eco Action-related		Unit	FY 2018	FY 2019	FY 2020
SF ₆ gas emissions		t	0.2	0.1	0.1
	• Upon inspection		0.2	0.1	0.0
	• Upon removal		0.1	0.0	0.1
SF ₆ gas recovery rate					
	• Upon inspection	%	98.5	99.0	99.6
	• Upon removal		99.3	99.4	99.3
Transmission and distribution loss rate*1*2			5.1	4.8	5.1
Number and rate of smart meters installed*2		million %	About 10.58 About 81	About 11.53 About 88	About 12.25 About 93

*1 Transmission and distribution loss rates = (area transmission-end power – area consumption power (end use) – substation power) / area transmission-end power × 100 [%]

Area in this case refers to the entire supply area of Kansai Transmission and Distribution, Inc.

*2 Data of Kansai Transmission and Distribution, Inc. only

Office-related		Unit	FY 2018	FY 2019	FY 2020
Energy and resource conservation (Office division)	Office electricity consumption*1	GWh	74	75	74
	Office water consumption*1	1,000 m ³	425	413	388
	Fuel efficiency of company vehicles	km/L	11.4	10.95	10.9
	Vehicle fuel consumption (gasoline)	1,000 kL	2.0	1.7	1.5
	Vehicle fuel consumption (diesel oil)		0.3	0.4	0.4
	Copy paper consumption	t	772	747	662
CO ₂ emissions resulting from office activities*2	Office electricity	10,000 t-CO ₂	2.4	2.4	2.6
	Office water		0.01	0.01	0.01
	Vehicle fuels		0.5	0.5	0.4

*1 The scope of this calculation was reviewed for the actual consumption amounts of office electricity and water.

*2 CO₂ emissions from office activities = amount of electricity consumption × adjusted emission factor

CO₂ emissions from office water consumption = amount of office water consumption × emission factor

CO₂ emissions from vehicle use = amount of vehicle fuel consumption × emission factor by type of fuel

Material-related, revegetation rate		Unit	FY 2018	FY 2019	FY 2020
Amount of limestone used*1		1,000 t	57	61	56
Amount of ammonia used*1			8	8	8
Revegetation rate*2 (end of fiscal year)	Thermal power plants	%	38	39	39
	Nuclear power plants		68	67	67
	Electric power offices (substations)		28	28	28

*1 Data of the Kansai Electric Power Co., Inc. only

*2 Revegetation rate = (business site revegetation area ÷ business site total area) × 100

Rates of conversion to underground transmission and distribution lines*		Unit	FY 2018	FY 2019	FY 2020
Rate of conversion to underground transmission lines (end of fiscal year)		%	17.4	17.5	17.6
Rate of conversion to underground distribution lines (end of fiscal year)			10.3	10.3	10.4

* Data of Kansai Transmission and Distribution, Inc. only

● Environmental conservation cost

We practice and announce the results of environmental accounting for the Company, Kansai Transmission and Distribution, Inc. and other group companies, where the costs and effects of environmental conservation in our business activities are determined.

◆ Evaluation of the performance in FY 2020

We invested a total of about 7.92 billion yen in environmental conservation, a year-on-year increase of about 3.86 billion yen, while the total cost amounted to about 16.46 billion yen, a year-on-year decrease of about 0.21 billion yen, due to a lower PCB processing cost, etc.

◆ Environmental conservation costs (100 million yen)

Category	Investment		Expenses		Major items
	FY 2019	FY 2020	FY 2019	FY 2020	
1. Global environmental conservation costs (CO ₂ reductions, etc.)	0.1	0.0	2.0	2.0	
2. Local environmental conservation costs	38	76	37.7	38.5	
(1) Measuring/monitoring environmental impact	2.4	5.3	14.3	14.7	Radiation control and measurement, air quality concentration measurement, and marine area surveys
(2) Pollution control (air pollution, water contamination, oil leakage, etc.)	35.2	70.2	15.6	17.1	Air pollution control measures, water contamination prevention measures
(3) Nature conservation	0	0	7.8	6.8	
3. Costs to build a circular economy	2.9	3.5	123.1	119.6	
(1) Industrial waste processing, recycling	2.8	3.4	57.8	48.4	
(2) General waste processing, recycling	0	0	0.0	0.1	
(3) Radioactive waste processing	0	0	65.3	71.2	
(4) Green purchasing	0.1	0.0	0.0	0.0	
4. Environmental management costs	0	0	0.7	0.7	
5. R&D costs	0.1	0.2	3.0	3.5	Load leveling, environmental conservation, energy savings and recycling, natural energy
6. Other costs	0	0	0.2	0.2	
Total	40.6	79.2	166.7	164.6	
Total capital investment during the period	4,472	5,415			
Operating expenses during the period			25,332	32,069	

Note: Based on the Environmental Reporting Guidelines (FY 2005 version) issued by the Ministry of the Environment. Depreciation is not calculated into expenses. Composite costs are tallied proportionally by one of three methods: (1) calculation of differences; (2) proportional division based on rational criteria; and (3) proportional division based on criteria of expediency. Costs involved in generating nuclear power are calculated with the sum of individual measures to protect the environment taken as environmental conservation costs (radiation control and measurement, low-level radioactive waste processing, etc.). Figures may not add up due to rounding off.

◆ Effects of environmental conservation

Category	Item (unit)		FY 2019	FY 2020	Year-on-year change
1. Global environmental conservation	CO ₂ emissions (basic)	(10,000 t-CO ₂)	3,844	3,702	-142
	CO ₂ emission intensity (basic)	(kg-CO ₂ /kWh)	0.340	0.340	0.00
	CO ₂ emissions (after adjustment)	(10,000 t-CO ₂)	3,594	3,583	-13
	CO ₂ emission intensity (after adjustment)	(kg-CO ₂ /kWh)	0.318	0.350	0.03
2. Local environmental conservation	Air pollution control				
	SOx emissions	(t)	2,138	2,098	- 40
	SOx emission intensity	(g/kWh)	0.036	0.033	- 0.003
	NOx emissions	(t)	4,414	4,551	137
	NOx emission intensity	(g/kWh)	0.074	0.072	-0.002
	Landscape integration				
	Revegetation area	(1,000 m ²)	3,109	3,102	- 7
3. Building a circular economy	Industrial and other waste generated	(1,000 t)	621	567	-54
	Recycling rate for industrial waste, etc.	(%)	99.8	99.8	0.0
	Low-level radioactive waste	(Rods)	507	2,034	1,527

Note: CO₂ emissions: including from power supplied by other companies; CO₂ emissions and CO₂ emission intensity: the results for FY 2019 are provisional and the actual CO₂ emission factor will be officially announced by the government in accordance with the Law Concerning the Promotion of the Measures to Cope with Global Warming, etc.; CO₂ emission factor: by the amount of power sold (adjusted CO₂ emissions include environmental value adjustments under the surplus solar power purchasing system and the renewable energy feed-in tariff system in addition to deduction reflecting carbon credits); SOx and NOx emissions: only the Company's self-generated power; SOx and NOx emission factor: by the amount of power generated by thermal power plants of the Company.

● Economic benefits from environmental conservation measures

◆ FY 2020 assessment

Economic benefits increased approximately 0.8 billion yen from the previous year due to an increase of gain on sale of disused articles, etc.

◆ Economic benefits from environmental conservation measures (100 million yen)

Category		FY 2019	FY 2020	Major items
Revenue	Operating revenues from recycling, etc.	35.4	43.7	Gain on sale of disused articles (recycling)
Cost savings	Cost savings from reuse and recycling, etc.	0.1	0.1	Cost savings from the purchase of recycled items
Total		35.5	43.8	

● Environmental accounting (group companies)

◆ Environmental accounting of group companies

The environmental accounting applies to 12 group companies that participate in the Kansai Electric Power Group Environmental Management Committee (as of FY 2020).

◆ Environmental conservation costs (million yen)

Category	Major items	Investment		Expenses	
		2019	2020	2019	2020
Costs for pollution control	Air, water and soil pollution prevention	0	0	31,480	35,604
Costs for resource recycling	General and industrial waste processing and recycling	2,930	2,739	87,889	73,604
Costs for management activities	Environmental protection efforts, environmental education and related activities at business places and in their neighborhoods	3,700	7,536	24,130	24,376
Costs for community activities	Contributions to and support of environmental protection activities and environmental protection organizations outside the company	0	0	0	0
Costs for research and development	Research and development of products, for example, that contribute to environmental protection	0	0	7,706	1,800
Costs related to environmental damages	Natural restoration, damage compensation, etc.	0	0	276	264
Other costs		—	—	0	0
Total		6,630	10,275	151,481	135,649

◆ Environmental conservation effects (physical effects)

Category	Item (unit)	2019	2020
Global and local environmental conservation	CO ₂ emissions (10,000 t-CO ₂)	11.9	14.7
	SO _x emissions (t)	0.3	0.6
	NO _x emissions (t)	59.7	55.5
Environmental management	ISO or other external certifications (locations)*	5	4
Building a circular economy	Industrial waste generated (1,000 t)	62.4	63.3

* Cumulative to end of fiscal year

◆ Economic benefits from environmental conservation measures

Category	Major items	2019	2020
Revenue	Operating revenues from recycling, etc.	18,071	25,928
Cost savings	Cost savings from reuse and recycling, etc.	53.3	375
Total		18,124	26,303

◆ Management of chemical substances (PRTR)

Name of targeted chemical substance	Releases (t/year)		
	FY 2018	FY 2019	FY 2020
2-aminoethanol	—	—	—
	(—)	(—)	(—)
Asbestos (specified)	0.0	0.0	0.0
	(0.0)	(0.0)	(0.0)
Ethylbenzene	4.7	8.6	5.9
	(4.7)	(8.6)	(5.9)
Ferric chloride	0.0	0.0	0.0
	(0.0)	(0.0)	(0.0)
Xylene	6.5	12	9.1
	(6.5)	(12)	(9.1)
Dioxins (specified)	0.065 (mg-TEQ/year)	0.24 (mg-TEQ/year)	0.11 (mg-TEQ/year)
	(0.065 (mg-TEQ/year))	(0.24 (mg-TEQ/year))	(0.11 (mg-TEQ/year))
1,2,4-trimethylbenzene	<0.1	—	<0.1
	(<0.1)	—	(<0.1)
Toluene	4.9	8.7	5.0
	(4.9)	(8.7)	(5.0)
Hydrazine	<0.1	<0.1	0.0
	(<0.1)	(<0.1)	(0.0)
Benzenes (specified)	0.1	<0.1	<0.1
	(0.1)	(<0.1)	(<0.1)
Boron compound	—	0.0	0.0
	(—)	(0.0)	(0.0)
PCB	0.0	0.0	—
	(0.0)	(0.0)	(—)
Methylnaphthalene	1.4	1.2	2.3
	(1.4)	(1.2)	(2.3)
Bromotrifluoromethane	0.0	—	—
	(0.0)	(—)	(—)
Nonylphenoxypolyoxyethanol	0.0	—	—
	(0.0)	(—)	(—)
Ethylenediaminetetraacetic acid	—	0.0	0.0
	(—)	(0.0)	(0.0)
2,6-di-tert-butyl-p-cresol	(0.0)	(0.0)	(0.0)
n-Hexane	(0.0)	(0.0)	(0.0)

Name of targeted chemical substance	Transfers (t/year)		
	FY 2018	FY 2019	FY 2020
2-aminoethanol	—	—	—
	(—)	(—)	(—)
Asbestos (specified)	6.8	1.6	14
	(6.8)	(1.6)	(14)
Ethylbenzene	0.0	<0.1	0.0
	(0.0)	(<0.1)	(0.0)
Ferric chloride	1.0	0.9	0.0
	(1.0)	(0.9)	(0.0)
Xylene	0.0	0.4	0.0
	(0.0)	(0.4)	(0.0)
Dioxins (specified)	0.030 (mg-TEQ/year)	0.0043 (mg-TEQ/year)	0.079 (mg-TEQ/year)
	(0.030 (mg-TEQ/year))	(0.0043 (mg-TEQ/year))	(0.079 (mg-TEQ/year))
1,2,4-trimethylbenzene	0.0	—	0.0
	(0.0)	(—)	(0.0)
Toluene	0.0	0.8	0.0
	(0.0)	(0.8)	(0.0)
Hydrazine	0.0	0.0	0.0
	(0.0)	(0.0)	(0.0)
Benzenes (specified)	0.0	0.0	0.0
	(0.0)	(0.0)	(0.0)
Boron compound	—	0.0	6.9
	(—)	(0.0)	(6.9)
PCB	4.7	2.3	—
	(4.7)	(2.3)	—
Methylnaphthalene	<0.1	0.0	0.0
	(<0.1)	(0.0)	(0.0)
Bromotrifluoromethane	0.0	—	—
	(0.0)	—	—
Nonylphenoxypolyoxyethanol	0.0	—	—
	(0.0)	—	—
Ethylenediaminetetraacetic acid	—	0.0	0.0
	—	(0.0)	(0.0)
2,6-di-tert-butyl-p-cresol	(<0.1)	(<0.1)	(<0.1)
n-Hexane	(1.7)	(2.0)	(2.1)

Notes:

- The chart shows total values reported in compliance with the PRTR Law.
- "0" indicates no releases or transfers at targeted business sites.
- "<0.1" indicates less than 0.1 t/year releases, etc.
- "—" indicates no business sites targeted for totaling.
- Significant figures are displayed in two digits.
- The figures in parentheses includes the results of group companies (excluding those of some group companies)

◆ Radioactive substances, radioactive waste (non-consolidated)

Fiscal year			2018	2019	2020	Unit
Gaseous waste	Evaluated dose values for the public in the vicinity of power plants (inert gases)	Mihama Nuclear Power Station	N.D.	N.D.	N.D.	millisievert* ¹
		Takahama Nuclear Power Station	N.D.	N.D.	N.D.	
		Ohi Nuclear Power Station	N.D.	N.D.	N.D.	
	Evaluated dose values for the public in the vicinity of power plants (iodine)	Mihama Nuclear Power Station	N.D.	N.D.	N.D.	millisievert* ¹
		Takahama Nuclear Power Station	N.D.	N.D.	N.D.	
		Ohi Nuclear Power Station	N.D.	N.D.	N.D.	
Liquid waste	Evaluated dose values for the public in the vicinity of power plants	Mihama Nuclear Power Station	<0.001	<0.001	<0.001	millisievert* ¹
		Takahama Nuclear Power Station	<0.001	<0.001	<0.001	
		Ohi Nuclear Power Station	<0.001	<0.001	<0.001	
Radioactive gaseous waste discharged (inert gas)		Mihama Nuclear Power Station	N.D.	N.D.	N.D.	becquerel* ²
		Takahama Nuclear Power Station	N.D.	N.D.	N.D.	
		Ohi Nuclear Power Station	N.D.	N.D.	N.D.	
Radioactive gaseous waste discharged (iodine)		Mihama Nuclear Power Station	N.D.	N.D.	N.D.	becquerel* ²
		Takahama Nuclear Power Station	N.D.	N.D.	N.D.	
		Ohi Nuclear Power Station	N.D.	N.D.	N.D.	
Radioactive liquid waste discharged (excluding tritium)		Mihama Nuclear Power Station	N.D.	N.D.	N.D.	becquerel* ²
		Takahama Nuclear Power Station	N.D.	N.D.	N.D.	
		Ohi Nuclear Power Station	N.D.	N.D.	N.D.	
Radioactive liquid waste (tritium) discharged		Mihama Nuclear Power Station	1600000000000	8600000000000	11000000000000	becquerel* ²
		Takahama Nuclear Power Station	19000000000000	13000000000000	23000000000000	
		Ohi Nuclear Power Station	22000000000000	56000000000000	66000000000000	
Radioactive solid waste generated (200-L drum equivalent)* ⁴			11,800	12,312	13,223	Equivalent in drums
	• Mihama Nuclear Power Station	4,828	3,918	3,202		
	• Takahama Nuclear Power Station	4,396	4,624	6,516		
	• Ohi Nuclear Power Station	2,576	3,770	3,505		
Radioactive solid waste reduced (200-L drum equivalent)* ⁵			9,099	11,805	11,189	Equivalent in drums
	• Mihama Nuclear Power Station	3,907	2,946	2,409		
	• Takahama Nuclear Power Station	3,460	3,959	5,715		
	• Ohi Nuclear Power Station	1,732	4,900	3,065		
Amount of solid radioactive waste generated – Amount of solid radioactive waste reduced (200-L drum equivalent)* ⁶			2,701	507	2,034	Equivalent in drums
	• Mihama Nuclear Power Station	921	972	793		
	• Takahama Nuclear Power Station	936	665	801		
	• Ohi Nuclear Power Station	844	-1,130	440		
Cumulative amount of solid radioactive waste stored (200-L drum equivalent)* ^{7*8}			100,311	100,818	102,853	Equivalent in drums
	• Mihama Nuclear Power Station	26,172	27,144	27,938		
	• Takahama Nuclear Power Station	44,223	44,888	45,689		
	• Ohi Nuclear Power Station	29,916	28,786	29,226		

ND: Not Detectable

*1 Millisievert (effective dose): unit indicating the degree of radiation's effect on the human body

*2 Becquerel: unit of radioactivity (one becquerel is defined as one nucleus decaying per second, representing the rate at which radioactive material emits radiation.)

*3 Notes 4-7 are for the storage status at power plants.

*4 The amount of solid low-level radioactive waste produced in the fiscal year.

*5 The total of amount of solid waste with low-level radioactivity reduced through incineration, etc. and transported out of facilities in the fiscal year.

*6 The net increase of solid waste with low-level radioactivity calculated by deducting the amount reduced from the amount generated in the fiscal year.

*7 Cumulative amount of low-level solid radioactive waste

*8 Totals might not match due to rounding after conversion to drum equivalent.

◆ Environmental protection records at thermal power plants

Item			Sakaiko Power Station	Nanko Power Station	Miyazu Energy Research Center	Kansai International Airport Energy Center	Maizuru Power Station	Gobo Power Station	Himeji No.1 Power Station 5, 6 U & GT 1, 2 U	Himeji No. 2 Power Station	Aioi Power Station	Ako Power Station		
Main fuel			L	L	Heavy/crude	Kerosene	Coal	Heavy/crude	L	L	L	Heavy/crude		
Air quality related	Sulfur oxides	Amount emitted hourly (m ³ N/h)	Air Pollution Control Law (total amount regulation)	84	98	306*1	13	515*1	6,510*3	129	582	2,757*3	2,158*3	
			Agreed value	—	—	112	—	255	184	—	—	165	180	
			Actual value	—	—	Stopped	—	187	88	—	—	3	79	
		Amount emitted daily (t/d)	Agreed value	10.1	—	—	—	—	—	—	—	—	—	—
			Actual value	—	—	—	—	—	—	—	—	—	—	—
			Amount emitted annually (t/y)	Agreed value	940	—	492 × 10	—	1,523 × 10	970 × 10	—	—	885 × 10	650 × 10
	Actual value	—		—	Stopped	—	688 × 103m ³ N	23,551 × 103m ³ N	—	—	0.256 × 103m ³ N	22.7 × 103m ³ N		
	Nitrogen oxides	Amount emitted hourly (m ³ N/h)	Air Pollution Control Law (total amount regulation)	625	255	—	—	—	—	—	—	—	—	
			Agreed value	—	—	58	—	244	110	123.5	463	85	94	
			Actual value	50.2	34	Stopped	—	215	51	64	93	45	73	
		Amount emitted daily (t/d)	Agreed value	7.7	1.8	—	—	—	—	—	—	—	—	
			Actual value	2.1	1.5	—	—	—	—	—	—	—	—	
		Amount emitted annually (t/y)	Agreed value	1,420	400	244 × 10	—	1,457 × 10	560 × 10	701 × 10	2,263 × 10	390 × 10	340 × 10	
	Actual value		558	169	Stopped	—	1,137 × 103m ³ N	20,459 × 103m ³ N	207.837 × 103m ³ N	393 × 10	51.4 × 103m ³ N	53.5 × 103m ³ N		
	Soot particles	Emission concentration (g/m ³ N)	Air Pollution Control Law	0.04	0.03	0.05	0.05	0.1	0.07	0.05	0.05	0.07	0.05	
			Agreed value	0.02	Not emitted	0.014	—	0.009	0.01	—	—	0.015	0.015	
			Actual value	<0.002	—	Stopped	<0.002	0.008	0.014	—	<0.002	0	0.001	
	Water quality related	Hydrogen ion concentration index		Water Pollution Control Law and ordinances	5.8–8.6	5.0–9.0*2	5.0–9.0	—	5.0–9.0	—	5.0–9.0	5.0–9.0	5.0–9.0	
Agreed value				—	—	5.8–8.6	—	5.8–8.6	5.8–8.6	5.8–8.6	5.8–8.6	5.8–8.6		
Actual value				7.9	7.3	6.0–7.6	—	6.3–7.7	6.4–8.0	6.7–8.0	7.2–7.8	6.7–7.4	6.5–7.7	
Chemical oxygen demand		Highest concentration (mg/L)	Water Pollution Control Law and ordinances	12	—	160	—	160	—	70	70	70	70	
			Agreed value	—	—	15	—	15	10	15	15	15	15	
			Actual value	1.8	—	7.7	—	7.4	5.6	6.0	4.6	3	2.6	
		Pollution load amount (kg/d)	Water Pollution Control Law and ordinances	209.2	—	—	—	—	—	38.8	49.71	67.8	85.5	
			Agreed value	—	—	20.8	—	22	36.8	15.2	35	18	22.4	
			Actual value	5.99	—	0.2	—	5.54	10	6.0	12.2	2.25	3.9	
Amount of suspended solids		Highest concentration (mg/L)	Water Pollution Control Law and ordinances	50	600*2	200	—	200	—	90	90	90	90	
			Agreed value	—	—	20	—	15	20	20	20	20	20	
			Actual value	<5	5	4	—	2	1.7	7	<5	1	<1	
Amount of inclusion of n-hexane extractable substances		Highest concentration (mg/L)	Water Pollution Control Law and ordinances	2	4*2	5	—	5	—	5	5	5	5	
			Agreed value	—	—	1	—	1	1	1	1	1	1	
			Actual value	<1	<1.0	<0.6	—	<1.0	0.3	0.2	<1	0.1	<0.5	

*1 Regulated value of Kyoto Prefecture ordinance execution rules to protect and nurture the environment

*2 Regulated value of Osaka City sewer ordinance execution rules

*3 Regulated K value

■ Reporting Coverage

● Reporting coverage of the Kansai Electric Power Co., Inc. and its 86 consolidated subsidiaries (as of the end of March 2021)

Specific data of environmental impact including electricity consumption in an office is grasped and reported in this report ⇒ **97.5%**

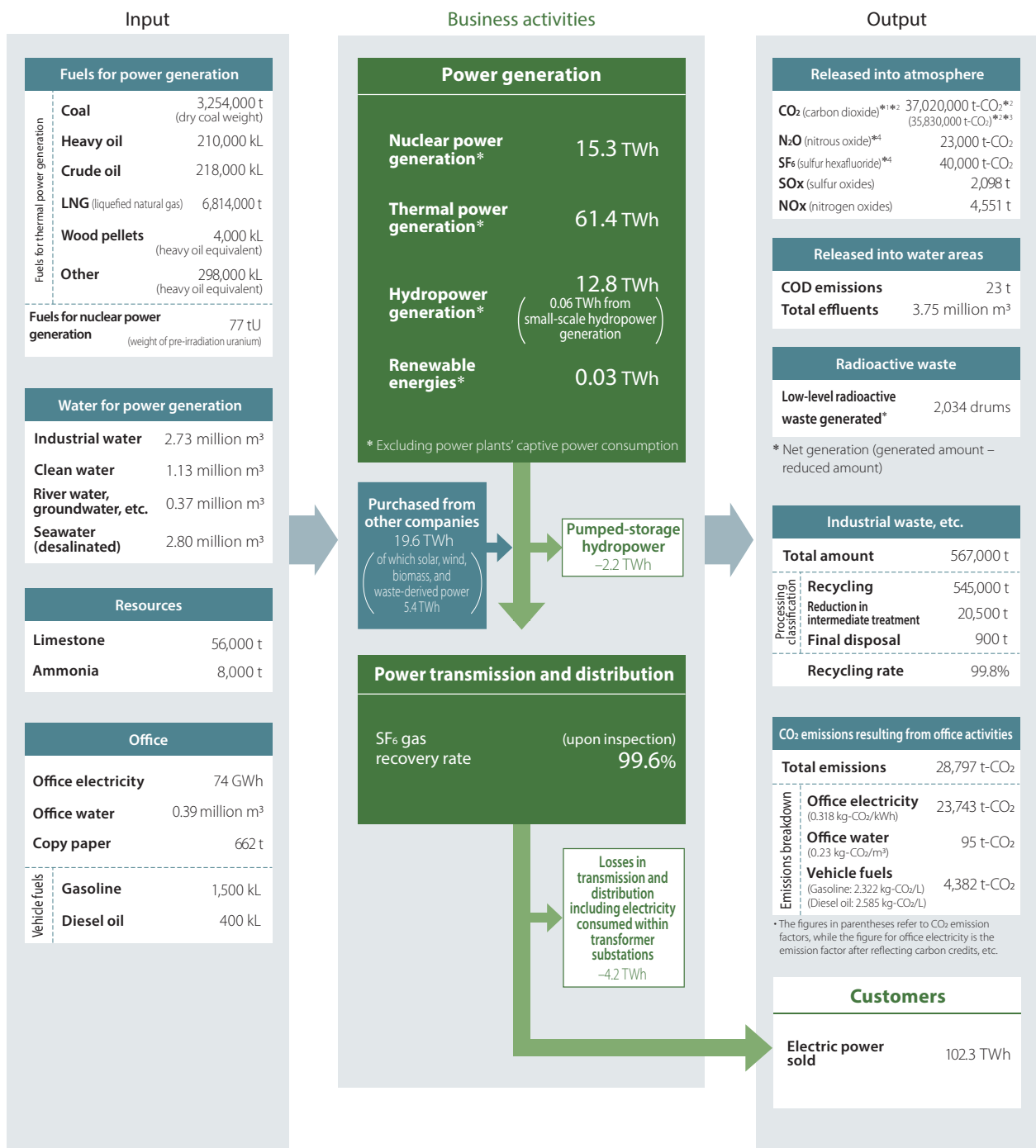
<Explanation>

It represents the ratio of companies that are performing Eco Action among the Kansai Electric Power Co., Inc. and its 86 consolidated subsidiaries (ratio of sales).

◆ Calculation method

$$\frac{\text{(Sales of the Kansai Electric Power Co., Inc. in FY 2020) + \text{(Sales of 38 consolidated subsidiaries in FY 2020 that are performing Eco Action as of the end of March 2021)}}{\text{(Sales of the Kansai Electric Power Co., Inc. in FY 2020) + \text{(Sales of 86 consolidated subsidiaries in FY 2020)}}$$

◆ Status overview of our business activities and environmental load (FY 2020 results)



Note 1: Totals may not sum due to rounding.
 Note 2: Thermal power generation figures do not include biomass power generation.

*1 Includes CO₂ originating from electricity purchased from other companies
 *2 The results for FY 2020 are provisional; the actual CO₂ emission factor will be officially announced by the government in accordance with the Law Concerning the Promotion of the Measures to Cope with Global Warming, etc.
 *3 Emissions reflecting carbon credits, etc.
 *4 CO₂ conversion

Environmentally Friendly Business



ENVIRONMENT



Policy and Concept

Further developing and leveraging renewable energy

Leading Japan in zero-carbon energy production, the Kansai Electric Power Group is generating over 2 million kW of renewable energy, aiming to expand its installed capacity at home and abroad to 6 million kW in the 2030s.

On the domestic front, for example, we focus on increasing hydropower output and promoting solar power, onshore wind power, offshore wind power, biomass power and geothermal power generation, the total capacity of which stands at about 4.14 million kW as of the end of March 2021. We also focus on commercializing projects in the development stage, monitoring fundamental reviews of the FIT system. In addition, we are committed to helping customers and society achieve zero carbon by contributing to local communities and supplying power sources that are either developed or acquired while reducing power generation costs to become independent from the FIT system.

Goals

Advancing efforts to control CO₂ emissions

- Keep the top spot for the amount of zero-carbon power generation in Japan
- Halve CO₂ emissions associated with power generation in Japan in FY 2025 (compared to FY 2013)

Further development and utilization of renewable energy

- Achieve 6 million kW of installed capacity by 2030s (2 million kW or more new development in Japan and abroad)

Efforts

Status of domestic development in fiscal 2020

- Renewable Japan Co., Ltd., Tokyu Land Corporation, ENEOS Corporation and the Kansai Electric Power Co., Inc. jointly set up a limited liability company called the "Sustainable Power Supply Fund" to promote and manage renewable power sources, with funding completed in June 2020.
- Our Group entered into a capital and business alliance with Renewable Japan Co., Ltd. in July 2020.
- Our Group took part in a solar power generation project with ENEOS Corporation in December 2020 planned in Kamigori-cho, Ako-gun, Hyogo Prefecture.
- Our hydropower generation project capitalizes on our Sakagami Dam and Utsubo Dam (both located in Miyagawa-cho, Hida City, Gifu Prefecture), where the Shin-sakagami Power Station and the Shin-utsubo Power Station will be built immediately downstream. This project will use abundant water impounded by the two dams, and the two power stations are designed for a total output of 9,240 kW. Construction on the Shin-sakagami Power Station started in March 2021 and is scheduled for commencement in August 2024. Likewise, construction on the Shin-utsubo Power Station started in August 2021 and is scheduled for commencement in February 2025. Guided by relevant authorities and supported by the local communities, these two projects are on track, with top priority given to safety.

Expansion of renewable energy power assets overseas

The total power capacity of our renewable energy assets overseas has expanded to approximately 1,055 MW* across 10 projects. In terms of international business, renewable energy accounts for about one third of the total power generation assets invested and owned by the Kansai Electric Power Company.

* As of the end of January 2022, projects under construction included.



Nam Ngiep 1 Hydropower Project in Laos



Aviator Onshore Wind Farm Project in the U.S.

- ◆ Renewable energy capacity of facilities that have begun operation (completed construction) in Japan and abroad: 4,142 MW (as of the end of FY 2020)

● [Energy Conservation Grand Prize]

Enudge 2.0 (an energy management service based on AI and the nudge theory, provided by the Kansai Electric Power Group for corporate customers) and a project ongoing in Nakanoshima, Kita-ku, Osaka (a “high efficiency district heating and cooling system using river water heat and temperature stratified heat accumulation tanks”) were awarded the Energy Conservation Grand Prize 2020, the former in the Product & Business Model category and the latter in the Energy Conservation Practice category.

Enudge 2.0, a service designed for companies operating many stores and business establishments, such as commercial facilities and supermarkets, encourages employees to practice energy conservation. It is highly valued for its ability to conserve energy in a stress-free, efficient manner, empathizing both “humans” and “machinery.”

The “high efficiency district heating and cooling system using river water heat and temperature stratified heat accumulation tanks,” meanwhile, is designed to improve the efficiency of conventional district heating and cooling plants, boasting one of the highest efficiency rates in Japan.

We are committed to improving our energy management expertise as part of our efforts to boost the asset values of our customers.

● Performance data

Development and promotion of renewable energy		Unit	FY 2018	FY 2019	FY 2020
Development and promotion of renewable energy	Capacity of facilities that have begun operation (completed construction)	10,000 kW	372.46	388.58	414.17
	Projects underway		66.14	54.02	61.30
Accumulated installed capacity	438.60		442.60	475.47	
• Solar power generation	8.17		8.17	11.31	
• Wind power generation	30.40		30.95	59.65	
• Hydroelectric power generation	374.6		377.80	378.84	
• Biomass power generation	25.67		25.67	25.66	
• Geothermal power generation	—		0.01	0.01	

Climate Change



ENVIRONMENT



Policy and Concept

● Social background

Countries are carrying out actions against climate change aiming to achieve their greenhouse gas reduction targets under the Paris Agreement, which sets the framework for climate change mitigation.

The Japanese government pledged in October 2020 to achieve carbon neutrality by 2050. Moreover, at the climate change summit in April 2021, it announced a greenhouse gas reduction target of 46% below fiscal 2013 levels by fiscal 2030, and the Strategic Energy Plan and the Plan for Global Warming Countermeasures are being reviewed to achieve these targets.

<Addressing TCFD Recommendations>

In May 2019, our Company declared our support for the recommendations of the Task Force on Climate-related Financial Disclosures or TCFD*.

Recognizing the size of the impacts that our Group business activities have on the global environment, we declare our support for the TCFD Recommendations to “analyze and disclose business risks and opportunities originating in climate change over the medium and long terms in order to reduce risks of financial market destabilization.”

Refer to page 25 of the Integrated Report for details about scenario analysis, etc.

* TCFD was established by the Financial Stability Board, which is an international agency that has central banks, financial regulatory authorities and other organizations from major countries as members. In total, 2435 organizations around the world, including financial institutions, businesses and governments, declared their support for the TCFD Recommendations as of August 31, 2021.

● Targets and efforts to achieve them

The Kansai Electric Power Group declared “Zero Carbon Vision 2050” in February 2021. Our Group, as a leading company of zero-carbon energy, is aiming for carbon neutrality throughout the entirety of its business activities including power generation by 2050. In addition, we will mobilize its resources to support decarbonization not only in the economic activities of our customers, but also across society as a whole.

Specifically, we are making best efforts to decarbonize power generation by promoting renewable energy sources to the fullest degree such as offshore wind power, maximizing nuclear power with priority given to safety, as well as working to shift to power generation using zero-carbon fuels (hydrogen, ammonia, etc.) for thermal power. Efforts are also underway to electrify society and encourage the efficient use of electricity, addressing both supply and demand sides, with technical evaluations and demonstrations conducted to establish a hydrogen supply chain, etc. While pursuing these efforts, our immediate commitment is to stay at the top position for the amount of zero-carbon electricity generated in Japan, and to reduce CO₂ emissions associated with our domestic power generation by 50% below fiscal 2013 levels by fiscal 2025. We are also advancing our development to increase the installed capacity of renewable energy to 6 million kW in the 2030s.

Furthermore, as a member of the Electric Power Council for a Low Carbon Society (ELCS), which was established by a consortium of electric companies including the Company, we are contributing to the ELCS initiatives as well by working on these Group endeavors..

Goals

● Advancing efforts to control CO₂ emissions

- Keep the top spot for the amount of zero-carbon power generation in Japan
- Halve CO₂ emissions associated with power generation in Japan in FY 2025 (compared to FY 2013)

● Continuing safe and stable operation of nuclear power plants

- Operation of nuclear power plants with top priority placed on safety

● Further development and utilization of renewable energy

- Achieve 6 million kW of installed capacity by 2030s (2 million kW or more new development in Japan and abroad)

● Maintaining and improving the thermal efficiency of thermal power plants

- Benchmark indicators* (A: 1.00, B: 44.3%)

* Indicators based on the benchmark system of the Law Concerning the Rational Use of Energy

● Reducing transmission and distribution loss

- To be maintained and reduced

● Promoting use of innovative forms of energy among customers and communities

- Contribute to making energy use by customers and society more sophisticated

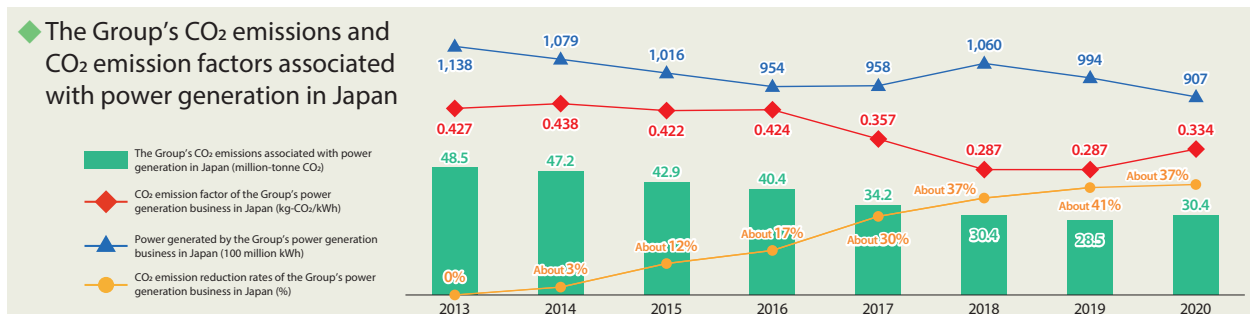
● Limiting SF₆ emissions (calendar year basis) (gas recovery rate upon inspection/removal of equipment)

- 97% (upon inspection)
- 99% (upon removal)

Efforts

Our Group's CO₂ emissions associated with power generation in Japan

Our Group's CO₂ emissions associated with power generation in Japan amounted to about 30.4 million tonnes in fiscal 2020; emissions have been declining since fiscal 2013 when the target was set. As a "leading company in achieving a zero-carbon energy," we are committed to safely and stably operating Takahama Nuclear Power Station Units 3 and 4 and Ohi Nuclear Power Station Units 3 and 4 while developing and promoting renewable energy. Our efforts have resulted in a reduction in CO₂ emissions of about 40% from fiscal 2013 levels.



Continuing safe and stable operation of nuclear power plants

Since nuclear power generation emits no CO₂, it is an important source of energy that prevents global warming. With understanding of residents of local communities, we continue the safe and stable operation of plants that have resumed operation and restart plants as soon as the safety is confirmed by appropriately responding to examinations of the Nuclear Regulation Authority. We will also keep independently and continuously promoting safety measures that exceed regulatory requirements.

Maintaining and improving the thermal efficiency of thermal power plants

We continuously undertake measures related to facilities and operation, working to reduce the amount of fuel used and suppress CO₂ emissions by maintaining and improving thermal efficiency.

Our Himeji No. 2 Power Station, one of our largest natural gas-fired thermal power plants, employs a combined-cycle power generation with advanced 1,600°C class gas turbines. We are working to suppress CO₂ emissions by increasing thermal efficiency to about 60%, which is the highest global standard, and reducing the amount of fuel used. Moreover, at Units 1 and 3 of the Aoi Power Station, in addition to the heavy oil and crude oil we had been using, we began using natural gas, which is less expensive and better for the environment, in 2016.

Demonstration project of CO₂ Capture System at the Maizuru Power Station

We are setting up a pilot scale plant at the Maizuru Power Station to demonstrate an energy-saving CO₂ Capture (separation and recovery) System (40 t-CO₂/day). This joint project with Kawasaki Heavy Industries, Ltd. and the Research Institute of Innovative Technology for the Earth (RITE) is scheduled to start operation in fiscal 2022, where exhaust combustion gases from coal-fired thermal power plants will be captured for separation and recovery of CO₂. There are growing needs to develop and leverage energy-saving CO₂ capture technologies, as CO₂ emissions from industrial plants are thought to cause global warming. The CO₂ capturing method with solid sorbent to be demonstrated in this project is expected to achieve significant reduction of energy consumption in CO₂ capture, compared with conventional methods. This method is anticipated to represent promising next-generation capturing technology, and the demonstration project is the first case of this method being used in Japan at a thermal power plant.

We are committed to leveraging our accumulated expertise in pursuing this project, reducing CO₂ emissions and building a low-carbon society.

Encouraging efficient energy use

With the goals of realizing energy conservation, cost cutting and CO₂ reduction for our customers and society, we are offering high-efficiency systems that utilize renewable energy sources and heat pump technologies, as well as proposing effective operation procedures. We are also providing total support for energy management to customers and other members of society and undertaking activities that serve these purposes, including the services for visualizing energy use.

The solution offered to residential customers is "total electric conversion," which, through efficient use of energy, can make our lives more comfortable and convenient. Specific products and services include an energy-efficient hot water supply system (EcoCute), safe, comfortable and convenient electric appliances (IH cooking heaters, etc.), and power consumption visualization (Hapi e-Miruden). The internet-based service Hapi e-Miruden monitors the amount and rate of electricity and gas consumed. By entering data on utility costs the system can automatically indicate the total household CO₂ emissions while providing useful information, such as tips on energy conservation according to registered equipment or power consumption patterns.

We are providing total support for the energy management of our business customers. We offer proposals for energy systems that are optimized to their various needs, including making energy use more efficient, and explain how to operate these systems. We also work with other group companies to provide a range of services such as energy conservation diagnoses and energy management support appropriate to the customer's facility usage patterns. We remain committed to helping our customers minimize their energy consumption, achieve cost savings, and reduce their CO₂ emissions.

● Adoption of smart meters

Kansai Transmission and Distribution, Inc. is systematically introducing smart meters. In addition to making amounts of electricity use visible to customers, installing smart meters contributes to the energy conservation of society as a whole, and enables formation of facilities efficiently according to the conditions of electricity use, among other benefits. We have completed installation of smart meters for customers that receive high-voltage and extra-high-voltage electricity, and we plan to install them for every customer that receives low-voltage power by fiscal 2022.

● Group companies' renewable energy programs

Kanden Energy Solution Co., Inc. leverages its solar, wind and biomass power plants to decarbonize energy systems. Moreover, as a comprehensive energy business operator, we are promoting distributed renewable energy sources, storage batteries, and energy conservation, particularly by upgrading and standardizing energy management systems, thereby helping customers and society achieve zero-carbon emissions.

◆ Major achievements

Solar power generation

Arida Solar Power Station (Arida City, Wakayama Prefecture)

The Arida Solar Power Station is the Group's largest solar power station with about 150,000 solar panels installed across a large area.

Power output	29,700 kW
Generated energy	Approx. 31 million kWh/annum (Equivalent to the annual consumption by 10,000 standard households)
CO ₂ emission reduction	Approx. 16,000 tonnes/annum*
Total site area	Approx. 45 ha
Commencement	October 2015



Wind power generation

Awaji Wind Power Station (Awaji City, Hyogo Prefecture)

While harmonizing with the community, this station operates by utilizing the wind blowing through the hills in northern Awaji City.

Power output	12,000 kW (6 turbines @2,000 kW)
Generated energy	Approx. 20 million kWh/annum (Equivalent to the annual consumption by 6,500 standard households)
CO ₂ emission reduction	Approx. 7,000 tonnes/annum*
Commencement	December 2012



* The reduction in CO₂ emissions was a figure calculated upon commencement of operations.

● Performance data

GHG emissions	Unit	FY 2018	FY 2019	FY 2020
Direct greenhouse gas emissions (Scope 1)*1*2	10,000 t-CO ₂	2,865.7	2,663.2	2,857.2
Indirect greenhouse gas emissions (Scope 2)*1*3		0.6	0.5	0.6
Other indirect greenhouse gas emissions (Scope 3)*1*4		3,784.5	3,173.9	3,211.5
Category 1*5		123.2	142.7	159.9
Category 2*6		102.6	129.3	158.8
Category 3*7		3,556.6	2,900.0	2,890.9
Category 4*8		0.1	0.0	0.0
Category 5*9		1.1	1.0	1.0
Category 6*10		0.3	0.3	0.2
Category 7*11		0.6	0.6	0.6
Category 8*12		—	—	—
Category 9*12		—	—	—
Category 10*12		—	—	—
Category 11*12		—	—	—
Category 12*12		—	—	—
Category 13*12	—	—	—	
Category 14*12	—	—	—	
Category 15*12	—	—	—	

*1 The amount of greenhouse gases emitted in our entire supply chain is calculated in accordance with the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (ver. 2.3) issued by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.

*2 Direct GHG emissions (Scope 1) refer to emissions (energy-derived CO₂, SF₆ and N₂O emissions) reported by electric companies in line with the Law Concerning the Promotion of the Measures to Cope with Global Warming along with CO₂ emissions from transportation fuel use, which are excluded from the reporting obligations. SF₆ emissions, which are factored in, are based on calendar year.

*3 Indirect GHG emissions (Scope 2) include CO₂ emissions originating from electricity and heat purchased from external corporations, which should be reported by electric operators in line with the Law Concerning the Promotion of the Measures to Cope with Global Warming.

*4 Indirect emissions not covered by Scope 1 or Scope 2 (emissions from other corporations related to the business activities of the company concerned)

*5 Product/service price (purchased or obtained) × emission intensity

*6 Capital goods price × emission intensity

*7 Fuel consumption × emission intensity + electricity purchased externally × emission factor

*8 Fuel consumption × emission intensity

*9 Waste disposal volume × emission intensity + fuel consumption × emission intensity

*10 Number of employees × emission factor

*11 (City classification-based) Σ (number of employees × operating days × emission intensity)

*12 Not applicable because of specific to our business

The Group's CO ₂ emissions and their factors associated with power generation in Japan	Unit	FY 2018	FY 2019	FY 2020
CO ₂ emissions*1	10,000 t-CO ₂	3,040	2,850	3,040
CO ₂ emission factor (at the generation end) (per power generation output)*2	kg-CO ₂ /kWh	0.287	0.287	0.334

*1 CO₂ emissions refer to those produced by fuel combustion at the Group's thermal power plants in Japan.

*2 CO₂ emission factor (at the generation end) corresponds CO₂ emissions per kWh of the Group's domestic power generation business

• CO₂ emission factor (at the generation end) = CO₂ emissions of the Group's domestic power generation business ÷ amount of power generated

CO ₂ emissions and retail emission factors of our Company	Unit	FY 2018	FY 2019	FY 2020
CO ₂ emissions (before adjustment)*1	10,000 t-CO ₂	4,153	3,844	3,702
CO ₂ emissions (after adjustment)*2		3,936	3,594	3,583
CO ₂ emission factor (energy used) (before adjustment) (per amount of electric power sold)*3	kg-CO ₂ /kWh	0.352	0.340	0.362
CO ₂ emission factor (energy used) (after adjustment) (per amount of electric power sold)*3		0.334	0.318	0.350

*1 CO₂ emissions refer to those produced by fuel combustion at the thermal power plants and include those for power purchased from other corporations.

*2 Adjusted CO₂ emissions include the environmental value adjustments under the surplus solar power purchasing system and the renewable energy feed-in tariff system.

• CO₂ emissions = CO₂ emissions (before adjustment) + CO₂ emissions (after feed-in tariff adjustment, etc.)

*3 CO₂ emission factor (energy used) corresponds CO₂ emissions per kWh of the Kansai Electric Power Co., Inc. electricity used.

• CO₂ emission factor (energy used) (before adjustment) = CO₂ emissions (before adjustment) ÷ amount of electric power sold

• CO₂ emission factor (energy used) (after adjustment) = CO₂ emissions (after adjustment) ÷ amount of electric power sold

*1,2,3 The results for FY 2020 are provisional; the actual CO₂ emission factor will be officially announced by the government in accordance with the Law Concerning the Promotion of the Measures to Cope with Global Warming, etc.

Greenhouse gases other than CO ₂	Unit	FY 2018	FY 2019	FY 2020
N ₂ O (dinitrogen oxide)*1	10,000 t-CO ₂	2.4	2.3	2.3
SF ₆ (sulfur hexafluoride)*1*2		5.1	3.8	4.0

*1 The results were first made public in fiscal 2010. CO₂ equivalent

*2 SF₆ emissions are based on the calendar year.

Utilization rate of nuclear power facilities and net thermal efficiency of thermal power facilities	Unit	FY 2018	FY 2019	FY 2020
Utilization rate of nuclear power facilities*1	%	54.6	48.4	28.0
Net thermal efficiency of thermal power facilities*2		49.0	48.6	47.8

*1 Utilization rate of nuclear power facilities = amount of power generated ÷ (permitted output × calendar hours) × 100

*2 Net thermal efficiency of thermal power facilities = (amount of power transmitted × quantity of heat per kWh) ÷ total amount of input heat (lowest heat value standard) × 100

Energy consumption	Unit	FY 2018	FY 2019	FY 2020	
Total energy consumption*	1,000 GJ	492,321	460,063	494,045	
Thermal fuel consumption	Coal	1,000 t	3,455	3,305	3,254
	Heavy oil	1,000 kL	136	48	210
	Crude oil		194	30	218
	LNG		1,000 t	6,734	6,502
	Wood pellets	1,000 kL (heavy oil equivalent)	2	0.2	4
	Other	288	202	298	
Fuels for nuclear power generation (weight of pre-irradiation uranium)	tU	87	52	77	

* These figures are reported to the government in accordance with the Act on the Rational Use of Energy. (Fossil fuel consumption, purchased electricity, and purchased heat)

Resource Circulation



ENVIRONMENT



Policy and Concept

In accordance with the aims stated in the Kansai Electric Power Group Environmental Policy, we are working actively to reduce emissions and recover resources. For industrial waste generated from our business activities, our Group is undertaking proactive 3R (Reduce, Reuse, Recycle) efforts with the goal of achieving zero emissions. For general waste such as copy paper and other office waste, we are also conducting 3R efforts with sorting as the foundation in each business place.

Efforts are also underway to promote green procurement.

◆ <Kansai Electric Power Group Environmental Policy 3. Promoting resource circulation>

3. Promoting resource circulation

At the Kansai Electric Power Group, recognizing that natural resources are limited, we advance efforts toward resource circulation in society as a whole. Our efforts include reducing natural resource consumption in our business activities, proactively promoting 3R (reduce, reuse, recycle) practices, and providing products and services that contribute to resource circulation.

Goals

Maintaining industrial waste recycling rate

99.5%

Efforts

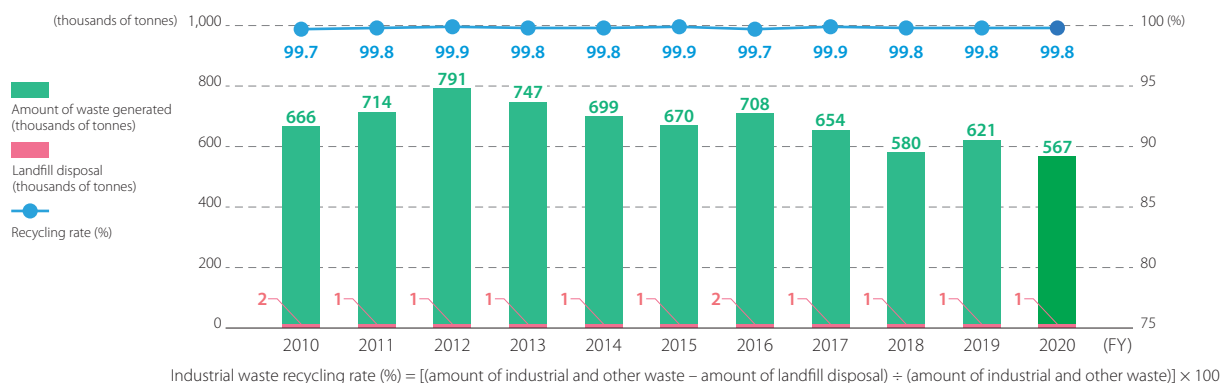
● Efforts to achieve zero emissions

The principal types of industrial waste generated by our Group include coal ash from coal-fired thermal power plants and concrete pole fragments remaining from power grid construction. In order to achieve zero emissions, we set a target for our Group of “a 99.5% or higher recycling rate” for industrial waste, and we are advancing efforts that include recycling all coal ash as raw material for cement and paving material for roads, for example. We achieved a 99.8% recycling rate in fiscal 2020, which marks the eleventh consecutive year that we have reached our target. We are also working to reduce and recycle general waste (copy paper, etc.) from our offices.

● Efforts to reduce plastic

Our Group's all-out efforts to reduce plastic include recycling of waste plastics originating from facility operations and construction work, reduction of plastic bags used in in-house shops, and promotion of reusable drink bottles.

◆ Changes in the amount of industrial waste generated and the recycling rates



● Promoting green procurement

Our Group is working on green procurement to promote resource circulation in society.

◆ Green procurement concept

- (1) Given that all procured goods or all machines and methods used for construction have an environmental impact, wherever possible we will opt for environmentally friendly office supplies, materials, equipment and construction machines/methods.
- (2) The concept is to “rethink” whether goods to be purchased are necessary at all, “reduce” the amount of purchase as much as possible, “reuse” unnecessary goods at other locations (including extended use of purchased goods), “recycle” resources and “repair” things wherever possible.

● Performance data

Waste-related*1*2	Unit	FY 2018	FY 2019	FY 2020
Amount of industrial and other waste	1,000 t	580.0	621.3	566.7
		(636.6)	(662.5)	(608.8)
• Soot particles (heavy/crude oil ash, coal ash, etc.)		387.0	384.7	381.2
		(387.0)	(384.8)	(381.4)
• Sludge (desulfogypsum, waste water processing sludge, etc.)		107.9	129.7	91.3
		(112.7)	(135.5)	(97.5)
• Cinders		25.3	45.8	30.8
		(25.5)	(46.1)	(31.0)
• Demolition debris (waste concrete utility poles, etc.)		18.2	18.1	17.1
		(56.5)	(36.9)	(38.0)
• Metal scraps		23.9	25.5	26.6
		(25.6)	(27.4)	(28.7)
• Glass/ceramic scraps (thermal insulation scraps, insulator scraps, etc.)		1.3	2.4	2.1
		(4.5)	(4.7)	(4.0)
• Waste oil		3.0	4.1	4.5
		(3.7)	(5.9)	(4.9)
• Waste plastic	0.9	1.4	1.1	
	(2.4)	(3.1)	(2.5)	
• (Repeated) Ash and gypsum	515.7	553.2	498.6	
	(515.9)	(553.6)	(499.0)	
• Other	12.6	9.6	12.0	
	(18.8)	(18.1)	(20.5)	
(Repeated) Special controlled industrial waste	8.3	7.1	11.2	
	(8.4)	(7.5)	(11.5)	
Amount of industrial waste for landfill disposal	1,000 t	0.9	1.1	0.9
		(19.2)	(12.6)	(11.5)
• Glass/ceramic scraps (thermal insulation scraps, insulator scraps, etc.)		0.09	0.19	0.15
		(0.7)	(0.8)	(1.5)
• Sludge (wastewater processing sludge, etc.)		0.48	0.41	0.03
		(3.7)	(5.3)	(6.2)
• Demolition debris		0.03	0.00	0.00
		(8.6)	(1.2)	(0.4)
• Cinders		0.00	0.00	0.00
		(0.2)	(0.3)	(0.2)
• Waste plastic		0.10	0.27	0.08
		(1.0)	(0.6)	(0.4)
• Metal scraps	0.05	0.03	0.02	
	(0.9)	(0.2)	(1.3)	
• Other	0.14	0.20	0.61	
	(4.0)	(4.2)	(1.5)	
• (Repeated) Amount except for special controlled industrial waste	0.77	0.95	0.04	
	(19.0)	(11.6)	(10.5)	
Industrial waste recycling rate*3	%	99.8	99.8	99.8
		(97.0)	(98.1)	(98.1)
Ash and gypsum waste recycling rate*3	%	100	100	100
		(100.0)	(99.9)	(99.9)

*1 The totals may not match up due to rounding.

*2 The figures in parentheses include the results of group companies (excluding those of some group companies)

*3 Industrial waste recycling rate = [(amount of industrial and other waste – amount of landfill disposal) ÷ (amount of industrial and other waste)] × 100

Pollution Prevention



ENVIRONMENT



Policy and Concept

Steadily implementing local environmental protection measures, including preventing air and water pollution, dealing with asbestos issues and preserving biodiversity, we are also strictly managing chemical substances.

At our power plants, for instance, we undertake measures based on laws, local regulations, environmental protection agreements and other rules to reduce air pollution, water pollution, noise, vibrations, and other problems. In addition, we monitor and measure the air and ocean around our power plants and carefully evaluate the environmental effects of our operations on the regional environment to ensure that no problems occur.

Efforts are also underway to promote safe, reliable, and complete disposal of PCB wastes.

◆ <Kansai Electric Power Group Environmental Policy 4. Protecting local community environments>

4. Protecting local community environments

At the Kansai Electric Power Group, we seek to prevent environmental pollution while working to strictly manage and reduce toxic chemicals in our business activities in order to promote the environmental protection of local communities.

Goals

● Measures to prevent air pollution

◆ Maintaining current sulfur oxide (SOx) emissions per power output

Emission factor: Maintaining the world's lowest levels, Emissions: Complying with the standards as agreed for each power plant
Results: 0.023 g/kWh (consolidated), 0.033 g/kWh (thermal power generation), with all agreed standards met

◆ Maintaining current nitrogen oxide (NOx) emissions per power output

Emission factor: Maintaining the world's lowest levels, Emissions: Complying with the standards as agreed for each power plant
Results: 0.049 g/kWh (consolidated), 0.072 g/kWh (thermal power generation), with all agreed standards met

Proper processing of PCB wastes

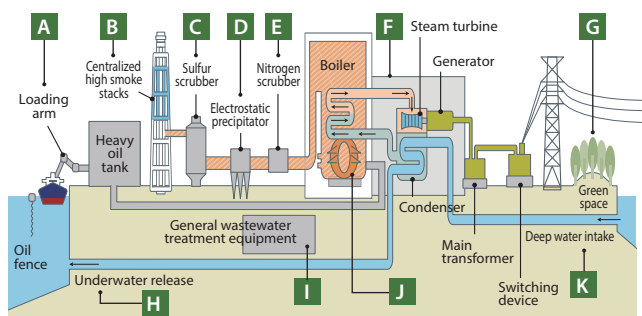
Proceed with certainty to achieve processing before the legal deadline

Efforts

● Air pollution prevention measures (SOx, NOx, soot)

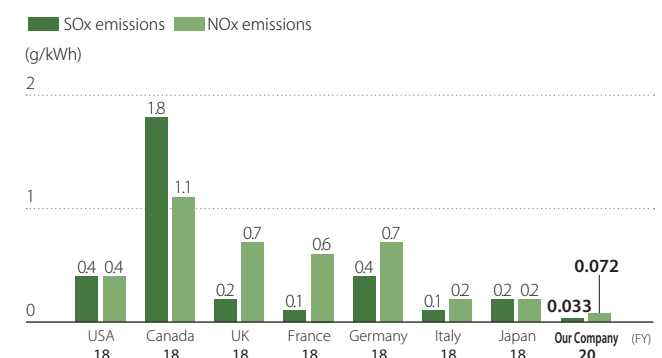
Our Company has implemented measures aimed at reducing the volume of SOx (sulfur oxides) emitted by our thermal power plants by using low-sulfur fuels, installing sulfur scrubbers, and other measures. To address the issue of NOx (nitrogen oxides), we are taking steps to lower emission levels, such as improving combustion methods and installing nitrogen scrubbers. As a result, our SOx and NOx emissions per unit of electric power generated are significantly lower than those of the major countries of Europe and North America, remaining among the lowest in the world. In addition, we have installed high-performance electrostatic precipitators that dramatically cut soot emissions.

◆ Environmental measures adopted at thermal power stations



- A** Oil leakage prevention **B** Ground-level density reduction measures
C Removal of sulfur oxides **D** Removal of soot **E** Removal of nitrogen oxides
F Noise prevention **G** Afforestation **H** Heated water discharge measures
I Drainage treatment **J** Low-sulfur fuel **K** Heated water discharge measures

◆ SOx and NOx emission factors for thermal power generation of major countries and our Company



Sources: OECD StatExtracts for emissions; IEA Energy Balances 2020 for power generation output

● Handling chemicals

We regularly monitor the status of buildings and equipment that contain asbestos and systematically advance the removal of asbestos and replacement with non-asbestos products. In these ways, we are managing asbestos suitably as we strictly abide by related laws, regulations and other rules.

Moreover, in addition to abiding by the PRTR (Pollutant Release and Transfer Register) System, we are working actively to manage toxic chemicals strictly and to reduce them.

◆ Use of asbestos in buildings and facilities

Items targeted		Type of use	Present conditions (usage)
Blown-in materials containing asbestos		Acoustic insulation, thermal insulation, and fireproofing materials in company buildings; acoustic insulation for transformers	<ul style="list-style-type: none"> Company buildings 276 buildings (about 4% of total) Acoustic insulation for transformers 23 units (about 1% of total)
Asbestos-containing products	Building materials	Fireproofing panels, roofing materials, flooring for buildings, etc.	<ul style="list-style-type: none"> Company buildings May include building materials used before August 2006
	Asbestos-cement pipes	Duct wiring for underground wires (transmission, distribution, and communications facilities)	<ul style="list-style-type: none"> Transmission ducts Approx. 661 km (route length) (about 42% of total length) Distribution ducts Approx. 573 km (route length) (about 12% of total length) Communications ducts Approx. 2.6 km (route length) (about 10% of total length)
	Thermal insulation	Power generation facilities (thermal power facility, nuclear power facility)	<ul style="list-style-type: none"> Remaining products containing asbestos Thermal power: Approx. 72,781 m³ (about 20% of total) Nuclear power: Approx. 2,049 m³ (about 21% of total)
	Sealing materials, gaskets	Power generation facilities (thermal power facility, nuclear power facility)	<ul style="list-style-type: none"> Sealing materials (remaining products containing asbestos) Thermal power: Approx. 33,000 (about 29% of total) Nuclear power: Approx. 5,400 (about 3% of total) Gaskets (remaining products containing asbestos) Thermal power: Approx. 4,400 (about 10% of total) Nuclear power: Approx. 12,000 (about 6% of total)
	Buffers	Suspension insulators for transmission facilities, etc.	<ul style="list-style-type: none"> Transmission facilities Approx. 570,000 (about 12% of total) Distribution facilities 708 (about 1% of total)
	Thickeners	Electric wire for overhead transmission lines, hydroelectric dams	<ul style="list-style-type: none"> Transmission facilities Approx. 115 km (route length) (about 1% of total length) Part of asphalt-surface impervious wall for dam structure 1 facility (Tataragi Dam)
	Insulation materials	Main motors and main circuit fuses of electric locomotives	<ul style="list-style-type: none"> Main motor: 4 locomotives (4 units/locomotive) Main circuit fuse: 4 locomotives (1 unit/locomotive)

Note: The figures in the table reflect the use of asbestos in buildings and facilities as of the end of March 2021.

● Safe, proper disposal of PCB

In line with relevant laws and regulations such as Law Concerning Special Measures Against PCB* Waste, we have a program in place to dispose of all equipment containing PCB (transformers, capacitors, fluorescent ballasts, etc.) safely and properly according to their characteristics.

◆ Disposal of high-level PCB

Equipment containing PCB (transformers, capacitors, fluorescent ballasts, etc.) is investigated retrospectively, referring to information on high-level PCB provided by the government and electric manufacturers; high-level PCB, if identified, is disposed of by the Japan Environmental Storage & Safety Corporation (JESCO) in accordance with the national PCB Waste Treatment Basic Plan.

As the deadline is approaching for the disposal of high-level PCB at the Group's business locations, we are currently working to complete proper disposal of all high-level PCB waste located and stored through an on-going search before expiration of the deadline.

◆ Disposal of low-level PCB

We established the Recycling Center for Utility Pole Transformers in 2003 while soliciting consent from local residents and municipalities on disposal of low-level PCB; insulating oil and transformer cases contaminated with PCB were detoxified for recycling purposes, with treatment of these materials in storage completed by July 2015.

Meanwhile, equipment containing insulating oil (transformers in operation at power plants and substations, pole transformers in distribution facilities, etc.) is routinely inspected for maintenance purposes (regardless of the presence or absence of PCB) to ensure proper operation. Additionally, measures are in place in the event of the unplanned release of insulating oil due to natural disasters (typhoons, lightning strikes, etc.), where spillages are prevented and contamination is contained to minimize impacts on the environment.

Moreover, all equipment in operation is inspected for possible PCB contamination and properly treated according to its type, size and PCB levels, leveraging certified detoxifying business contractors authorized by the Minister of the Environment (Kanden Engineering Corporation's Solvent Cleansing Method, etc.), treatment facilities operating under license from prefectural governors, and the energized natural circulation washing technology in compliance with government procedures.

* Poly Chlorinated Biphenyl. PCB was widely used for transformer insulating oil, etc. because of its excellent properties as an electrical insulator. However, due to PCB being a hazard to ecosystems, production and use have since been largely banned. More often than not, high-level PCB was intentionally used while low-level PCB was accidentally mixed in.

● Performance data

Atmospheric emissions and drainage*1		Unit	FY 2018	FY 2019	FY 2020
SOx emissions*2		t	2,351	2,138	2,098
			(2,351)	(2,138)	(2,099)
SOx emission intensity (at the generation end)*3			0.022	0.021	0.023
SOx emission intensity (per thermal power output) (at the generation end)*4		g/kWh	0.037	0.036	0.033
NOx emissions*5		t	4,686	4,414	4,551
			(4,738)	(4,474)	(4,607)
NOx emission intensity (at the generation end)*6			0.043	0.043	0.049
NOx emission intensity (per thermal power output) (at the generation end)*7		g/kWh	0.074	0.074	0.072
Ozone depletion emissions		t-CO ₂	971	1,153	314
	HCFC		966	690	263
	Other		5	463	577
COD emissions*8		t	21	22	23
			(22)	(23)	(23)
Amount of PCB waste		1,000 t	7.4	6.6	10.7
			(7.4)	(6.7)	(10.7)

*1 The figures in parentheses include the results of group companies (excluding those of some group companies)

*2 This is calculated from amounts of sulfur in fuel as well as SOx concentrations in gas emissions (measured values) and gas emission volumes. (Some previous fiscal year amounts were calculated from the amount removed by desulfurization equipment.)

*3 SOx emission intensity (at the generation end) = SOx emissions ÷ power output (at the generation end)

*4 SOx emission intensity (per thermal power output (at the generation end)) = SOx emissions ÷ thermal power output (at the generation end)

*5 This is calculated from SOx concentrations in gas emissions (measured values) and gas emission volumes.

*6 NOx emission intensity (at the generation end) = NOx emissions ÷ power output (at the generation end)

*7 NOx emission intensity (per thermal power output (at the generation end)) = NOx emissions ÷ thermal power output (at the generation end)

*8 This is calculated from analyzed wastewater concentration values.

Efforts Toward Conserving Biodiversity



ENVIRONMENT



Policy and Concept

In line with the Kansai Electric Power Group Environmental Policy, our Group recognizes the importance of biodiversity, working on conservation by properly understanding, analyzing and assessing the impact that our operations may have on biodiversity. Moreover, in line with the Biodiversity Action Guidelines of the Japanese Electric Utility Industry, which were set by the Federation of Electric Power Companies of Japan, we are expanding operations while recognizing the importance of biodiversity. For instance, when building or renovating power plants in areas of sensitive biodiversity, as much as possible we strive to prevent or reduce any impact on the environment and biodiversity in accordance with the Environmental Impact Assessment Law and where necessary we also consider biodiversity offsets.

Biodiversity Action Guidelines by the Japanese Electric Utility Industry (revised on June 2020)

In the electric power business, we are committed to using the blessings of nature in a sustainable manner while minimizing the impact on biodiversity.

In view of the "integration of business activities and environmental measures" encompassing a wide range of environmental activities, or so-called "environmentally integrated management" that has been required recently, we have revised the Biodiversity Action Guidelines by the Japanese Electric Utility Industry. Based on these Action Guidelines, we will continue to strive for sustainable business activities while appreciating the blessings of nature.

Code of Conduct

As a member of the international and local communities, not just as an electric power company, we keep in mind that biodiversity is an important foundation of a sustainable society and realizing such a society is our responsibility. We will actively promote the following business activities that bring benefits to biodiversity, thereby realizing a sustainable society.

I. Promoting environmentally integrated management that contributes to biodiversity

- ① When supplying electricity, carry out corporate management while recognizing the effects of business activities on achieving various goals related to SDGs with due consideration to biodiversity.
- ② In order to reduce greenhouse gas emissions in the electric power industry as a whole, make utmost efforts to use nuclear power generation with the basic premise of ensuring safety, increase the use of renewable energies, further improve efficiency and perform appropriate maintenance of thermal power generation, and provide energy-saving and CO₂-saving services that contribute to a low-carbon society.
- ③ Continue to engage in 3R (Reduce, Reuse, Recycle) activities, such as effective use of resources and reduction of final waste disposal, to create a recycling-based society and reduce environmental load.
- ④ Regarding biodiversity efforts, deliver easy-to-understand information and dialogue appropriately to a broad base of stakeholders.

II. Steadily engaging in actions that contribute to biodiversity

- ⑤ When conducting business activities, properly assess, analyze and evaluate the impact on biodiversity, and strive for conservation and sustainable use.
- ⑥ Promote technologies and R&D that contribute to the conservation and sustainable use of biodiversity, and seek to disseminate them.
- ⑦ Work to conserve biodiversity by voluntarily and proactively engaging in activities that lead to the creation of social value, such as forest conservation and environmental education, while cooperating and collaborating with relevant local organizations and customers. At the same time, contribute to achieving SDGs.
- ⑧ Encourage employees to enhance their awareness of biodiversity by participating in environmental education and environmental conservation activities inside and outside the company.
- ⑨ Provide environmental education activities to customers and the next generation, and participate in and cooperate with educational activities performed in the community to widely spread awareness of biodiversity.

Goals

Conservation of biodiversity

Consideration of biodiversity through
business activities

Efforts

Examples of specific efforts related to Biodiversity Action Guidelines by the Japanese Electric Utility Industry II – ⑤

Monitoring of the habitats and lives of flora and fauna at locations around the power plant

While we contribute to conserving local species around the Okutataragi Pumped Storage Power Station as part of our nature conservation efforts, we conducted literature and field surveys in fiscal 2020 to monitor the habitats and lives of flora and fauna (forest green treefrogs, etc.) at locations around the power station. Based on the results, we will go on with further study on biodiversity conservation activities.

Protecting native species around Kurobe Dam

Our Company runs electric buses along the Tateyama Kurobe Alpine Route that connects Nagano Prefecture and Toyama Prefecture. Along with not emitting exhaust gases, these vehicles rarely startle animals with their sound because they run extremely quietly. Kurobe Dam, which is situated in a national park, receives one million visitors annually. At Ogizawa Station, which is the entrance to the Nagano Prefecture side, the seeds of plants that do not naturally grow in Kurobe sometimes get brought over on the soles of the shoes of tourists. Thus, we have placed seed removal mats at the station ticket gates to prevent the influx of non-native species. The removed seeds are collected with a vacuum cleaner and incinerated.



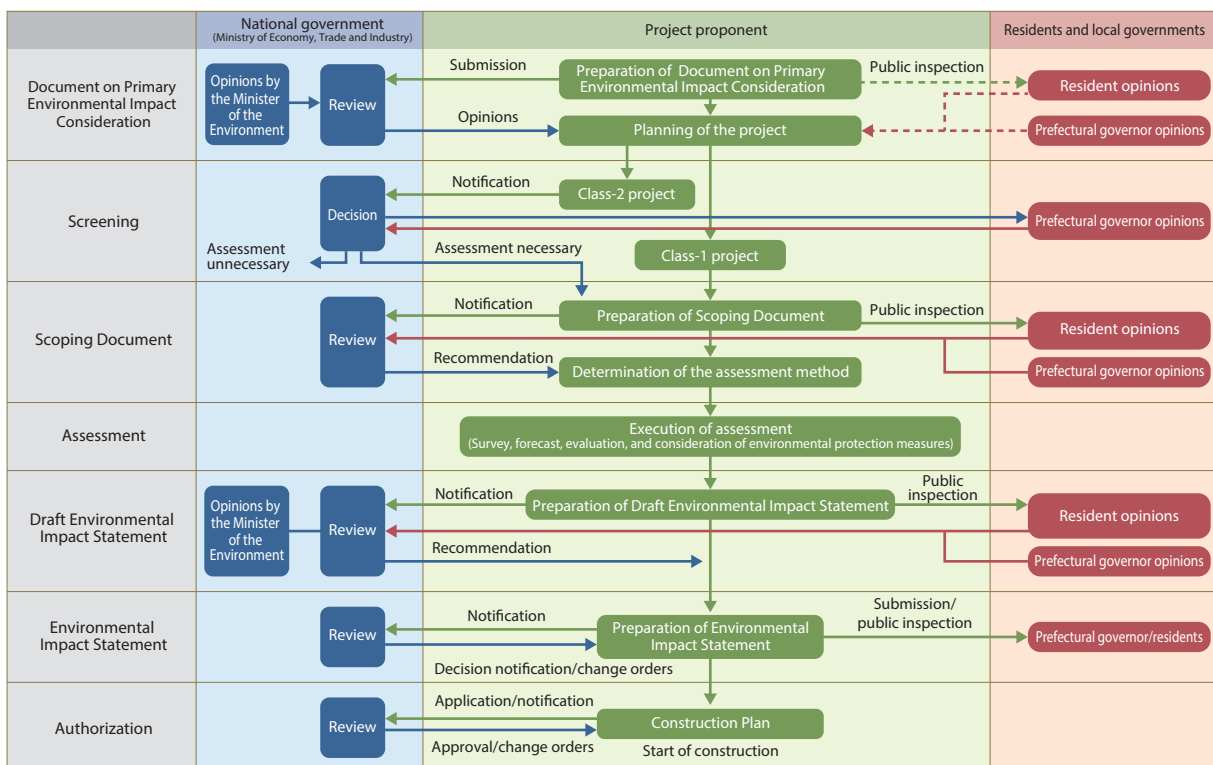
Seed-removal floor mat

Execution of environmental impact assessment

An environmental impact assessment system estimates and evaluates impacts on the environment of business activities and investigates necessary countermeasures before the execution of large-scale development projects.

In Japan, the system based on the Environmental Impact Assessment Law stipulates subject business survey items, procedure protocols, and other requirements. In suitably implementing environmental impact assessment for power plant construction (including new, expansion, or replacement) in the electric power business, along with utilizing the extensive knowledge that we had accumulated before the establishment of this law, we are, for example, listening to the opinions and recommendations of local residents, regional organizations and the national government. Furthermore, through environmental protection measures based on the opinions of experts and others, we are making efforts to minimize impacts on the natural environment and biodiversity as well as restore natural environments.

Environmental assessment procedures

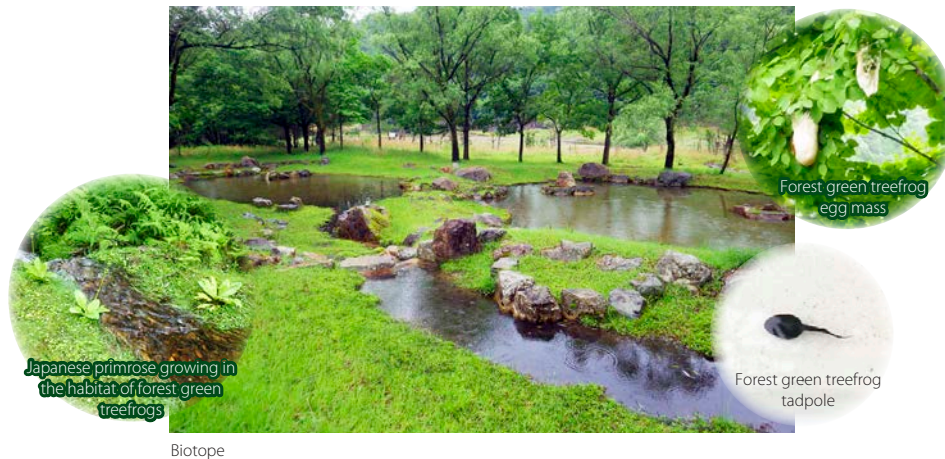


● Examples of specific efforts related to Biodiversity Action Guidelines by the Japanese Electric Utility Industry II — ⑦

◆ Natural forest creation

In order to make forests that are similar to nature at power plants in a short period of time, we are trying to create environments that protect the original biodiversity of the region by selecting cultivated tree saplings that are suited to the region, and planting different species densely in close proximity.

Moreover, in order to maintain natural forests, as we look to the guidance of experts, we are undertaking continuous efforts to preserve biodiversity, including measures to further diversify species and eliminate invasive species.



◆ Protecting oriental white storks

In Toyooka City, Hyogo Prefecture, released oriental white storks, which are designated a Special Natural Treasure in Japan, sometimes make their nests on utility poles and steel towers. Not only are there concerns about accidents, but there are also fears that storks could be electrocuted. For these reasons, Kansai Transmission and Distribution, Inc. patrols carefully, removing nests as quickly as possible and conducting measures to discourage them from coming near utility poles in cooperation with the local governments. In these ways, we are both protecting the storks and maintaining the safety and stability of the power supply.

Water Resources



ENVIRONMENT



Policy and Concept

A physical shortage of water has an impact on our business. Specifically, restrictions on the supply of drinking and industrial water could have an impact on the operations of water-dependent thermal and nuclear power plants.

Thermal and nuclear power plants use massive amounts of water; seawater is used for cooling purposes while about half of a power plant's water (excluding cooling water) is supplied by seawater desalination facilities.

In addition, the results of water risk assessments conducted in fiscal 2020 at our power plants showed that there was no significant risk associated with drought.

While drought poses little risk to our power plants in Japan, we will continue to work on the proper use of water resources and risk management.

At the same time, group-wide efforts will be made to minimize office water use (as part of the Kansai Electric Power Group Eco Action).

Goals

Reducing office water consumption

Reduce as much as possible

Efforts

Water risk assessments

The results of water risk assessments conducted in fiscal 2020 at our power plants showed that they were not at significant risk of a water shortage; resources include tools provided by the World Resources Institute (WRI)* and information obtained from external experts.

* An independent organization that researches policies on issues related to the global environment and development, as well as providing technical support.

Performance data

Water consumption*1		Unit	FY 2018	FY 2019	FY 2020
Total net fresh water consumption*2		million m ³	5.19	3.97	4.23
			(6.13)	(4.86)	(5.05)
River water			0.40	0.41	0.37
			(0.40)	(0.41)	(0.37)
Groundwater			0.00	0.00	0.00
			(0.40)	(0.36)	(0.48)
Total municipal water supplies			4.79	3.56	3.86
			(5.33)	(4.09)	(4.20)
Amount of industrial water used (for power generation)			3.70	2.64	2.73
			(3.87)	(2.82)	(2.91)
Amount of service water used (for power generation)		1.09	0.92	1.13	
		(1.46)	(1.27)	(1.29)	
Seawater (desalinated)*3		2.74	2.92	2.80	
		(2.74)	(2.92)	(2.80)	

*1 The figures in parentheses include the results of group companies (excluding those of some group companies)

*2 Excluding desalinated seawater

*3 Desalinated seawater

Social

S

Social

- ◆ Human Rights
- ◆ Labor Practices
- ◆ Occupational Health and Safety
- ◆ Human Capital Development
- ◆ Responsibilities Toward Customers
- ◆ Disaster Mitigation Efforts
- ◆ Communities
- ◆ Supply Chain Management

Human Rights



SOCIAL



Respect for human rights

Policy and Concept

As part of the Kansai Electric Power Group Code of Conduct, our Group has established conduct standards regarding human rights, upholding "Respect for human rights and promotion of diversity." We recognize human rights as a common and universal value of a global society, and we are committed to compliance with the laws and regulations of each country or region in which we operate. With the upmost respect given to international norms to protect human rights, we are promoting prevention of harassment and respect for human rights throughout the supply chain.

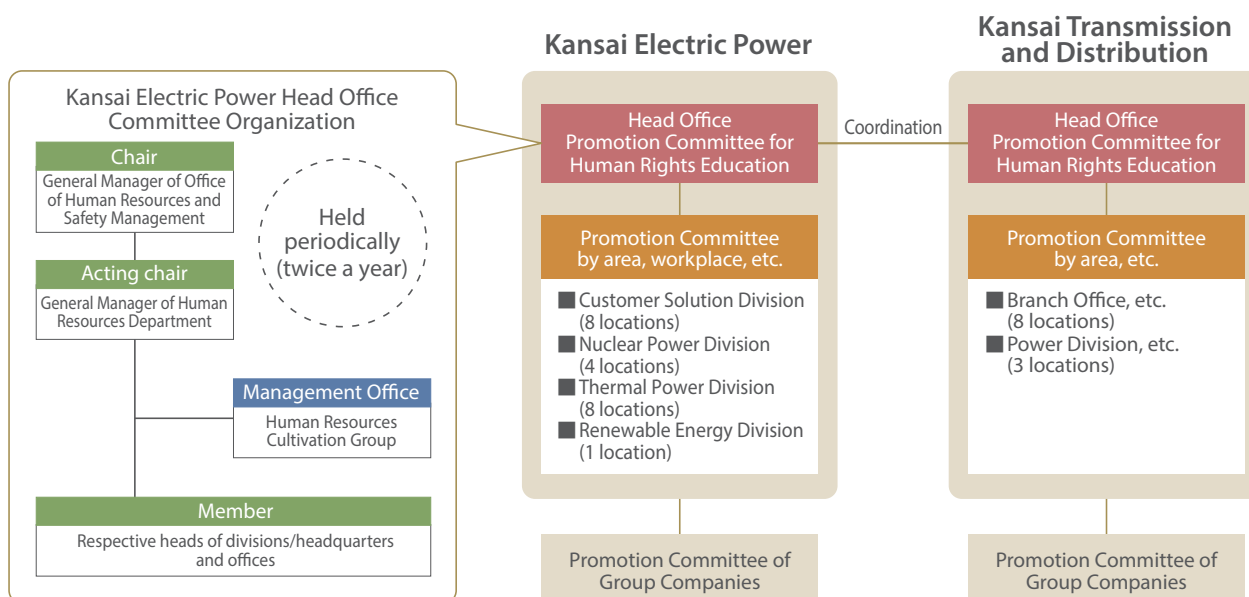
◆ **Conduct standards regarding human rights**
 (excerpt taken from the Kansai Electric Power Group Code of Conduct, 4. Respect for human rights and promotion of diversity, Conduct standards for individuals)

- Respect the human rights of every individual involved in business activities and promote diversity.
- Never say or do anything that is discriminatory, harassing, defamatory or taunting or that could otherwise cause another person to feel uncomfortable based on race, nationality, religion, gender, sexual orientation, sexual identity, social position, family background, occupation, disability or other personal trait. Moreover, do not sympathize with such words or behavior or allow them to pass.
- Never be involved in any kind of forced labor or child labor.
- Endeavor to create workplaces that make the most of diverse senses of value and that enable people to work with vigor and vitality.

System

System for the promotion of human rights education

With the Promotion Committee for Human Rights Education established at the respective head offices and business activity bases in each region, our Company and Kansai Transmission and Distribution, Inc. formulate basic plans for human rights education for the year to come, as well as confirming how human rights awareness raising efforts and training programs are being implemented. In addition, we share information on various human rights issues and promote initiatives for respecting human rights across the Group.



Goals

- Kansai Electric Power 2021 Basic Plan for Human Rights Education
- Kansai Transmission and Distribution 2021 Basic Plan for Human Rights Education

Promote human rights training with the goal of having all employees receive training at least once a year.

FY 2020 Results:
Frequency of training attendance per person

2.76 times

(A total of 53,610 employees attended)

Efforts

● Efforts to raise human rights awareness

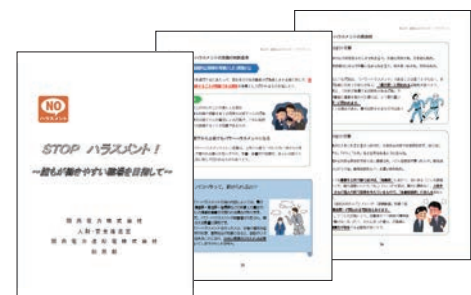
The Kansai Electric Power Co., Inc. and Kansai Transmission and Distribution, Inc. provide human rights training to management and all employees on a continuous basis to deepen their understanding and recognition of our corporate responsibility to respect human rights, and to enable each and every employee to take responsible action in all business activities.

Particularly with regard to harassment prevention, we have established rules, including a handbook, and consultation desks for harassment prevention to create a workplace climate that does not permit any kind of harassment. We are also thoroughly engaged in activities to raise awareness of harassment prevention by implementing e-learning and holding workplace discussions based on case examples every year throughout the company.

In addition to the above, we pay careful attention to routine internal practices from the perspective of respect for human rights and conduct appropriate reviews as necessary.

◆ Characteristic training and actual attendance in fiscal 2020

Training details	Target person	Attendance
Human Rights Training for Directors - IT innovation and revolution; corporate management -	Upper management and promotion members	65
Human Rights Lectures Current status of power harassment and preventive measures	Promotion members, officers and others	170
Harassment Counselor Training	Consultation desk managers	23



Harassment Prevention Handbook

Note: Training was carried out online to prevent the spread of COVID-19.

● Initiatives linking our Group, municipalities and other entities

Twice a year, the Kansai Electric Power Group holds Human Rights Information Exchange Meetings for Group Companies to promote initiatives for respecting human rights. In addition, we actively participate in the activities of the Osaka City Council on Human Rights Promotion for Corporations and other liaison group organizations, as well as those at the national and local government level.

● Relevant data

Policy

Policy pertaining to the respect for human rights

Established

Included in the Kansai Electric Power Group Code of Conduct
<https://www.kepco.co.jp/sustainability/csr/mind/charter/index.html>

Labor Practices



SOCIAL



Promotion of diversity

Policy and Concept

With an exclusive organization established in 2011, we have been developing systems and promoting initiatives such as the periodic release of information and implementation of various training programs, seeking to realize workstyles and to cultivate workplace environments that enable everyone to exercise their abilities to the maximum extent, regardless of their personal attributes, including gender and age, sexual orientation, sexual identity, being with or without disability, or life events experienced, such as childrearing and nursing care.

● Kansai Electric Power Group Diversity Promotion Policy (established in December 2015)

1. By respecting the "differences" of each individual and making diverse senses of value and ways of thinking into sources of strength for the organization, we will realize a competitive corporate group that creates new value.
2. We seek to realize workstyles and to cultivate workplace environments that enable everyone to exercise their abilities to their maximum extents, regardless of their personal attributes, including gender and age, or experienced life events.



System

Director responsible: Nobuyuki Miyamoto (Executive Vice President) of the Kansai Electric Power Co., Inc.

Management office: Diversity Promotion Group, Office of Human Resources and Safety Management of the Kansai Electric Power Co., Inc.

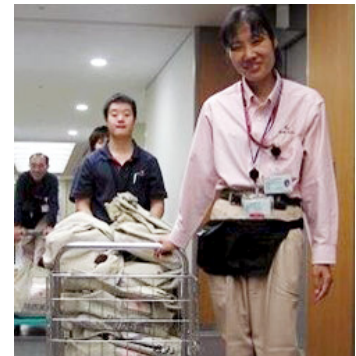
Efforts

● Promotion of employment of persons with disabilities

In 1993 we established Kanden L-Heart Co., Inc. as a special affiliate company, and together with Kansai Transmission and Distribution, Inc.* (which was split off in April 2020), these organizations encourage employment of people with disabilities. Kanden L-Heart is actively recruiting people with disabilities by accepting them as workplace trainees and by other means, in collaboration with the government, related organizations, special-needs high schools, etc.

As a result, our employment ratio of workers with disabilities reached 2.6% (as of June 1, 2021), having continuously achieved the legally required ratio (2.3%). In addition, we are opening up a diverse range of job positions where people with disabilities can play an active role, such as office assistant, while bolstering support for those with mental disabilities.

* Kansai Transmission and Distribution, Inc. has been certified as a special affiliate (as our Group) and therefore is included in the calculation of our employment ratio of persons with disabilities.



Pick-up and delivery work

● Promotion of employment of elderly persons

We are rehiring all applicants after they retire at the age of 60, and are also continuously working to improve the environment so that veteran employees can further utilize the knowledge and experience they have cultivated so far. Currently, many highly qualified and skilled retirees with abundant experience are active in a wide range of operations at our Company and group companies.

Note: Number of rehired employees (retired employees) at the end of March 2021: Approximately 850

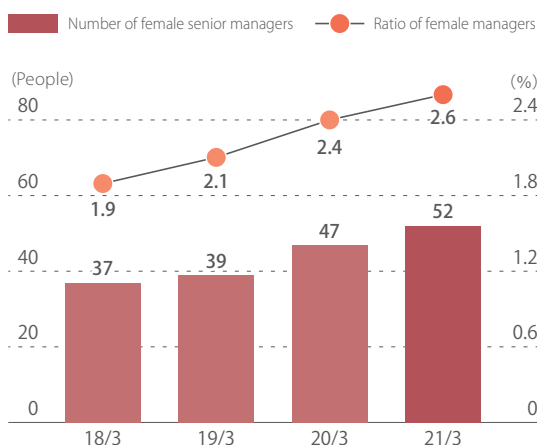
● Initiatives to encourage the further success of female employees

Various training programs and initiatives are implemented for female employees so they can maximize their potential without underestimating it, be motivated for continuous self-growth through work, and actively balance work and family, etc. even at life-stage transitions.

◆ Targets for promotion of female employees

Appointment to managerial positions	By the end of FY 2030, increase the ratio of female managers and the number of female senior managers to more than threefold those of FY 2018. (FY 2020 results: The ratio of female managers was 2.6% and the number of female senior managers was 52.)
Recruitment	Achieve ratios of 40% or more for women employed in office jobs and 10% or more for women employed in technical jobs. (FY 2021 results: 47% for office jobs and 10% for technical jobs)

◆ Number of female senior managers*1 and ratio of female managers*2



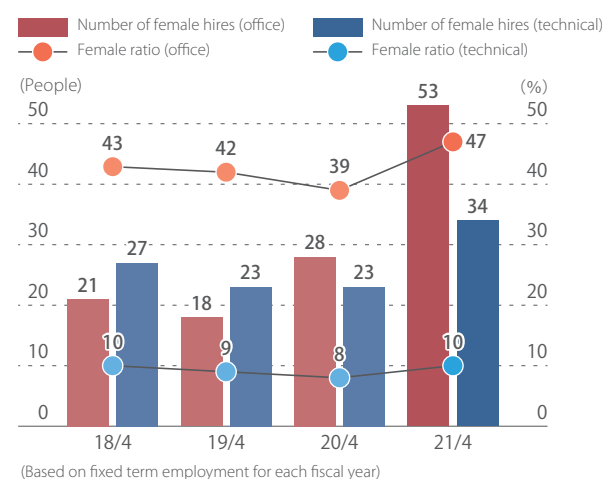
(Figures from fiscal year ends)

Excludes medical staff and transportation staff.

*1 Senior managers refer to those equivalent to section chief or higher.

*2 Managers refer to those equivalent to unit chief or higher.

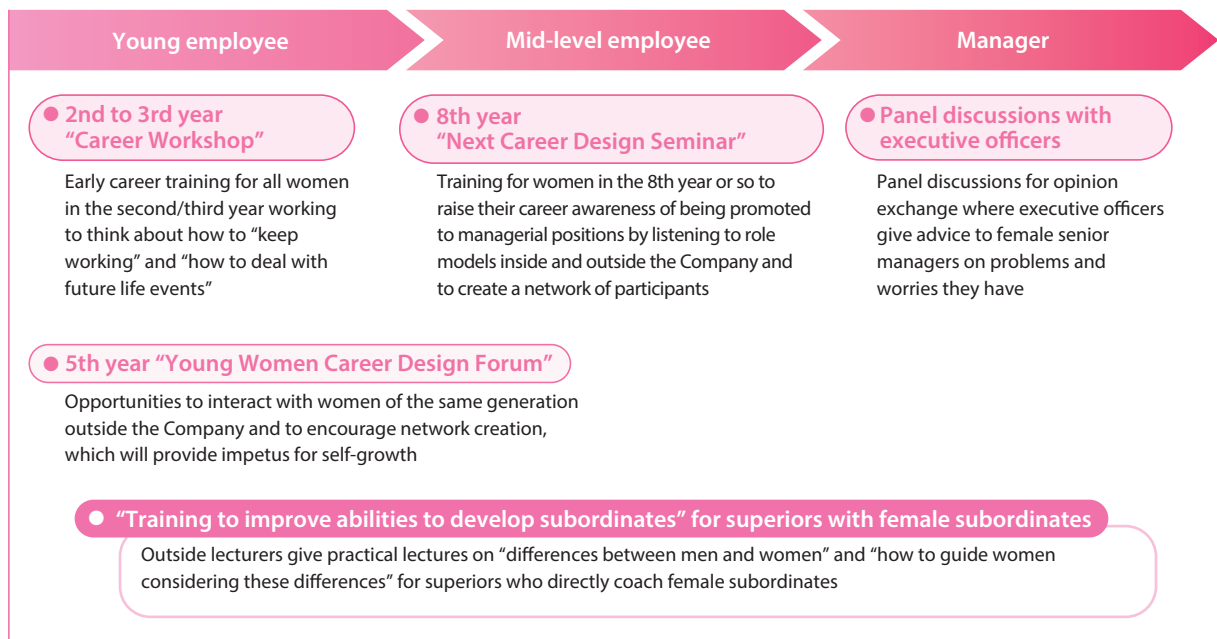
◆ Number and ratio of female hires



(Based on fixed term employment for each fiscal year)

◆ Initiatives related of promoting women's empowerment

- Support and measures according to career stages



- Measures and support according to life events

- **Expectant mother seminar**

Pregnant women (and their spouse in the case of intra-office marriage) learn our systems, tips for nursery school hunting, timing of returning to work, and receive advice for balancing work and childcare.

- **Expectant mother seminar: Information session for superiors**

The session provides superiors with pregnant female subordinates explanation on expected roles and key points when communicating with their subordinate.

- **Early reinstatement support menu**

Financial support is provided for childcare to employees returning to work early, before their child celebrates his/her first birthday.

- **Returnee seminar**

Women who have returned to work after childcare leave receive advice for balancing work and childrearing by listening to information from outside lecturers and senior role models, and are encouraged to think positively about striking a balance between work and childrearing in the future.

- **Participation in training, etc. during childcare leave**

Employees can participate in training and take promotion exams, if they are conducted during childcare leave, upon request.

- **PC rental service during childcare leave**

A computer is lent to each employee to keep them informed regarding the moves and changes in business situations even during childcare leave, and to support their return to work through communication with their workplace.

- **Release of information on the in-house website**

Our in-house website "Chiga Chika Net" ("Difference (Chigai) is Strength (Chikara) Net) introduces our seminars and systems supporting each life stage in an easy-to-understand manner.



Scenes from training



Scenes from training



Chiga Chika Net

◆ Third-party evaluation on women’s empowerment

As a result of these various efforts, we received the “Kurumin” certification in accordance with the Act on Advancement of Measures to Support Raising Next-Generation Children and the highest “Eruboshi” certification (third level) in accordance with the Act on Promotion of Women’s Participation and Advancement in the Workplace. In addition, we were recognized as a “Leading company for female activity in Osaka City.” Moreover, in the selection of “Nadeshiko Brands” instituted jointly by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange, we were selected as a “Semi-Nadeshiko Brand.” Furthermore, we acquired the Osaka Prefecture “Danjo Ikiiki Plus” certification as a business operator putting forth its best effort to be a vibrant company or organization where both men and women can work with enthusiasm.



● Promoting the participation of male employees in childrearing

We are encouraging male employees to participate in childrearing with the aim of deepening their ties with family members and growing as individuals through childrearing experience as well as increasing work efficiency and motivation. Specifically, setting a goal of 90% or more of childcare leave utilization among male employees, when the period of childcare leave begins, the provision allows for seven days of paid leave. Additionally, we deliver an email calling for taking childcare leave to male employees whose spouses have given birth to a child, with the same message sent to their superiors. The experiences of male employees who took childcare leave are published on our intranet.



● Support for balancing work and nursing care

Providing employees with basic knowledge about nursing care, public support, and our internal systems can help prevent them from leaving their jobs when faced with nursing care and maintain a balance with work. For this reason, we have published a Handbook for Work-Nursing Care Balance Support and hold seminars on the compatibility of work and nursing care.



Handbook for Work-Nursing Care Balance Support



Nursing care seminar

● Support for employees identifying as LGBTQ and promotion of understanding companywide

Aiming to deepen employees' understanding of LGBTQ issues and create a comfortable workplace for everyone, we have implemented e-learning for all employees, published an informative handbook regarding company diversity and prevention of harassment, and set up a consultation desk. In addition, in the index for evaluating corporate efforts related to LGBTQ employees formulated by a voluntary organization, work with Pride, the Company won the highest "Gold" award for the fifth consecutive year from 2016 to 2020. In April 2021, we earned a three-star certification as an Osaka City LGBT Leading Company.

The screenshot shows an e-learning interface with two main sections. The left section is a glossary titled '第3章 性的指向・性自認に関するハラスメント' (Chapter 3: Harassment related to sexual orientation and gender identity). It lists terms in English and Japanese, such as 'L レズビアン' (Lesbian), 'G ゲイ' (Gay), 'B バイセクシャル' (Bisexual), 'T トランスジェンダー' (Transgender), 'クエスチョニング' (Questioning), and 'クワイ' (Queer). The right section is titled '第3章 性的指向・性自認に関するハラスメント防止' (Chapter 3: Prevention of harassment related to sexual orientation and gender identity) and includes sub-sections for '6. カミングアウトとアウトイング' (6. Coming out and outing). It defines 'カミングアウト' (coming out) as voluntarily disclosing one's sexual orientation and 'アウトイング' (outing) as disclosing it without the person's consent. A large text box at the bottom explains that coming out is a personal choice and that outing is a form of harassment.

e-learning

● Work system, work-life balance support system

Category	System	Details
System that enhances workstyle flexibility	Super flextime	Flexible work system without designated core time
	Telework	Employees can work from home or in a satellite office regardless of reason and without a limit on the number of times.
	Hourly leave	Leave is available in 1-hour units (up to 5 days/year).
Support for compatibility with childrearing	Prenatal and postnatal leave	6 weeks before and 8 weeks after childbirth
	Maternity leave	5 days at any time starting from the time the spouse's pregnancy is determined and no later than 2 weeks after delivery
	Childrearing leave	Until the end of the fiscal year in which an eligible child becomes 3 years old. Paid up to 7 days from the start of the leave.
	Early reinstatement support menu	Financial support for childcare is provided to employees with a child under 12 months of age upon returning to work.
	Short working hours (childrearing)	Until the end of September of the year when an eligible child is in the first grade of elementary school
	Child nursing leave	Available when an employees' child receives nursing care or health examinations before entering elementary school
	Family support reserve leave	Employees can use part of their accumulated annual paid leave for "nursing/long-term care of their spouse/relatives," "going to hospital for infertility treatment," "participation in school events," etc.
Support for compatibility with nursing care	Nursing care leave	Within 3 years in principle or up to 93 days in total
	Short working hours (nursing care)	Period that an employee applied for (period in need of nursing care)
Reemployment system	f-staff system	Reemployment system for those who resigned due to pregnancy, childbirth, childrearing, long-term nursing care, transfer of spouse, or infertility treatment

Promotion of workstyle innovation

Policy and Concept

● Promotion of workstyle innovation, health and productivity management

The Company has established a Health and Productivity Management Declaration with the aim of expressing our unwavering commitment to step up efforts in health management. Under the Medium-term Management Plan, we are committed to increasing the added value of operations through leveraging by digital technology, accelerating flexible workstyles regardless of time and place, continuously conducting health activities on a workplace basis, and promoting line care as a means to step forward.

◆ Health and Productivity Management Declaration (established in January 2018)

The Kansai Electric Power Company, in order to fulfill our mission, “continuing to serve our customers and communities,” will promote the maintenance and enhancement of our employees’ physical and mental health as well as the improvement of the quality of their lives by making employees’ health one of the pillars on our corporate management.

We will also implement working practices which place an emphasis more on value creation than the amount of work time, boost productivity, eliminate longer working hours, promote workplace diversity, and realize dynamic innovation through human-capacity reform to further improve effectiveness of our health management.

Based on our belief that we value people, we will continue to promote the advancement of employees’ health and contribute to “the realization of a bright and affluent future.”

System

Responsible for promotion: Takashi Mori (Representative Executive Officer, President)

Deliberative body: Workstyle Innovation, Health and Productivity Management Committee

Management office: Labor Health Group, Office of Human Resources and Safety Management

Goals

- Reduce total working hours “by 5% compared to FY 2015, or 190 hours/year, which is equivalent to overtime hours per person”
→ FY 2020 results: Overtime hours per employee were 236 hours/year
- Achieve male employee childrearing leave/paid leave utilization rate of 90% or higher.
→ FY 2020 results: Male employee childrearing leave utilization rate was 98%, and paid leave utilization rate was 95.5%.
- Improve health indexes (weight, exercise, smoking, sleep and drinking) to the level of leading companies in health and productivity
→ Achieved: Exercise, smoking, sleep, drinking habits
Not achieved: Appropriate bodyweight

Efforts

● Developing comfortable workplaces

On the premise that working hours are managed appropriately, a flexible work system is being put in place to clearly delineate efficient working time (“on”) from effective rest time (“off”). To this end, we are expanding flextime with no core time across the Company, enhancing to a working system that allows for more flexibility when it comes to times/places of work through extended teleworking requirements, and encouraging employees to take leave in a planned and meaningful manner.

◆ Major work system revisions in recent years

2015. 4	Introduction of anniversary leave	Granted special leave on anniversaries of employees or their families.
2016. 4	Introduction of teleworking	Introduced to support improved work-life balance.
2016. 4	Introduction of partially paid childrearing leave	Seven days of paid leave for the purpose of encouraging male employees to take childrearing leave.
2018. 10	Introduction of leave for spouse's overseas assignment	Introduced leave of absence program for employees who will accompany their spouse's overseas assignment.
2019. 4	Introduction of rest between shifts	Encouraged employees to secure, basically, at least 11 hours of rest.
2019. 6	Introduction of satellite office work	Made available working at the nearest business location, etc. Also expanded requirements for working from home.
2020. 4	Extension of super-flexible work hours	Abolished core time as a general rule at all business locations. (Has been abolished at some locations since April 2019.)
2021. 4	Extension of teleworking, introduction of hourly leave system	Made available teleworking without a limit on the number of times, etc., increased flexibility in leave utilization.

Note: Non-regular employees are also eligible for many of these systems.

● Certified as a Health & Productivity Management Outstanding Organization 2021 (White 500)

Having been recognized for our philosophy of “Management that values people” and health measures for employees, our Company has been certified as a Health & Productivity Management Outstanding Organization (White 500) for the fifth consecutive year since 2017.



● Major health and productivity management initiatives

As part of initiatives aiming to raise awareness of health management and improve self-care skills, the Group holds exercise and diet seminars and has set “non-smoking days” throughout the Company.

Moreover, we are working to create an environment that facilitates superiors’ support for their subordinates by conducting training on line care for managers, and to enhance the support system by establishing a consultation desk with industrial physicians, industrial nurses, and outside counselors.

● Welfare system to support employees

We have created an environment in which employees can work cheerfully with peace of mind by stabilizing the lives of employees and their families with the following systems: life security measures such as condolence money and various insurance programs, housing measures such as company housing/dormitory and housing allowance, property accumulation support measures such as owned property accumulation savings and employee stock ownership association, welfare proxy service, a cafeteria plan, an employee cafeteria, retirement benefit plans, etc.

Note: With the exception of some systems, non-regular employees are also eligible.

● Sustaining stable labor-management relations

We have concluded a union shop agreement with the Kansai Electric Power Workers Union, and have set “company productivity increases accompanied by improved labor conditions” as a shared labor-management goal. Based on strong relationships of trust that we have constructed over our many years of history, we are building good labor-management relations. To keep up these relations, we continue to strive for mutual understanding by holding management panel discussions between labor and management as we operate business.

◆ Major opportunities for labor-management communication

Management panel discussions	Labor and management promote communication in the corporate management plan, etc. (held annually)
Management Council	Labor and management discuss important matters, such as reorganization (as needed)

◆ Correspondence between labor and management concerning employee transfer

Under the collective agreement, the Kansai Electric Power Co., Inc. and Kansai Transmission and Distribution, Inc. shall, when it is necessary due to business reasons, transfer their employees fairly in consideration of their intentions, living conditions, skills, etc. Especially when it is necessary to make a wide-ranging transfer, criteria for the transfer shall be discussed with the labor union.

● Tackling COVID-19

In order to prevent the spread of COVID-19 and maintain a safe and stable electricity and gas supply, the Group has set up a COVID-19 Response Headquarters and has been striving to restrict movement by promoting the adoption of telework. When commuting to work, we strictly follow rules regarding mask wearing from the viewpoint of infection prevention. We are also implementing measures to avoid crowding, such as maintaining enough space between desks in the office environment. In addition, as a measure to ensure the safety and health of employees and their families as well as to create an environment where they can work with peace of mind, we grant employees special leave to receive COVID-19 vaccination and are also introducing a workplace vaccination program to contribute to accelerating the speed of vaccination of society as a whole.

As it is expected to take time until the number of infections starts to decrease, we will strive to achieve both infection prevention and sustainable business activities by considering an internet-driven transformation of how we work.

● Relevant data

◆ Diversity and workstyle innovation

	2019/3	2020/3	2021/3	
Number of employees*3	18,884 (32,597)	18,141 (31,850)	17,739 (31,933)	
Average age*3	43.2	43.3	43.4	
Average length of service*3	22.4 years	22.5 years	22.4 years	
Average annual salary	7.91 million yen	7.99 million yen	8.36 million yen*2	
Rate of childrearing leave utilization among men*3	144%	109%	98%	
Rate of childrearing leave utilization among women*3	100%	100%	100%	
Number of days for childrearing leave utilization among men*3	8.5 days	6.8 days	8.3 days	
Rate of paid leave utilization	97.0%	97.1%	95.5%	
Total working hours	1910.3 hours/year	1873.8 hours/year	1908.0 hours/year	
Turnover headcount*3	149	148	112	
Turnover rate*3	0.73%	0.74%	0.58%	
Male turnover rate*3	0.66%	0.67%	0.52%	
Female turnover rate*3	1.67%	1.65%	1.24%	
By age group	Under 30 years old*3	1.82%	1.70%	1.40%
	30-49 years old*3	0.43%	0.46%	0.32%
	50 years old and over*3	0.65%	0.70%	0.56%
Ratio of workers with disabilities	2.5%	2.6%	2.6%	

	2019/4	2020/4	2021/4
Number of new hires*3*4	314	373	448

◆ Indexes related to female empowerment

	2019/3	2020/3	2021/3
Ratio of female employees*3	7.5%	7.7%	8.1%
	—	(12.5%)	(13.1%)
Number and ratio of female managers*3	112 / 2.1%	130 / 2.4%	136 / 2.6%
	—	(680 / 5.8%)	(726 / 6.2%)
Number and ratio of female senior managers*3	39 / 1.6%	47 / 1.9%	52 / 2.1%
	—	(113 / 2.1%)	(118 / 2.2%)
Average length of service for female employees*3	16.7 years	17.1 years	17.3 years
	—	(12.5 years)	(12.7 years)

	2019/4	2020/4	2021/4
Number and ratio of female hires*3*4	41 / 13%	51 / 14%	87 / 19%
	—	(161 / 21%)	(236 / 26%)
Number and ratio of female hires (office jobs)*3*4	18 / 42%	28 / 39%	53 / 47%
Number and ratio of female hires (technical jobs)*3*4	23 / 9%	23 / 8%	34 / 10%

*1 Figures in parentheses are consolidated figures from the Kansai Electric Power Co., Inc. and its subsidiaries.

*2 Figures from the Kansai Electric Power Co., Inc. (non-consolidated)

*3 Figures do not include transportation staff and medical staff.

*4 Figures reflect those employed by periodic recruitment.

Occupational Health and Safety



SOCIAL



Efforts to eliminate industrial accidents

Policy and Concept

About the Kansai Electric Power Group Code of Conduct for Safety

Based on the President's Declaration: "Ensuring safety is my mission, and the mission of the Company" and applying the lessons learned from the Mihama Nuclear Power Station Unit 3 accident, we are continuing with the implementation of safety efforts that put preserving the safety of every person involved in our Group's business activities first.

Inherent in the beliefs expressed in this declaration, we share "our beliefs about safety" as an everlasting group-wide principle to raise awareness of safety under the Kansai Electric Power Group Code of Conduct for Safety. Additionally, by practicing safe actions based on the Safe Action Declaration, we will steadily accumulate achievements in safety and cultivate an unwavering culture of safety.

System

Director responsible: Kazumitsu Takanishi (Executive Vice President) of the Kansai Electric Power Co., Inc.

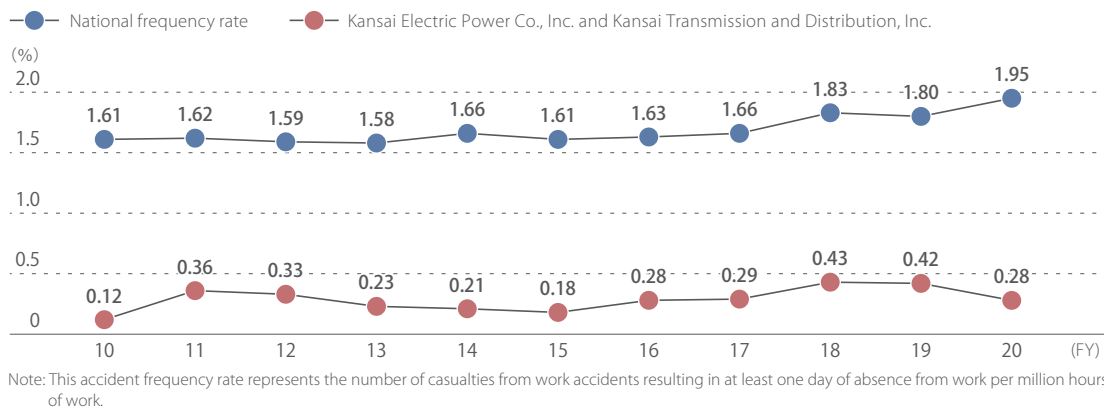
Deliberative body: Safety and Quality Board

Management office: Safety Management Group, Office of Human Resources and Safety Management of the Kansai Electric Power Co., Inc.

Goals

Preserve the safety of every person related with the Group and make Zero Accidents a reality.

Trend in accident frequency rate



Efforts

Fostering an unshakable group-wide safety culture

Based on the lessons from the Mihama Nuclear Power Station Unit 3 accident, we are continuing safety efforts that put preserving the safety of every person involved in the business activities of our Group first. We share a strong belief that "we will not allow misfortune to occur to the colleagues who work with us or their families." We also deepen information sharing and communication. By doing these and other things, we are working to cultivate a group-wide safety culture that never wavers.

In order to further advance group-wide efforts to prevent accidents, we are pushing ahead with Kansai Electric Power Safety Culture Area activities. Specifically, we are fostering mutual understanding and sharing knowledge on safety through various meeting structures, etc. across the Group. We are also working closely with our group companies, including subcontractors, based on a reward system to commend subcontractors for creative and ingenious safety activities.



SOCIAL



● PDCA of safety activities

To ensure safety for everyone related with our Group and achieve our unchanged goal, or “zero accidents,” we are working to maintain safe working environments and prevent accidents from occurring and reoccurring through activities that mobilize the capacities of our organization with the full participation of employees. Concretely, as steps to prevent recurrence of accidents we had in the past, we analyze and evaluate the details of accidents that occur each year, have discussions among relevant internal departments including the management, and prioritize items to address on a group-wide basis.

We will seek continuous improvement by running the PDCA cycle of safety activities in each fiscal year. We will also share prioritized items to address with our group companies, thereby further enhancing the effectiveness of safety activities.

◆ Prioritized items in safety activities for fiscal 2021

- ① Create a safe and secure working environment at each business site.
- ② Make it a habit to think safety and act safely based on danger prediction.
- ③ Promote safety activities based on bilateral communication with subcontractors, etc.
- ④ Practice safe driving behavior by all drivers and passengers as a unified effort of the workplace.

● Specific safety efforts

◆ Efforts in safety education and acquisition of knowledge from outside the company

To raise awareness of our employees and protect the colleagues of subcontractors and others, we provide education for each employee to practice autonomous safety activities. Besides that, we learn new things throughout our group companies in lectures and in training programs on safety led by external experts, thereby increasing the level of our Group’s safety activities.

As a result of these efforts, our accident frequency rate is lower than the national average.

◆ Bilateral communication with subcontractors and others

When the opportunity presents itself, our employees visit equipment construction/maintenance sites and are active in creating and enhancing opportunities to communicate with subcontractors, etc. so that we can deepen mutual understanding and promote safety activities together. By proactively facilitating bilateral communication, we are striving to raise safety awareness and reduce the risk of accidents.



Bilateral communication with subcontractors and others

◆ Thoroughly managing safe driving

For employees who drive cars, we have instituted our own Vehicle Operator Certification System, aiming for a safe driving level that is one step higher. After receiving education related to safe driving and practical training, they are given the vehicle operator certificate. We work to implement thorough and safe driving management by providing them with education and training periodically.



Thoroughly managing safe driving

● Relevant data

Policy		2019/3	2020/3	2021/3
Occupational Health and Safety Policy	Established	Kansai Electric Power Group Code of Conduct for Safety https://www.kepco.co.jp/energy_supply/supply/ichiisenshin/philosophy/chikai.html		
		Included in the Kansai Electric Power Group Code of Conduct https://www.kepco.co.jp/corporate/policy/charter/index.html		
		Included in the Health and Productivity Management Declaration https://www.kepco.co.jp/sustainability/society/working_style/working_01.html		
Accident frequency rate	Group companies*	0.43	0.42	0.28
		—	0.69	0.49
Number of fatal accidents		0	0	0

* Average values of three principal group companies undertaking major construction work have been adopted.

Human Capital Development

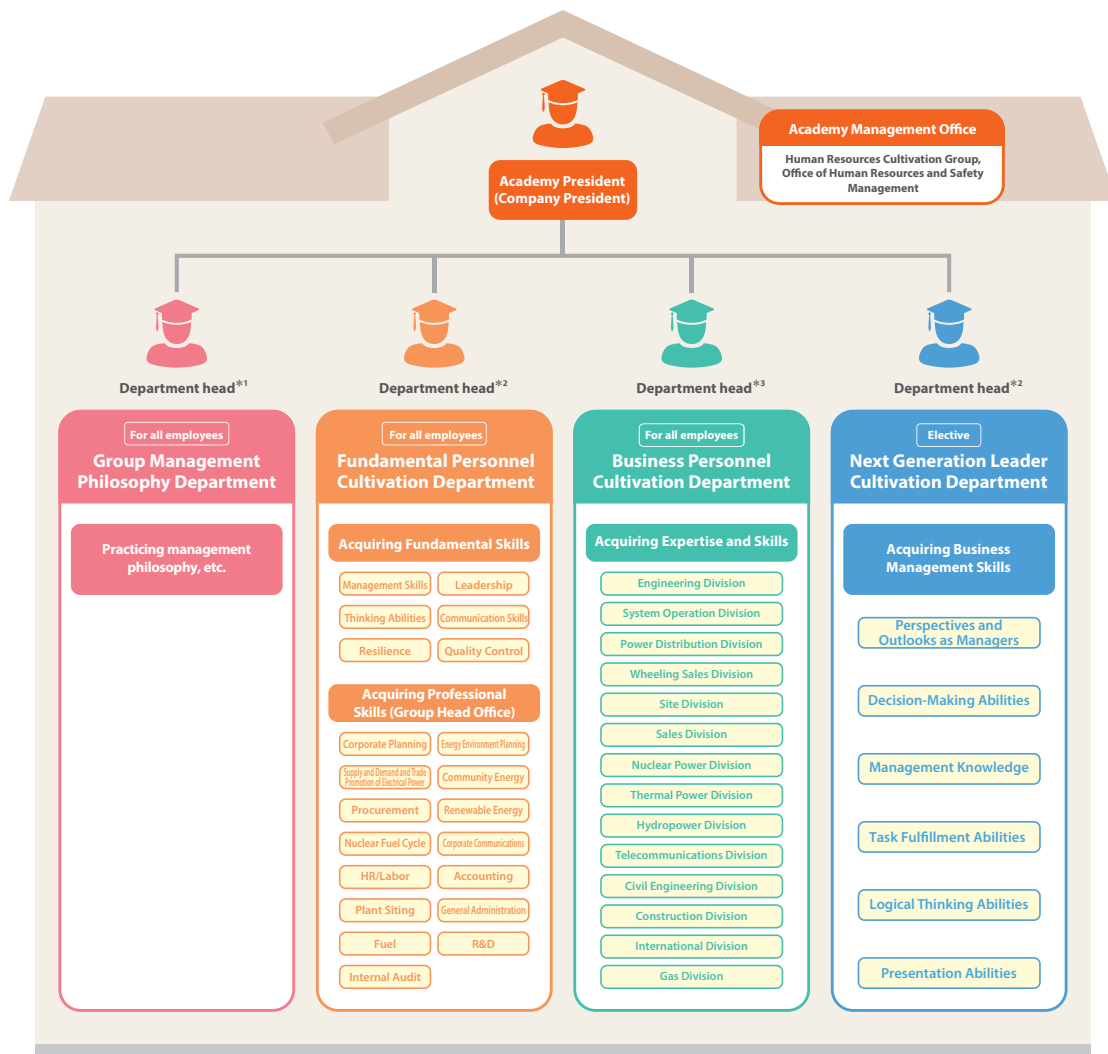


Development measures for "human capital" innovation

Policy and Concept

About the Kansai Electric Power Group Academy

We established the Kansai Electric Power Group Academy in 2018 and systematized our corporate training and education systems in order to actualize our Company belief that "developing human capital is the most important thing for prevailing in a severe competitive environment" along with our Group philosophy of "management that values people."



*1: Director, Office of Corporate Planning, *2: Director, Office of Human Resources and Safety Management, *3: Division Manager of Each Division and President of Kansai Transmission and Distribution, Inc.

Personnel development policies

At the Kansai Electric Power Group Academy, we will implement capability development measures to empower each employee to be dynamic in their work by willingly taking on challenges to grow even amid the changing working environment, so we can achieve high productivity, secure new revenue sources, and support "autonomous career development" for our employees. Specifically, we will practice personnel development measures to change awareness and behavior, which is necessary to achieve our management philosophy and medium-term management plan. Along with that, we will implement measures to enhance individual employees' strengths and improve or overcome challenges that require deeper understanding, ensure that expertise is handed down to the next generation, improve productivity, and create added value driven by digital technology.

Goals

The “human capital” that we seek

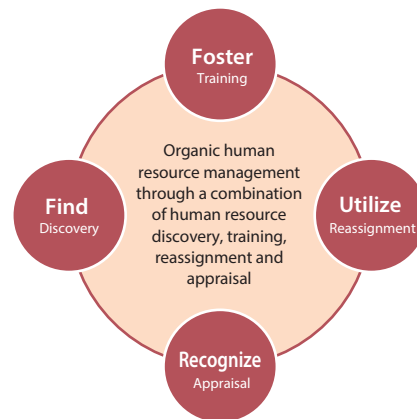
We have formulated “human capital” as the characteristics desirable in employees in order to achieve sustainable growth for the Group.



Efforts

Measures for “human capital” innovation

Recognizing that the source of the power to move forward with the initiatives set forth in the medium-term management plan is each and every employee, the Kansai Electric Power Group aims to create a virtuous cycle in which each employee plays an active role with willingness to grow and take on challenges while making the most of their diverse attributes. Their growth and achievements will eventually improve profitability and sustainable growth for our corporate organization. Specifically, we are working to maximize the success of all employees in various fields through a series of processes such as human resource discovery, training, reassignment and appraisal.



Adoption of an in-house application system (e-challenge system)

Supporting the independent career development of all individuals, we have implemented an in-house application system that allows employees to take on the challenges of diverse careers and fields. Based on high levels of motivation, they can exercise their abilities to their maximum extents even more than before.



		Objective	Career goal
Career challenges	Global business	Dramatic growth of international business	Career mainly in international business areas
	New business creation	Further promotion of innovations	Career mainly in new business areas
	Core group business	Further growth of group business	Career mainly in core group business areas
	Super Specialists (Data Scientist, Cyber Security Engineer, Digital Consulting)	Improvement of skills indispensable for future business operation	Highly specialized and specific career
	Renewable energy business	Dramatic growth of renewable energy business	Career mainly in renewable energy business area
Dual work challenges		Aiming for further growth through diverse work experience, in addition to their original work, participants take on another type of work (specific project work, etc.) during some of their working hours	

◆ Career design

As an initiative to support the career development of employees, we provide superiors with an opportunity to interview their subordinates once a year. The interviews are held based on a Career Design Sheet that describes each individual's strengths, challenges requiring deeper understanding, career plans, etc. Each employee's characteristics and career plan are shared with his/her superiors, and are also used for OJT and reassignment for the purpose of supporting our employees' career development.

◆ Independent career development support tool

In order to create an environment in which employees can think deeply about their own careers, gain awareness, and grow, we have published a Self-Design Book, a support tool for independent career development.

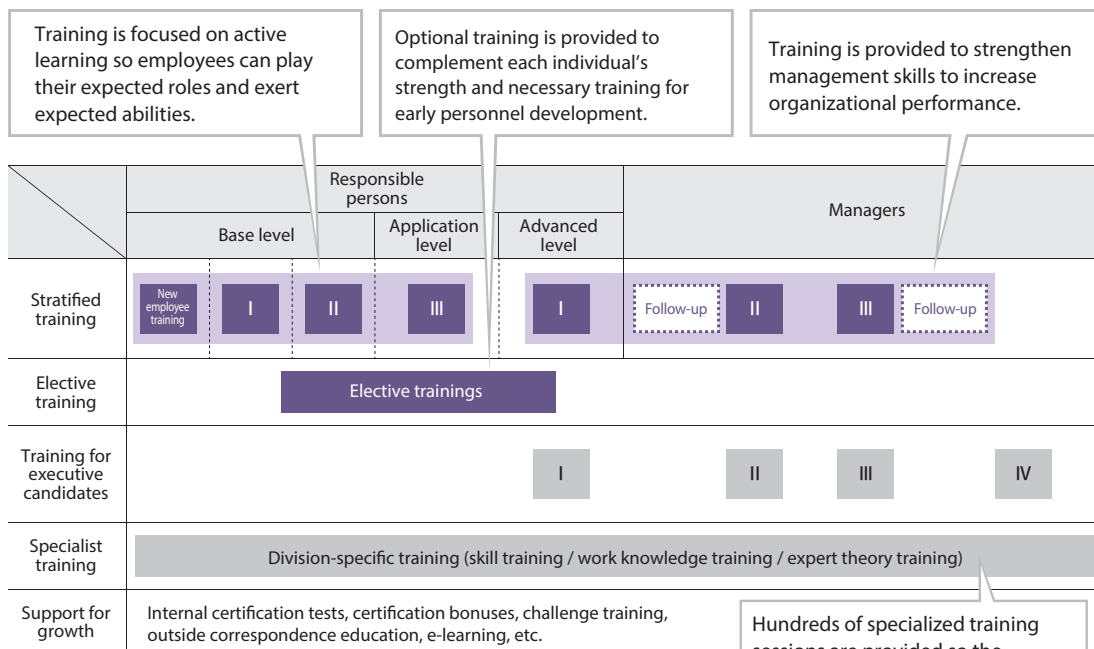
By reading this booklet, thinking over the content, and learning through various questions regarding "what you want to be, what you want to value, and how you should act as the environment changes toward the future," employees can receive hints on how to form their own careers.



Foster Training

As part of personnel development measures through the Kansai Electric Power Group Academy, we support employees who are looking to improve their abilities and advance in their careers by providing stratified training for early development, specialized training to enhance their business expertise, as well as an executive candidate development program. Moreover, with the personnel appraisal system and the in-house application system, our employees will have more willingness to grow and feel more motivated and rewarded.

◆ Our training and development systems



Training is focused on active learning so employees can play their expected roles and exert expected abilities.

Optional training is provided to complement each individual's strength and necessary training for early personnel development.

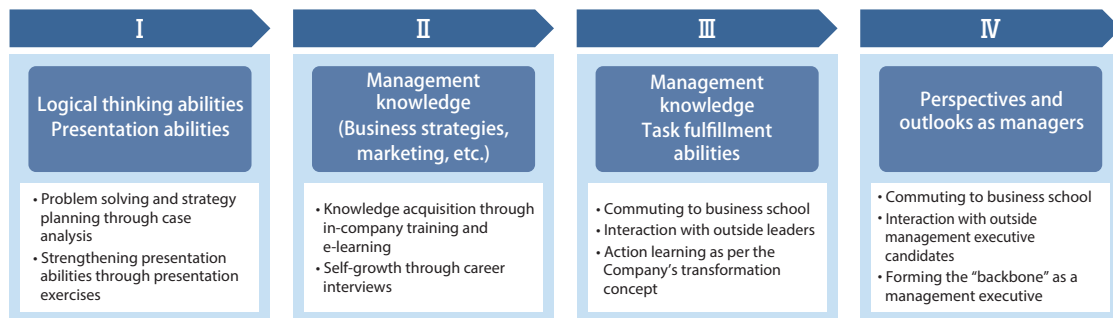
Training is provided to strengthen management skills to increase organizational performance.

Hundreds of specialized training sessions are provided so the expertise and skills will be improved and handed down. Each trainee's target and acquisition status of professional skills is clarified for their training in a planned manner.

Total number of training participants **30,547**

◆ Next generation leader development — Executive management candidate development

With the arrival of the “era of VUCA” and amid drastic changes in the environment surrounding the Group, we need to break away from prior precedents and cultivate early and systematically next-generation leaders who will drive innovation. In view of this, we are adopting step-by-step outside training programs for employees as a stretch opportunity to advance their careers. We are crossing conventional work divisions and incorporating interactions with different types of work as well as implementing curriculums that always link to business strategies.



◆ DX personnel development — Strengthening expertise that will be a source of competitiveness

For the realization of digital transformation (DX), we are developing DX personnel to advance efforts to increase productivity and generate added value utilizing digital technologies. Specifically, we are implementing on-the-job training (OJT) at K4 Digital Company and/or at each department, “data analysis and visualization training” intended for all departments, and similar programs.

◆ Support for self-growth

A variety of systems have been developed as an opportunity to motivate each employee to develop their abilities and make autonomous challenges.

Certification bonus system	A system to provide money gifts to employees who passed the company-designated national exams for the encouragement of acquiring qualifications highly related to their work (approx. 200 qualifications, up to 500,000 yen) • Increased amounts of gift money are provided to those who acquired the company-designated important qualifications early (maximum increase of up to 200,000 yen)
Challenge trainings	Application-based training to support employees who voluntarily strive to have a broader viewpoint in a wide range of fields, which is difficult in routine work A variety of courses provided in three categories: “hands-on/tour type,” “related to business at the Company,” and “qualification acquisition”
Outside correspondence education and e-learning	Broad range of outside correspondence education and e-learning provided, from business skills to cutting-edge IT skills that serve as growth opportunities to motivate employees to develop their abilities and autonomously take on the challenge of expanding their horizons

Recognize Appraisal

◆ Personnel appraisal system

We have put in place a mechanism to carefully assess each employee's “abilities” and “level of contribution” to our corporate performance and reflect those in their salaries, etc., so our employees will have more willingness to grow and feel even more motivated and rewarded.

Appraisal results are fed back from superiors to subordinates. In addition, communication opportunities for further growth are provided.

● Relevant data

	2019/3	2020/3	2021/3
Number of trainees (in total)	36,551	34,478	30,547
Hours spent in learning per employee	—	36.3 hours	37.6 hours
Total training costs	1,598 million yen	1,738 million yen	1,540 million yen
Training cost per employee	—	86,300 yen	85,800 yen

Responsibilities Toward Customers

SOCIAL



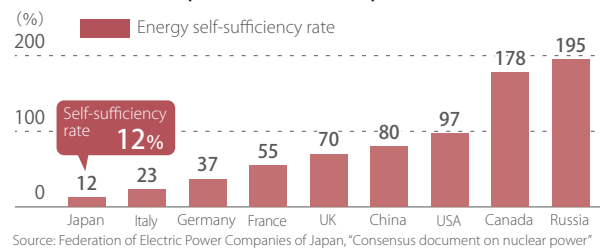
Securing a stable supply of energy

Policy and Concept

Energy risks faced by Japan

Japan's energy self-sufficiency rate is around 12%, including nuclear power generation, which is a very low value compared to major countries in the world. For most of its fossil fuel needs, Japan must rely on imports. Since energy resources on the earth are not inexhaustible, stably securing energy resources is a top-priority issue for Japan. For continued stable supply of energy in the future, it is vital to combine various power generation methods in a well-balanced manner, while not relying on only a single power generation method.

Energy self-sufficiency rates of major countries (for 2018, except FY 2019 for Japan)



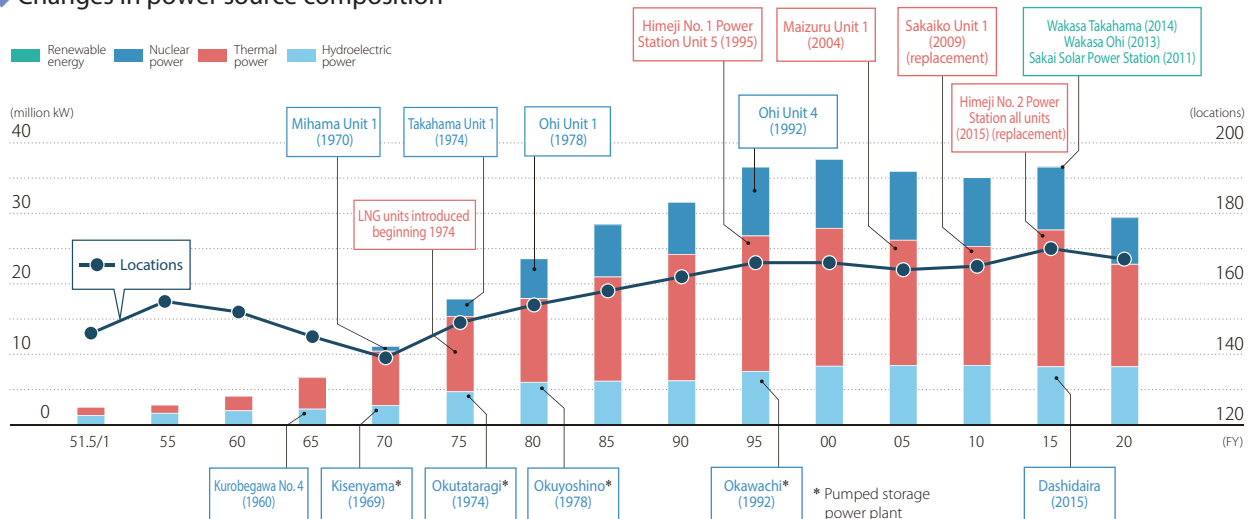
Decarbonization drive

The Japanese government pledged in October 2020 to achieve carbon neutrality by 2050. Moreover, at the climate change summit in April 2021, it announced a greenhouse gas reduction target of 46% below fiscal 2013 levels by fiscal 2030, and the Strategic Energy Plan is being reviewed to achieve these targets.

Facility configuration based on S+3E

Under these circumstances, with priority given to Safety (S), we are committed to seeking optimum, well-balanced combination of our power sources to simultaneously achieve 3E, namely Energy security, Economy, and Environmental conservation. Specific measures include introducing renewable energy and using nuclear energy both to the maximum, as well as decarbonizing thermal power generation.

Changes in power source composition



Goals

On the basis of our Zero Carbon Vision 2050, with priority given to safety, we are committed to decarbonizing all of our power generation systems, optimizing the combination of power sources to increase Japan's energy self-sufficiency, thereby stabilizing and improving the cost efficiency of energy supplies. Specific measures include introducing renewable energy and using nuclear energy, using both to their maximum potential, as well as decarbonizing thermal power generation.

Efforts

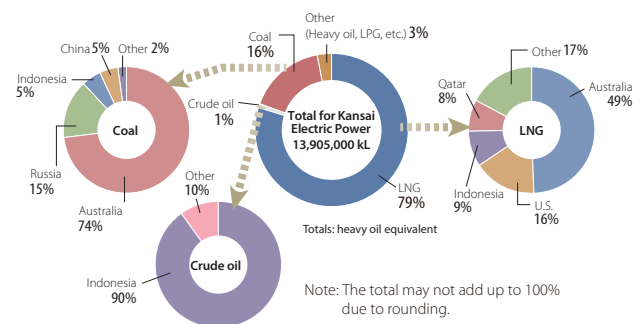
Approach for stable fuel procurement

We place a premium on stable, economically flexible procurement of thermal power generation fuel.

We are thus diversifying procurement sources, offering flexible pricing options and taking part in the entire LNG value chain from procurement to receiving, including upstream operations (stake acquisition) and middle-stream operations (transportation), encompassing a wide range of businesses.

These efforts are designed to ensure fuel procurement, better meet fluctuating power demand in a flexible manner, and improve overall cost efficiency.

Our fuel procurement in fiscal 2020



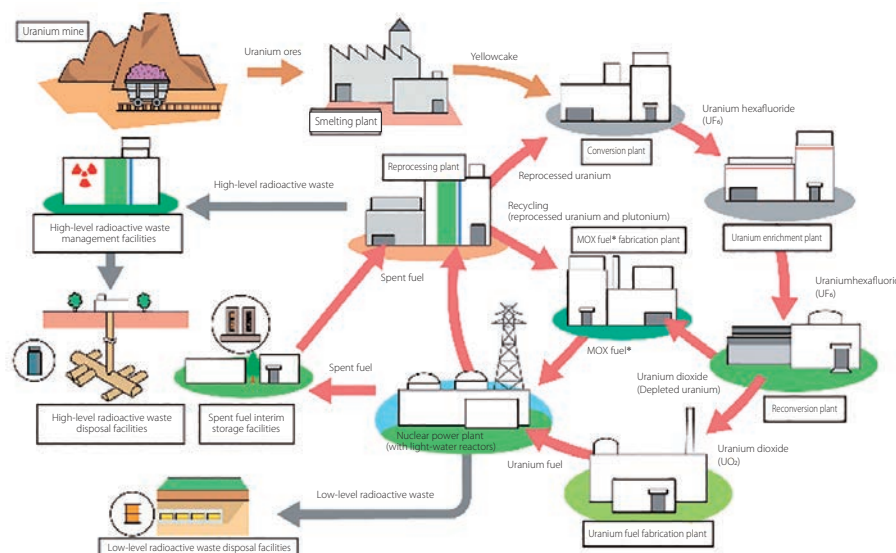
Enhanced spot trading for agile LNG procurement and sales



In an effort to deal with power demand fluctuations, KE Fuel Trading Singapore Pte. Ltd., which was established in April 2017 to secure procurement of LNG and expand our sales network, plays a pivotal role in extending our information gathering network based in Singapore, the LNG trading hub in the Asia Pacific region. The role of KE Fuel Trading Singapore includes timely gathering of information such as spot LNG trading and promotion and improvement of our flexible LNG procurement/sales systems.

Developing a full-scale nuclear fuel cycle

Uranium, a fuel for nuclear power generation, is produced in politically stable nations, which enables a stable supply. It can also be a “semi-domestic energy resource” mainly because a small amount of uranium is required for long-term power generation and spent fuel can be reprocessed and used again as fuel. Promotion of the “nuclear fuel cycle,” a cycle of re-using uranium and plutonium out of fuels used at nuclear power plants, is a practical way to effectively use energy resources and secure stable energy for Japan, a resource-poor country.



* MOX (mixed oxide) fuel: Plutonium mixed with depleted uranium Source: “Nuclear Power and Energy Drawings” (Japan Atomic Energy Relations Organization)

Interim storage facility

Spent fuels are stored in a spent fuel pool inside power stations for a certain period of time and then transported to a reprocessing plant. In case the pool is filled to capacity, the power station cannot be operated. For this reason, spent fuels have to be taken out in a planned manner. Installation of an interim storage facility, in which spent fuels are temporarily stored, enables the stable operation of power plants into the future. With the “Plan to promote measures for spent fuel” set up in 2015, we are working on selecting the candidate sites for interim storage facilities outside Fukui Prefecture, to be finalized by the end of 2023 for planned commencement around 2030.

Initiatives prioritizing safety at nuclear power plants

To prevent the lessons of the Mihama Nuclear Power Station Unit 3 accident from fading away

■ Policy and Concept

On August 9, 2004, an accident involving the rupture of secondary system piping occurred at Mihama Nuclear Power Station Unit 3. Based on the President's Declaration "Ensuring safety is my mission, and the mission of the Company," we have strictly implemented recurrence-prevention measures, with a firm determination that we shall never cause such accidents. The Nuclear Power Division has established Five Basic Principles as preventive measures that form part of our quality policy concerning the operation of nuclear power businesses with safety as the top priority. These measures are revised as necessary for safety improvement purposes. Making every August 9th our "Safety Vow Day," every employee observes a moment of silence. We are working to cultivate a safety culture in order to implement business management with safety as the top priority and prevent the lessons of the Mihama Nuclear Power Station Unit 3 accident from fading.

◆ Quality policy concerning the operation of nuclear power businesses with safety as the top priority

1. We will prioritize safety above all.
2. We will positively invest resources for safety purposes.
3. We will fully recognize the characteristics of nuclear power and continue our effort in reducing risks.
4. We will put our endeavor to recover the trust of plant-hosting communities and the whole country by further pushing ahead with the communication with them.
5. We will objectively assess our effort toward safety.

■ Goals

Give top priority to safety in business operations, based on lessons learned from the accident at Mihama Nuclear Power Station Unit 3.

Efforts

● “Safety Vow Day”

- A stone memorial was erected in the premises of the Mihama Nuclear Power Station with a pledge not to repeat similar accidents.
- All employees shall commemorate the victims of the accident with a moment of silence every year on August 9 at 15:22 (the time of the accident) with each individual renewing his/her determination to give top priority to safety.
- The President and others renew vows of safety and observe a moment of silence before the stone memorial every year.
- All employees review their Conduct Cards on which they have written their own safe conduct oaths.

● Communication between management and front-line workers

All offices are visited by the president while executives (including those of other divisions) engage in face-to-face discussions with power station staff. It is an opportunity for front-line workers to communicate their opinions to management.

● Improved communication with manufacturers and subcontractors

Continuous improvements are made through interactive communication to ensure the safe operation of nuclear power plants as well as strengthening the cooperative relationships we have with manufacturers and subcontractors. Opinions collected through questionnaires contribute to developing our safety culture, identifying unsafe operational practices in nuclear power plants and improving the work environment.

● Door-to-door visits with local residents

Our employees, including the Director of the Nuclear Power Division, visit each household in communities where our power plants are located (towns of Mihama, Ohi and Takahama in Fukui Prefecture) to engage in mutual dialogue.

● In-house training

Tailor-made training courses are provided to all employees, from new recruits to newly-appointed managers, to brief them on the accident at Mihama Nuclear Power Station Unit 3 and help them learn lessons from it.



Commitment to Enhancing Nuclear Safety

Policy and Concept

In response to the accident at the Tokyo Electric Power Fukushima Daiichi Nuclear Power Station, we established our Commitment to Enhancing Nuclear Safety, which clearly states our ideals about nuclear power safety, as a company proclamation that is one of our most important company rules. The company proclamation underlines our determination to constantly improve safety in nuclear power generation, whereby all executives and employees fully understand the characteristics and risks of nuclear power generation and always remind themselves of the potential magnitude of an accident, with the President playing a leading role in making company-wide efforts to protect local communities, society and environment.

◆ <Composition and summary>

Preface	Every one of us shall remember the lessons learned from the Fukushima-Daiichi nuclear accident and ceaselessly strive to enhance nuclear safety to protect the people not only in the plant-hosting communities but also the whole country, and to preserve the environment.
Characteristics of nuclear power generation and risk awareness	Nuclear power generation has superior characteristics in terms of energy security, prevention of global warming and economic efficiency, and is an essential power source for the future. On the other hand, nuclear power generation has risks of radiation exposure and environmental contamination. Every one of us shall always bear in mind that once a severe accident happens due to lack of proper management, it could cause enormous damage to the people and the environment.
Continuous removal/reduction of risk	To enhance nuclear safety, we shall fully understand the characteristics and risks of nuclear power generation and continually remove or reduce such risks while identifying and evaluating them, never believing at any moment that we have reached the goal of ensuring safety. These efforts shall be conducted at each level of the Defense-in-Depth.
Development of safety culture	Safety culture is the basis for continuously removing or reducing risks. Since the accident of Mihama Unit No. 3, we have been reviewing and improving our safety culture, and we shall develop such safety culture. To this end, we shall always be ready to question anything, learn from others and listen to the voices of society and discuss issues uninhibitedly while respecting diverse opinions with further efforts.
Commitment to enhancing nuclear safety	Enhancing nuclear safety is the overriding priority in the company. It is also important to promote two-way communications with the people in the plant-hosting communities and the whole country, and to share common perceptions on nuclear safety. Under the President's leadership, every one of us shall work together to tirelessly enhance nuclear safety.

Goals

Every one of us shall remember the lessons learned from the Fukushima Daiichi nuclear accident and ceaselessly strive to enhance nuclear safety to protect the people not only in the plant-hosting communities but also the whole country, and to preserve the environment.

Efforts

● In-house training

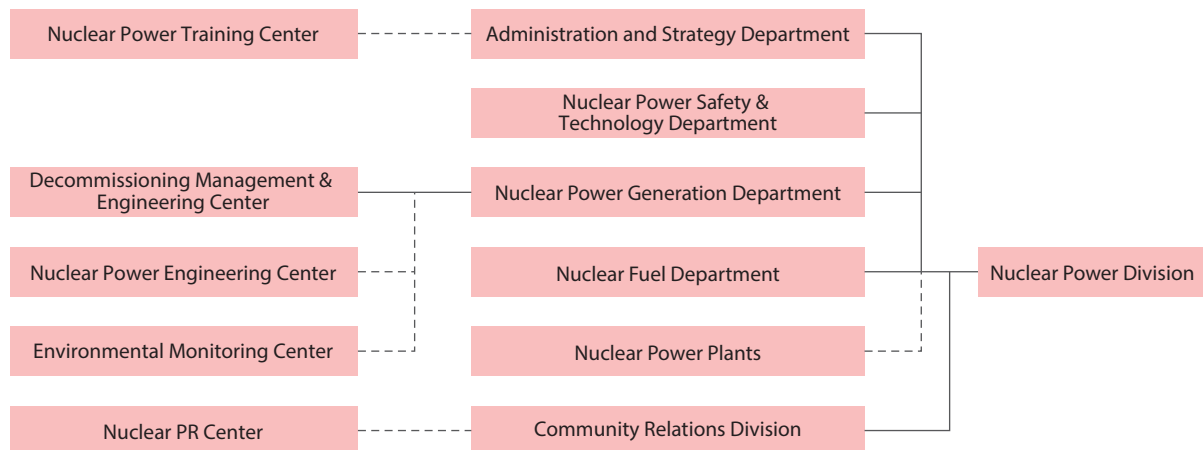
- A series of e-learning training courses are in place to help all employees understand our Commitment to Enhancing Nuclear Safety.
- Each department voluntarily holds group discussions while managers communicate safety messages to raise safety awareness among employees.

Safe and stable operation of power plants

Policy and Concept

Take all possible measures to safely and carefully operate and maintain nuclear power plants, underlining our determination to constantly improve their safety.

System



Goals

We will continue to safely and carefully operate and maintain our nuclear power plants, thereby ensuring the safe and stable operation of Units 3 and 4 of the Takahama Nuclear Power Station and the Ohi Nuclear Power Station, and the Mihama Nuclear Power Station Unit 3, each of which has resumed operations.

Efforts

● Key safety measures

◆ Careful inspection and examination

In an effort to ensure the safe and stable operation of our nuclear power plants, facilities and instrumentation are regularly inspected and shut down in accordance with the relevant laws and regulations, all of which is intended to protect shop-floor employees and maintenance personnel.

- Data on regular inspection results and facility conditions is reviewed to determine the content and frequency of inspections according to the characteristics of each facility. This approach serves as the basis of our inspection and maintenance protocol.

◆ Education and training of plant employees (operators, maintenance personnel, etc.)

Improving the technical skills of shop-floor employees (operators, maintenance personnel, etc.) is key to the safe and stable operation of nuclear power plants. In-house and external training is conducted on a regular basis.

- OJT is conducted through routine practice.
- Operators regularly simulate normal operating procedures and practice troubleshooting.
- Maintenance personnel are trained on inspection work at the Nuclear Power Training Center, using the same instrumentation one would find at a power plant.

◆ Five-layered wall structure to contain radioactive substances

Uranium nuclear fission at nuclear power plants produces radioactive substances, which are contained in a building with a five-layered wall structure (pellets, cladding tubes, pressure vessels, containment vessels and external shielding walls).

◆ In-depth defense system

Nuclear power plants are designed to prevent malfunctions and operational errors when, in the event of failure, reactors are immediately shut down, followed by the cooling and containment of radioactive substances.

◆ Reactor cooling system

Following a shutdown, residual heat removal pumps are activated to operate coolers, which cool the primary system water. In the event of a complete power loss, auxiliary feed pumps powered by steam-driven turbines feed water to steam generators, which cool the primary system water.

● Safety measures to deal with various risks

◆ Toward improved safety and confidence

Learning lessons from the accident at the Tokyo Electric Power Fukushima Daiichi Nuclear Power Station, the new regulatory requirements provide measures against earthquakes and tsunamis, with design standards revised to prevent similar accidents; taking into account the risks of natural disasters in Japan, these standards cover various other risks such as volcanic eruptions, tornadoes and forest fires. Complying with these new regulatory requirements, we are renovating our licensed power plants to protect them against severe accidents, earthquakes, tsunamis, tornadoes and fires. At the same time, voluntary efforts are underway to improve plant safety.

● Improving technical capabilities and systems in the event of a severe accident

◆ Conducting nuclear power disaster response training in collaboration with central and local government

Disaster response training programs are underway at our nuclear power plants, the Nuclear Power Division and the head office, some of which are conducted in collaboration with central and local government, manufacturers and subcontractors. Specifically, comprehensive training programs are conducted without prior notice to participants, simulating severe conditions, where emergency response capabilities are tested for improvement purposes. This includes the feasibility of post-accident remedial measures using water trucks and alternative portable low-pressure water pumps - which is already part of routine drill exercises at each of our power plants - and the examination of the communication systems in place for each task force.

◆ Education and training tailor-made for each role and responsibility

Supervisors and operators undergo repeated education and training according to their roles and responsibilities, in how to respond to a severe accident. This is to improve their emergency response capabilities and technical skills. Contents and target employees of this education and training were made more diversified than those at the time right after the accident at the Tokyo Electric Power Fukushima Daiichi Nuclear Power Station. In fact, the total number of trainees training on plant behavior during a severe accident has increased significantly, as has the frequency of training on emergency response procedures.

● Creating a response system

◆ Improving the out-of-hours response system

Emergency personnel stand by around the clock at Mihama, Takahama, and Ohi Nuclear Power Stations, taking into account findings learned from the accident at the Tokyo Electric Power Fukushima Daiichi Nuclear Power Station. They are in charge of the initial response to an incident, where resources are mobilized within six hours after an accident has been declared.

◆ Improving the Nuclear Emergency Assistance Center

The Nuclear Emergency Assistance Center (at Mihama, Fukui Prefecture) was jointly established by nuclear operators and went into full-scale operation in December 2016. Here remote-controlled equipment and instruments have been upgraded for flexible, advanced disaster response while emergency personnel of respective nuclear operators are trained. In the event of an emergency, equipment and instruments can be transported to a disaster site, with remote-controlled assistance provided to jointly minimize radiation exposure of shop-floor employees.

◆ Cooperation between nuclear operators

Nuclear operators are expanding their cooperative relationship to further improve the safety and reliability of their operations.

● Mutual cooperation agreement between five electric power companies in western Japan

Our Company, the Chugoku Electric Power, Shikoku Electric Power and Kyushu Electric Power entered into a cooperative agreement on nuclear power generation on April 22, 2016, and they were joined in the agreement by Hokuriku Electric Power on August 5, 2016. This agreement is designed to improve preparedness and emergency responses to nuclear power disasters by providing mutual assistance, equipment, instruments, etc., as well as taking advantage of their geographical proximity. There is also agreement to cooperate in conducting decommissioning in a safe, well-organized manner and setting up special facilities to deal with designated severe accidents, all intended to further improve the safety and reliability of nuclear power generation.

In fiscal 2020 attachments to connect our electric facilities to power supply vehicles owned by four electric power companies in western Japan were made and provided to secure multiple power sources for emergency situations at power plants.

● Technical cooperation agreement between four electric power companies with pressurized water reactors (PWRs)

Four electric power companies operating nuclear power plants equipped with similar PWRs (Hokkaido Electric Power, Kansai Electric Power, Shikoku Electric Power and Kyushu Electric Power) entered into a technical cooperation agreement on October 19, 2016. With this agreement in place, the four companies, each of which operates PWRs, exchange their technical knowledge and experience, where they share information on power plant operation management in other countries and examine new technologies to further improve reactor safety.

● Supporting municipal evacuation plans

◆ Efforts toward nuclear emergency preparedness

While a variety of safety measures are in place at our nuclear power plants, we cooperate with central and local government in minimizing impacts on local residents in the event of a nuclear disaster involving the massive release of radioactive substances. These activities are in line with relevant laws including the Disaster Countermeasures Basic Act and the Act on Special Measures Concerning Nuclear Emergency Preparedness. Nuclear operators are and will be making full efforts to ensure nuclear safety and prevent disasters in cooperation with central and local government.

◆ Communication in the event of a nuclear disaster

In the event of a nuclear disaster, we as nuclear power plant operators shall immediately report to the relevant authorities at all levels; all the parties concerned shall get together at the Offsite Center to share information and determine protective measures for local residents as the situation demands, while the nuclear disaster task force of each municipality communicates the center's decisions to local residents.

◆ Supporting nuclear disaster victims

● Providing transportation for evacuation

We shall mobilize all resources available to help local residents evacuate; this includes the provision of evacuation supervisors and transportation such as employee shuttle buses, welfare vehicles and contracted helicopters and vessels.

● Assisting and managing testing during an evacuation

At the request of municipalities, we shall assist and manage testing at the time of evacuation, targeting all those evacuated from the Urgent Protective action planning Zone or UPZ. Inspectors shall be provided along with equipment such as contamination survey meters and Tyvek suits.

● In order to increase the number of inspectors for evacuation (to secure about 3000 inspectors), agreements between nuclear power plant operators were revised in March 2021.

● Providing necessities

We provide necessities such as food and blankets as well as radiation protection facilities.

Over 40 years of operation

Policy and Concept

Nuclear power – a well-balanced energy source contributing to 3E (Energy security, Economy and Energy conservation) – is essential in resource-poor Japan. As a result, nuclear power generation should be maintained at a certain level to ensure energy security and develop technical/human resources, whereby accident-proof nuclear power plants can be operated for over 40 year-spans. Therefore, we will be making the most of our nuclear power plants, placing a premium on their safe operation.

Goals

We take all measures to operate and maintain the over 40-year-old Mihama Nuclear Power Station Unit 3, which was resumed operations, for keeping safe and stable operation with a continuous sense of safety and caution. In addition, with responsible construction management in place and safety prioritized, we are committed to improving the safety of our nuclear power plants while thoroughly reviewing our current construction plans. Moreover, we aim to communicate the importance and safety of operating nuclear power plants for over 40 years to local communities and residents.

Efforts

Our Company has always maintained the durability of our nuclear power plant facilities by continuously implementing maintenance and management, including regular inspections and planned equipment replacements. At the time of our application for an operation period extension for 40 years from the starting month of operation, in accordance with the law, for Takahama Nuclear Power Station Units 1 and 2 and Mihama Nuclear Power Station Unit 3, special inspections were carried out for reactor vessels and other equipment. In addition, technical evaluations of degradation from age were carried out, confirming that the durability of important facilities for safety could be assured even for an operation period of 60 years. After these examinations, we received operation period extension approvals from the Nuclear Regulation Authority for both power stations. Safety improvement measures at Mihama Nuclear Power Station Unit 3 and Takahama Nuclear Power Station Unit 1 have been completed, and those for Takahama Nuclear Power Station Unit 2 are underway, with top priority given to safety. In addition, we are communicating face-to-face with stakeholders through online symposiums, briefing sessions and lectures on demand to help them better understand over 40 years of operation at our nuclear power plants. We will also continue to proactively communicate with the public as well as communities near the plants.



Takahama Nuclear Power Station Units 1 and 2 containment vessel upper shield installation work



Online symposium

Reliable decommissioning processes

Policy and Concept

- We comply with the relevant laws and regulations on decommissioning, while giving top priority to safety in order to minimize exposure, reduce radioactive waste and properly manage security measures.
- We have designed safe decommissioning procedures and processes, incorporating effective decontamination techniques, remote-controlled equipment and measures to prevent the spread of contamination – all intended to minimize the exposure of those engaged in radiation-related work, strictly complying with statutory dose limits. In addition, a safe storage period is set for zones with relatively high radiation levels, taking into account the attenuation of radioactivity.
- We will continue to work on a series of measures for safe decommissioning, environmental conservation and regional development, according to the Agreement on Nuclear Power Plant Decommissioning, which was signed with Fukui Prefecture, Mihama Town and Ohi Town.

Goals

● Securing human and environmental safety

With safety prioritized, we will focus on minimizing exposure and radioactive waste as well as properly managing security measures.

● Designing safe decommissioning procedures and processes

We will design safe decommissioning procedures and processes, incorporating effective decontamination techniques, remote-controlled equipment and measures to prevent the spread of contamination, as well as operating waste disposal facilities to minimize the exposure of neighborhood residents and those engaged in radiation-related work.

● Foolproof system

The Decommissioning Management & Engineering Center (which was established in June 2015 within the Nuclear Power Division) cooperates with subcontractors in decommissioning nuclear power plants in a safe and foolproof manner.

● Activities according to the Agreement on Nuclear Power Plant Decommissioning

We will continue to work on a series of measures for safe decommissioning, environmental conservation and regional development.

Efforts

● Radioactive waste treatment and disposal

◆ Solid radioactive waste treatment

Non-radioactive general waste accounts for about 97% of decommissioning waste while radioactive waste is disposed of at designated facilities prior to completion of decommissioning in accordance with its radioactive level.

Meanwhile, waste that does not need to be treated as radioactive waste (clearance) is recycled as much as possible, following approval by the government.

◆ Treatment of gaseous and liquid radioactive waste

Gaseous and liquid radioactive waste is properly treated and released into the environment as is the case during regular plant operations, with strict monitoring in place.

● Decommissioning with safety prioritized

Decommissioning is conducted in four stages, which all together takes a total of about 30 years. While Stage 1 (dismantling) is underway, proper measures are in place for safe decommissioning.

◆ Decommissioning underway at Mihama Nuclear Power Station Units 1 and 2

○ Dismantling of equipment, etc. in the turbine buildings

Dismantling of contamination-free equipment, etc. is underway at the turbine buildings (items that may serve as obstacles to the dismantling process such as piping, frames and other small equipment) in addition to large equipment such as turbines, condensers and deaerators.

○ Transportation of new fuel

New fuel (unused fuel assembly) kept in storage vaults or spent fuel pits is being shipped in transportation casks for processing at fuel-processing plants at home and abroad.

◆ Decommissioning underway at Ohi Nuclear Power Station Units 1 and 2

○ System decontamination

Chemicals will be used to remove radioactive substances attached to the inner surfaces of equipment and piping – a process is underway to minimize the exposure of workers and facilitate dismantling.

○ Dismantling of equipment, etc. in the turbine buildings

Dismantling of contamination-free equipment, etc. is underway at the turbine buildings (items that may serve as obstacles to the dismantling process such as piping, frames and other small equipment) in addition to large equipment such as turbines and moisture separator heaters.

● Activities as a pioneer of decommissioning

◆ Japan's first decontamination of a pressurized water reactor (PWR) system

The system decontamination procedure underway at Mihama Nuclear Power Station Units 1 and 2 is unprecedented, involving the decommissioning of pressurized water reactors (PWRs), which requires advanced and special techniques. Therefore, any and all literature on system decontamination and plant manufacturer expertise were extensively surveyed from sources both home and overseas from the perspectives of "foolproof decontamination" and "reduction of waste produced by decontamination."

This has led to cooperation with overseas manufacturers with proven track records in decontamination and with domestic manufacturers producing the same equipment as those used in Mihama Nuclear Power Station Units 1 and 2 (and hence well-versed in all aspects of the station). As a result, as originally planned more than 90% of the radiation has been removed, with safety prioritized.

◆ Learning from the world

The work at Mihama Nuclear Power Station Units 1 and 2 is expected to pioneer the decommissioning of pressurized water reactors (PWRs) while research on decommissioning is underway in partnership with universities and the Wakasa Wan Energy Research Center. In addition, information sharing agreements are in place with nuclear operators in US, France, Spain and South Korea, etc. on many aspects of nuclear power generation (including decommissioning) to learn from safety improvement measures in these countries.

● Cooperation with nuclear operators in Japan

We signed an agreement with Hokuriku Electric Power, Chugoku Electric Power, Shikoku Electric Power and Kyushu Electric Power on cooperation across nuclear power businesses to facilitate safe decommissioning including reviewing techniques and procurement for large-scale decommissioning, information sharing on decommissioning processes, etc.

◆ Review of techniques and procurement for large-scale decommissioning

Measures such as joint material procurement are underway for safety and efficiency improvement purposes, according to the schedule of large-scale decommissioning projects at each power company including the inspection of the reactor interior, etc.

◆ Information sharing on decommissioning processes

The status of decommissioning projects at each power company is mutually monitored to facilitate safe decommissioning while information on expertise, best practices and concerns in other countries are shared.

● Local business development and employment promotion

According to the Agreement on Nuclear Power Plant Decommissioning (which was signed with Fukui Prefecture and Mihama Town on February 10, 2016, and with Ohi Town on November 22, 2018), the timing and procedures for decommissioning are being planned and announced, based on coordination with local businesses and employment promotion policies related to the decommissioning work.

◆ Information sharing for each decommissioning process

In cooperation with the Wakasa Wan Energy Research Center, contractors and subcontractors share information on decommissioning processes to encourage the participation of local businesses according to their technical capabilities.

○ Information sharing, implemented three times for Mihama Nuclear Power Station Units 1 and 2 (on March 2017, January 2018 and January 2019)

○ Information sharing, implemented once for Ohi Nuclear Power Station Units 1 and 2 (on March 2020)

◆ Research with local businesses

Research on decommissioning is underway with local businesses and other stakeholders to address and solve technical challenges, thereby streamlining decommissioning processes and improving their reliability. At the same time, assistance is provided to local businesses committed to developing new techniques to aid with decommissioning.

○ Four techniques were adopted in fiscal 2016, two in fiscal 2017, one in fiscal 2018, two in fiscal 2019 and two in fiscal 2020.

◆ Human resources development for decommissioning

Guidance on decommissioning, lectures on relevant techniques, study tours and first-hand experience programs are provided in cooperation with the Wakasa Wan Energy Research Center.

○ Conducted 13 times in total between fiscal 2016 and 2020.

Voluntary efforts to enhance nuclear safety

Policy and Concept

Learning lessons from the accident at Mihama Nuclear Power Plant Unit 3, we place a premium on nuclear safety. Specifically, the accident at Tokyo Electric Power Fukushima Daiichi Nuclear Power Station made us aware that our understanding and preparedness for risks unique to nuclear power generation were not necessarily sufficient. We, therefore, established a roadmap to “step-up voluntary/continuous efforts to improve nuclear safety,” based on which various measures are being implemented.

Goals

Efforts are underway to realize a nuclear safety ideal, which translates into development and implementation of a framework for voluntary/continuous safety improvement measures as well as incorporating external knowledge for further improvement, in accordance with our “Commitment to Enhancing Nuclear Safety.”

Efforts

● Communication and standardization of a philosophy, giving top priority to safety

◆ Sharing a philosophy of giving top priority to safety

- Management takes the lead in communicating our philosophy of giving top priority to safety.
- Members in management visit frontline workplaces in the power plants, etc. to communicate with plant employees and subcontractors, stressing the importance of improving safety.
- A company-wide proclamation: “Commitment to Enhancing Nuclear Safety” has been adjusted, communicated and standardized at workplaces.
- Group discussions and workshops are held, involving case studies relating to the proclamation.
- Internal communication tools are in place, such as a calendar proclaiming our commitment.

● Safety improvement activities

◆ Promoting safety improvement measures

- Large-scale safety renovations are underway at Takahama Nuclear Power Station Unit 2 toward over 40 years of safe operation.
- Safety renovation completed: Seawater tunnels were bored through solid ground to improve earthquake resistance, with existing tunnels replaced.
- Voluntary safety improvement measures are underway, in addition to new regulatory requirements.
- Water trucks, which replace fire pumps for emergency cooling of reactor cores, etc., are deployed at Takahama Nuclear Power Station Units 3 and 4 to quickly pour water and save on manpower.

◆ Boosting the accident response capacity

- Our accident response capacity is improving to deal with possible nuclear disasters.
- Comprehensive disaster drills are conducted at all nuclear power plants.
- As measures against severe accidents beyond design basis, assuming extreme conditions such as injuries among emergency responders, unscripted drills are regularly conducted.
- With timely and accurate accident remedial measures in place to prevent the spread and expansion of damage following an accident, continuous improvements are made, based on achievements made in previous drills.

<Key features of the drill>

Confirmed that disaster mitigation programs at new emergency response locations are conducted as planned.

- We have improved our facilities and optimized their layouts in the large-space emergency response locations, and checked to confirm in the drills that we can facilitate activities such as information gathering and strategical review (at Ohi Nuclear Power Station and Mihama Nuclear Power Station).
- We are working with five power companies* and affiliates in western Japan to better deal with nuclear disasters.
- In addition to various power supply facilities complying with new regulatory standards, attachments are made and deployed to connect to other companies’ power supply vehicles, a means to diversify power sources.
- A special assignment team (SAT) consisting of group companies’ employees is in place to respond to severe accidents 24/7, working in cooperation with our employees (Takahama Nuclear Power Station).

* The Chugoku Electric Power Co., Inc., Shikoku Electric Power Co., Inc., and Kyushu Electric Power Co., Inc., Hokuriku Electric Power Company, and our Company

● Developing and improving systems to manage risks, etc.

◆ Continuously improving our risk management system

- Learning lessons from industrial accidents that took place last year in addition to those that occurred in the past*, we are stepping up our risk management efforts to prevent accidents and respond to disasters.
- Risk review meetings are held as needed to discuss risks involved in decommissioning, etc. and to develop countermeasures
- Efforts to further prevent industrial accidents
- As COVID-19 cases were reported at our power plants, we are stepping up measures to prevent further cases.
- Conduct extensive voluntary PCR tests in addition to those requested by public health centers.
- Check health conditions and past movements of all those who enter the premises, regardless of their history of moving out of and into the prefecture, as well as those of their families.

* Including a fatal accident that took place during safety renovations at Takahama Nuclear Power Station Units 1 and 2 (March 2020); serious worker injuries that took place during tunnel construction at Ohi Nuclear Power Station Units 3 and 4 (October, 2019), earthquake-proof construction and reinforcement work on the spent fuel pits at Mihama Nuclear Power Station Unit 3 (September 2019), and safety renovations at Takahama Nuclear Power Station Units 1 and 2 (September 2019); serious worker injuries caused by falling steel materials at Takahama Nuclear Power Station Unit 1 (October 2018); the collapse of a crane at Takahama Nuclear Power Station Unit 2 (January 2017); and water leakage in the premises of Takahama Nuclear Power Station Unit 4, as well as automatic reactor shutdown following automatic generator shutdown (February 2016).

◆ Developing and improving tools for risk management and assessment

- We have developed a risk assessment tool (PRA*¹ model) and plan to promote its use in plant operations.
- “Weekly risk information,” which involves regular inspections to visualize weekly changes in risk factors, is shared among plant employees, including subcontractor employees (Takahama Nuclear Power Station Unit 4 and Ohi Nuclear Power Station Unit 4).
- A system is in place for decision making based on quantitative risk assessment using PRA, where facility reconstruction, procedural changes, and determination of failure significance are managed at Takahama Nuclear Power Station Units 3 and 4 and Ohi Nuclear Power Station Units 3 and 4.
- The PRA model has been completed for Takahama Nuclear Power Station Units 1 and 2 and Mihama Nuclear Power Station Unit 3, incorporating each plant’s updated operation status and the latest data provided by NRRC*².

*¹ Probabilistic Risk Assessment: A scenario where events that can take place at facilities such as nuclear power plants develop into serious accidents (core damage, etc.) is systematically and comprehensively considered to quantitatively determine the probability of core damage and other accidents.

*² Nuclear Risk Research Center

◆ Incorporating objective evaluation and external knowledge

- Safety measures at our nuclear power plants are monitored and evaluated for improvement purposes.
- Divisional oversight review meetings are held tentatively, where the Nuclear Power Division regularly reviews information*¹ on each plant’s oversight activities (PI*², MO*³, etc.).
- Operational information is shared with overseas electric power companies, specifically with working-level staff, to incorporate practices and knowledge from around the world.
- Operational information is also shared with EDF (France) through websites and email.
- General managers representing EDF in Japan and South Korea (headquartered in Tokyo) visited Ohi Nuclear Power Station.

*¹ Data compiling and analyzing information (PI, MO, etc.), and information for performance comparison between sites or with other power companies at home and abroad (each of which will be tested for improvement)

*² Performance Indicator: An index for quantitative management of power plant performance

*³ Management Observation: Power plant observation by the Nuclear Power Division and plant managers

● Improving communication

◆ Promote risk communication*¹

- As we take the opinions and concerns of the public seriously, some of which voice concern toward operating power plants over 40 years, we are engaging in mutual communication to jointly seek solutions.
- We visit each household in Mihama Town, Takahama Town and Ohi Town, where our nuclear power plants are located, to engage in mutual dialogue.
- The need for over 40 years of operation and its safety have been communicated through briefings to local residents, local meetings, symposiums, etc.
- Communication tools are being developed with focus on energy and nuclear power generation.
- “The Nanden Kanden Theater” video is available for view on social media*² and our website, where stand-up comedians explain energy and nuclear power in an easy-to-understand way.

*¹ A mechanism whereby the risk aspects of nuclear power generation are shared and the public’s opinions are incorporated into business management.

*² On the Company’s YouTube and Twitter, and the Group’s Facebook accounts

◆ Strengthening our resources (human resources development)

○ We are training and educating “personnel supporting nuclear safety” according to our human resources development plan.

<Acquiring knowledge for power plant operation>

- Operators are trained in preparation for plant restart after a long period of shutdown, using a system that simulates a new plant control panel (Mihama Nuclear Power Station and Takahama Nuclear Power Station).

<Education and training for raising hazard awareness>

- A program is in place to let our employees and of subcontractor employees “experience a sense of safety firsthand,” where a 3D VR is used to simulate construction work risks (Ohi Nuclear Power Station).

<Leveraging risk information>

- Working-level staff who have learned PRA attend a “risk specialist course” offered by the Nuclear Risk Research Center (NRRC). At the same time, Deputy Plant Manager (Nuclear Safety) takes part in a “risk-informed management program” designed for those in charge of plant RIDM*1.

<Developing leadership abilities>

- Management-level staff take part in a leadership development program sponsored by JANSI*2 for top management and managers, where they exchange views and opinions.

*1 Risk-Informed Decision Making

*2 Japan Nuclear Safety Institute

● Relevant data

	2019/3	2020/3	2021/3
Number of participants in training and practice programs for nuclear power disasters	About 5,900	About 5,700	About 5,400
Number of nuclear power disaster drills	—	About 6,100	About 5,200

Efforts for cyber security measures

Policy and Concept

Amid increasing cyber attacks targeted at important infrastructure operators around the world, as an important infrastructure operator in the electric power business, the Group believes that its key commitment to customers and society is to steadily advance cyber security efforts to ensure the safe and stable supply of power. To fulfill this responsibility, we are strengthening cyber security measures in accordance with the relevant laws, regulations and guidelines for cyber security management, along with internal regulations. Moreover, as cyber attack methods are evolving day by day as they become more complex and sophisticated, we strive to obtain cyber attack information from outside the company in addition to the latest security information, so we can prepare countermeasures in a timely manner.

System

Director responsible: Makoto Araki [Kansai Electric Power CISO (Executive Vice President)]

Deliberative body: Executive Meeting

Management office: Cyber Security Administration Group, Office of IT Strategy (Information Security Management Office)

Goals

Major information security incidents "0"

Efforts

By quickly recognizing threats such as security incidents and vulnerabilities that occur outside the Company, as well as issues with our Information Technology (IT) systems used in our daily work and all Operational Technology (OT) systems related to the provision of a stable power supply, we are continuously implementing necessary security measures.

Specifically, risk assessments are made for IT and OT systems, necessary technical measures are taken, and monitoring is carried out 24 hours a day, 365 days a year at dedicated IT and OT monitoring centers. In addition to an emergency response system established in preparation for incidents, we are continuing to provide drills for how to respond to cyber attacks as well as relevant training for employees.

We are gathering information about cyber attacks that occur outside our Company and the latest security information through, for example, the activities of the Japan Electricity Information Sharing and Analysis Center (JE-ISA*), which is an organization that undertakes the sharing and analysis of cyber attack information among electric power businesses. Moreover, countermeasures are reviewed as needed.

* An organization where business operators share and analyze information from the perspective of cyber security in order to ensure the stability of the supply of electricity in Japan.



Company-wide training to respond to cyber attacks

Providing services as a consolidated group

Policy and Concept

● Creating a prosperous future with customers

Our Group has been meeting the various demands of our customers and society by offering total solutions that combine our services, including comprehensive energy supply which is mainly offering electricity, as well as telecommunications, daily life and businesses. While customers and society have increasingly different needs, with social changes triggered by the global decarbonization movement and COVID-19 infection, we are committed to exceeding customers' expectations so that they will continue to select the Kansai Electric Power Group. Specifically, we are addressing head-on the needs and problems of customers and society while expanding and providing valuable service solutions to serve the public, businesses and communities.

Goals

Customer satisfaction survey: Satisfaction index 90% or higher

→ FY 2020 results: 91.5%

Efforts

● Services for residential customers

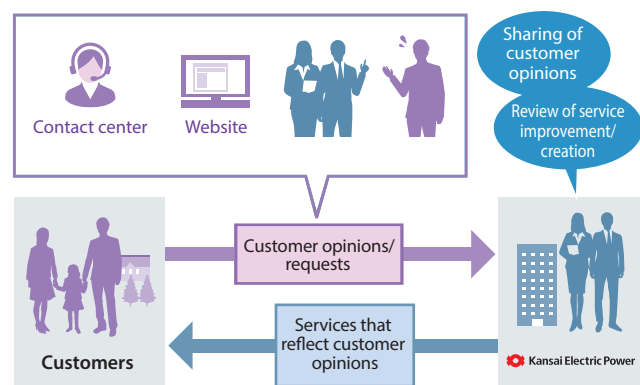
We offer a variety of services to help customers live comfortably, conveniently and economically. These include electric bill structures that meet customers' lifestyles, combined price plans for gas and electricity, total electric conversion for a zero-carbon life and integrated plans for energy and electric equipment.

We also have services that are helpful for our customers' daily lives, including a service to dispatch support personnel to customers experiencing problems, such as sudden power outages, as well as opening an EC mall designed to make life more convenient. All these solutions are available, tailor-made to the needs and lifestyles of customers.

As a comprehensive energy company, we will continue to promote initiatives for customer satisfaction.

◆ Service improvement and service creation to reflect the opinions of customers

We work to create and improve services in response to requests received from customers through our contact centers, website, etc. so we can meet our customers' needs.



◆ Customer satisfaction survey

We conduct "Customer Satisfaction Surveys" asking our customers to assess how understandable our telephone operators' explanations regarding inquiries such as "The lights in the house went out suddenly." We receive high evaluations from a lot of customers. We will keep working to make our customers more satisfied by utilizing the evaluation results for improvements in services and businesses.

Of customers who asked for advice over the phone,

91.5%

replied that they were satisfied.

◆ Lifestyle services with the confidence of our customers as the foundation

By addressing head-on the needs and problems of customers, we aim to become a corporate group that continues to provide new value to customers; we offer safe, comfortable, and convenient lifestyle services in the areas of home security, communication services, health management support, and nursing care, at high quality and reasonable prices that will satisfy our customers.



● Services for corporate customers

We offer a wide range of services, including energy sales, energy management system services, energy solutions (PV, storage batteries, electrification, etc.), mobility services and business solution services. All these are designed to help customers solve increasingly diversified and complex management and social issues, such as growing environmental needs associated with decarbonization and carbon neutral initiatives, and constantly changing business environments due in part to intensifying natural disasters.

◆ Example of on-site solar power generation services provided

We provided on-site solar power generation services to Trial Company, Inc., where the Super Center Tondabayashi (Osaka Prefecture), a supermarket opened in the spring of 2020, uses green electricity to power the entire store, thereby contributing to environmental conservation.

They plan to continue using the services and opt for solar power generation for captive consumption while looking at combining solar power generation with storage battery solutions as part of its Business Continuity Plan (BCP). We will therefore further strengthen our partnership to help them expand their business.



Trial Company logo and solar panels



◆ Examples of adopting utility services

Opened in Chuo-ku, Kumamoto City, Kumamoto Prefecture in September 2019, SAKURA MACHI Kumamoto building, a large-scale complex comprising various shops, a cinema complex, a bus terminal, residences, a hotel, office buildings, etc. has adopted utility services of Kanden Energy Solutions Co., Inc. (hereinafter, Kenes).

This client commented that the utility services, not requiring initial investment and enabling the leveling of equipment maintenance costs, exactly meet the need of making effective use of project costs while lowering initial costs, and that Kenes' track record of service introduction and energy management in large complex facilities was a major deciding factor in adopting its services. SAKURA MACHI Kumamoto building also accepts people stranded with no way home in the event of a large-scale disaster. While Kenes continues to ensure a stable energy supply, we will protect the safety and security of our customers and local residents, including aid in disaster preparedness, in cooperation with Kenes.



SAKURA MACHI Kumamoto building

◆ Examples of services for corporate customers

Examples of services for corporate customers	
Enudge 2.0 (Kansai Electric Power Co., Inc.)	Next-generation energy platform. In addition to encouraging energy-saving behaviors, this service provides integrated solutions for operational improvement and renovation of store equipment and operational support for individual stores.
Omaka Save-Air (Kansai Electric Power Co., Inc.)	A new air conditioning control service equipped with our proprietary AI-based auto-tuning function. A control computer installed on the air conditioner used by the customer automatically controls the air conditioner according to the usage situation and thereby achieves "energy saving" while maintaining "comfort."
Solar power generation on-site service (Kansai Electric Power Co., Inc.)	A service in which dispersed power generation equipment such as solar power generation equipment and storage batteries are installed on the customer's premises at our expense for long-term operational use. Customers can reduce their environmental burden by using energy from the equipment we operate.
Kanden comprehensive disaster mitigation service (Kansai Electric Power Co., Inc.)	Utilizing our long-cultivated knowledge about disaster mitigation as a comprehensive energy company, we coordinate and provide products and services necessary for corporate customers to respond to various "unexpected" events (safety confirmation system, emergency fuel delivery service, emergency power generator rental service, etc.).
Utility service (Kanden Energy Solution Co., Inc.)	A service that enables customers to outsource facility management and even makes initial financing unnecessary for them by providing comprehensive services from fund-raising and design to installation and maintenance administration for utility facilities related to energy, including power receiving equipment, air-conditioning and heating equipment and boilers.
Asset solution (Kanden Realty & Development Co., Ltd.)	As a company operating real estate brokerage and real estate consulting businesses (real estate survey, appraisal, proposals for effective utilization, etc.) owned by general corporations, we provide one-stop support to solve customer problems, leveraging our nationwide network and information-gathering abilities.
Office eo Hikari (OPTAGE, Inc.)	Small and medium customer companies/offices and SOHO can entrust their office internet, telephone, and hosting (email, web, database) to OPTAGE, and enjoy these services with confidence at a reasonable price.
Comprehensive building management (Kanden Facilities Co., Ltd.)	A service that provides safe and secure facility environments and contributes to increasing property values through, for example, the daily maintenance management and cleaning of buildings and facilities, security, environmental hygiene and energy management

The Group companies that provide the services are indicated inside parentheses.

● Relevant data

	2019/3	2020/3	2021/3
Number of reform cases based on customer feedback (cumulative)	225	129	140
Customer satisfaction (telephone consultation)	90.2%	92.0%	91.5%
Number of Hapi e-Miruden* subscribers	4,830,000	5,522,000	5,912,000

* A web-based service that provides notifications related to electricity and gas charges and usage (a service provided by the Kansai Electric Power Co., Inc. only)

To provide high-quality electric power

Policy and Concept

Our quality policies for the safety of our electric facilities

Ensuring safety

Maintaining high supply reliability

In order to ensure safety and a reliable supply amid an extremely harsh business environment, we are reviewing the way we do business, which includes checking if there are any oversights in risk management related to supply reliability, and increasing operational efficiency on the premise of not sacrificing safety and quality. While maintaining these efforts, we will carry out the following activities.

- Maintain electric facilities based on ensuring safety.
- Strive to prevent accidents caused by human error.
- Carry out our business in compliance with relevant laws, regulations and internal rules.
- Set and review quality goals in line with our quality policies.
- Confirm that front line workers are familiar with our quality policies.
- Review the appropriateness of the quality policies.

Goals

Annual power outage time per household

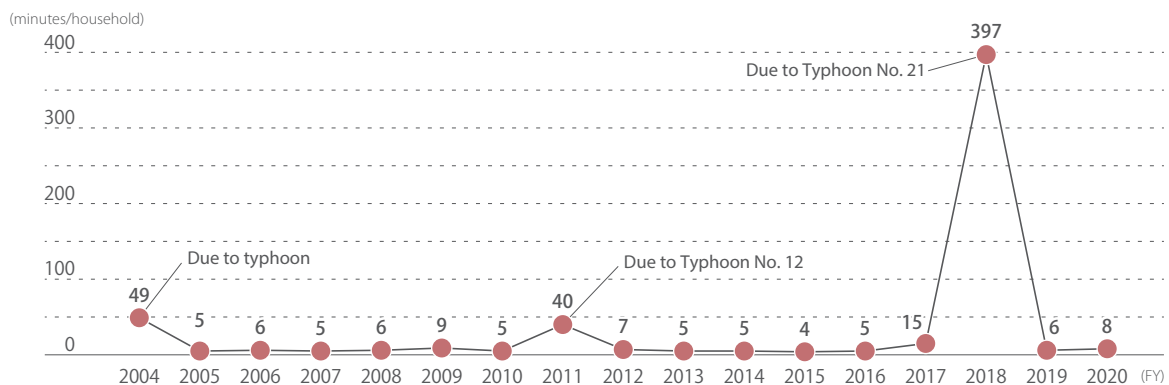
“Maintain the highest standard in the world”

Efforts

Toward a safe and stable supply

We at Kansai Transmission and Distribution, Inc. work to operate power systems that provide a reliable link between power plants and consumers and optimize the configuration of facilities. We are also making thorough efforts to prevent failure recurrence. As a result of our efforts, with the exception of major natural disasters, we are maintaining one of the world's highest power quality levels in the transmission and distribution business.

Annual duration of power outage per household



● Achieving electricity resilience

On September 4, 2018, the powerful Typhoon No. 21 ripped through the Kansai area, causing breakages totaling more than 1,300 utility poles and a power outage affecting roughly 2.2 million households in total. We apologize to our customers for the inconvenience and trouble caused by the extensive and long-term power outage.

With natural disasters intensifying nationwide, the Electricity Resilience Working Group* compiled verification results regarding our response to these emergencies. On July 1, 2020, the Acts for Establishing Resilient and Sustainable Electricity Supply Systems came into force. With the aim of fulfilling our power supply obligations through prompt restoration of the power supply, we have created an inter-business collaboration plan for disaster response and have started its implementation. This plan specifies cooperation with general power transmission and distribution business operators and related organizations (local governments, Self-Defense Forces, etc.).

In line with the plan, by addressing issues presented by the Electricity Resilience Working Group and sharing the lessons learned from Typhoon No. 21, we are determined to fulfill our mission of supplying safe and stable electricity and supporting society. To that end, we will develop and introduce new technologies and new construction methods, as well as systematically maintaining or replacing aging equipment, aiming for prevention of accidents and prompt restoration of the power supply. We will continue to step up our efforts for quick recovery in the event of an emergency.

* A joint working group of the Electricity and Gas Basic Policy Subcommittee under the Advisory Committee for Natural Resources and Energy, and the Electric Power Safety Subcommittee under the Industrial Structure Council

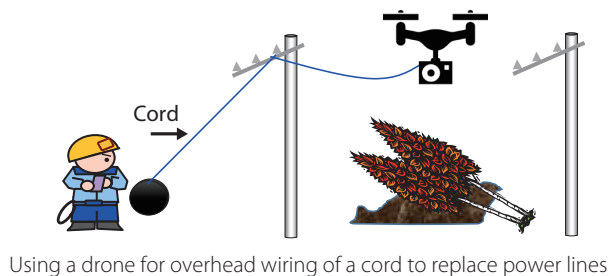
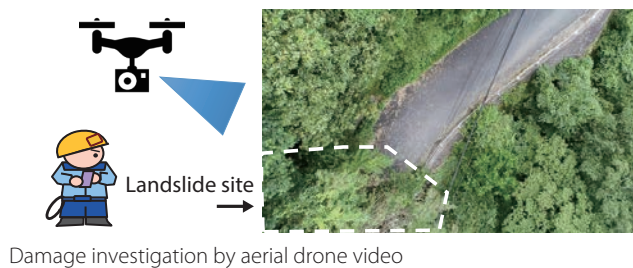
◆ Examples of countermeasures taken following Typhoon No. 21

- Quick information gathering using smartphones
- Understanding the scope of damage using drones; using this information for restoration work
- Trial operations of power outage information collection utilizing smart meter data
- Bolstering a broad support system inside and outside the company
- Timely provision of information to the customer on power outages and restoration work

● Understanding the scope of damage using drones; using this information for restoration work

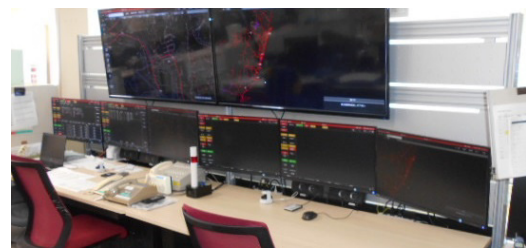
In places that are difficult to access, such as a site following a landslide, we use drones to check the status of equipment so we can quickly grasp the whole picture.

Drones are also expected to be used in restoration work, for example, using a drone for overhead wiring of a cord to replace power lines.



● Introduction of a third-generation automated power distribution system

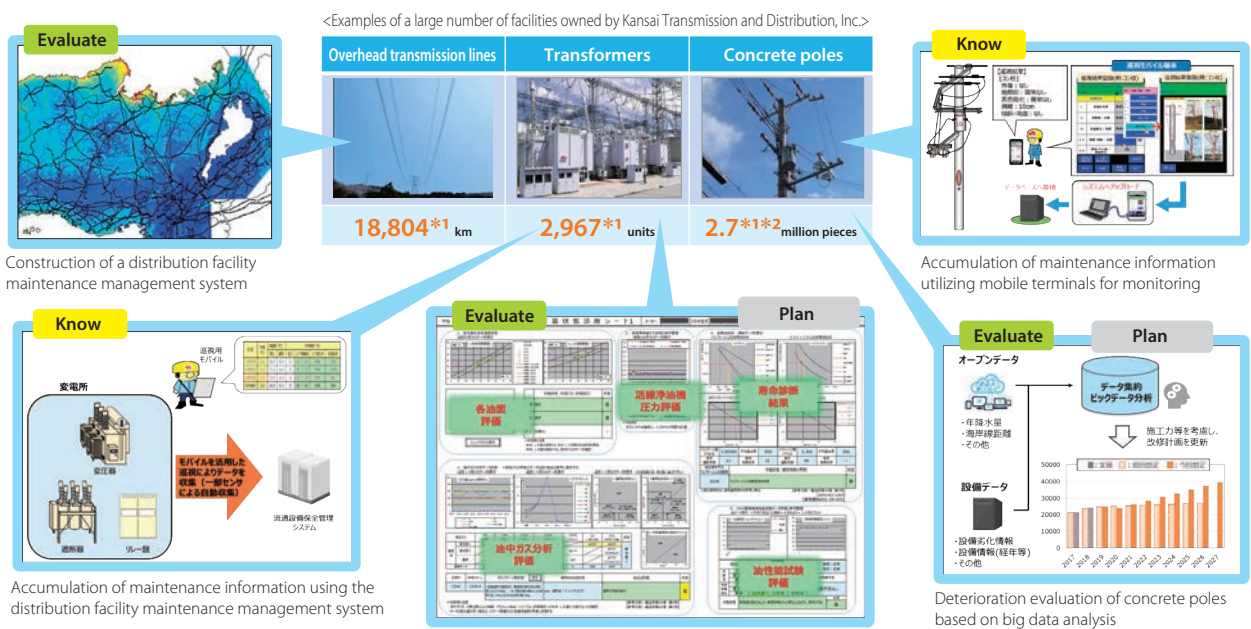
Twenty years have passed since the introduction of the conventional automated power distribution system. To address technical issues associated with the mass introduction of dispersed power generation equipment, etc., the system was renewed at the replacement timing in May 2021. By consolidating the dispersed systems and making them physically redundant, we can “ensure business continuity in the event of a disaster,” “improve security,” and “increase efficiency in system maintenance.” In addition, central management of system information facilitates understanding of the system status of the entire Kansai region as well as data analysis. We expect that this can be utilized for considering optimal facility configuration and further improving system operation.



Third-generation automated power distribution system console

● Formulation of efficient replacement plans using facility information

In order to deal with issues such as aging of power transmission and distribution facilities, increases in the amount of renovations, lack of construction capability, and labor scarcity, we have been working to build a framework that enables formulation of sustainable and efficient renovation plans toward the future by collecting and analyzing information regarding deterioration of substations, power transmission, and distribution facilities, the main facilities of electric power infrastructures, giving priority to renovation. In recognition of our efforts for efficient facility replacement continuing over the years, we received the METI Minister’s Award in the 2020 Infrastructure Maintenance Awards.



*1 Figures as of March 2020
*2 Including underground transmission lines

● Relevant data

	2019/3	2020/3	2021/3
Number and rate of smart meters installed	About 10.58 million / About 81%	About 11.53 million / About 88%	About 12.25 million / About 93%
Specialist technicians with specialized skills	188	124	132
Number of injured ordinary citizens	5	4	6
Transmission and distribution loss rate	5.05%	4.80%	5.10%

● SASB-related data System resilience

Code	Index	2019/3	2020/3	2021/3
IF-EU-550a-2	System Average Interruption Duration Index (SAIDI)	397 min (due to Typhoon No. 21)	6 min	8 min
	System Average Interruption Frequency Index (SAIFI)	—	0.11	0.1
	Customer Average Interruption Duration Index (CAIDI)	—	54.55	80.00
IF-EU-000.C	Length of power transmission and distribution lines	Transmission lines: 18,823 km Distribution lines: 132,456 km	Transmission lines: 18,804 km Distribution lines: 132,662 km	Transmission lines: 18,851 km Distribution lines: 132,880 km

To prevent electrical accidents

■ Policy and Concept

- Our quality policies for the safety of our electric facilities

■ Goals

Goals based on the materiality of the Kansai Electric Power Group

Number of injured ordinary citizens “None”

■ Efforts

If something approaches, touches or damages electrical facilities of Kansai Transmission and Distribution, Inc., including transmission and distribution equipment, it may lead to not only a power outage but also to possible injury or death from electric shock. To prevent such electrical accidents, we conduct various public relations activities through mass media and on our website as well as on the website of Kansai Transmission and Distribution, Inc. As part of these activities we ask construction companies, when they perform construction work near our transmission and distribution equipment, to attach protective covers to electric wires for sure and not to touch the wires that have been cut.

● PR campaign for accident prevention

- ① Announcements via our website and mass media
 - Reminders to attach protective covers and where to apply for these covers
 - Warning about touching severed wires, etc.
 - Notice of precautions in daily life and in an emergency situation
 - Prior to a typhoon, reminders to work on preventing objects from becoming projectiles
- ② On-site publicity

As part of our PR campaign, if we discover a construction site with protective covers not attached to electric wires, etc., we call the operator’s attention to the dangers of electricity and request that they apply for the protective covers.
- ③ Featured in *Electricity and Security* published by Kansai Electrical Safety Inspection Association

Our PR campaign for the prevention of accidents related to electricity on construction sites was published in the July-August 2021 issue.
- ④ Visiting classes

We visit various skills training classes, such as crane work operations, and introduce examples of electrical accidents as well as relevant countermeasures.

Disaster Mitigation Efforts



SOCIAL



Disaster mitigation efforts

Policy and Concept

● Preparing for a major disaster

In the event of a large-scale disaster such as an earthquake or typhoon, the Kansai Electric Power Co., Inc. and Kansai Transmission and Distribution, Inc. will ensure the safety of our employees and their families and fulfill our responsibilities of providing a stable supply of electricity and gas in an integrated manner. To this end, we promote disaster mitigation initiatives that will strengthen facilities to withstand various natural disasters. We have also put in place a disaster control system to enable rapid recovery. Particularly, in the event of the Nankai Trough Earthquake, a megathrust earthquake which is feared to hit in the future, we will follow the basic plan for mitigating disaster announced by the Japanese government and take carefully planned disaster response and recovery measures in place. In addition, amid the COVID-19 pandemic, we implement various measures so it will not interfere with our emergency response. Furthermore, through disaster mitigation events and lectures, we provide information on disasters and how we can be prepared, and carry out activities to raise awareness on disaster mitigation in local communities.

● Strengthening our disaster response system

We are enhancing our response systems to prepare for rapid initial response upon the occurrence of disasters. This includes the designation of individuals who arrive at the workplace early and night watches by initial response supervisors, along with the implementation of special training for individuals and supervisors in charge of initial response several times a year. Moreover, with the President of the Kansai Electric Power Co., Inc. serving as Chief of the Emergency Headquarters, group-wide comprehensive emergency response drills are conducted every year and these drills see full collaboration between the Kansai Electric Power Co., Inc. and Kansai Transmission and Distribution, Inc. We are committed to improving our disaster response skills and raising disaster awareness, not only to prepare for the occurrence of the Nankai Trough Earthquake but also with consideration for severe incidents such as the simultaneous occurrence of a nuclear power disaster or during occasions when the balance of power supply and demand is tight.

In the event of a major disaster, employees will be notified of any information pertaining to the disaster at the same time. We also have established action standards so that we can build a response system promptly after a disaster occurs, even on holidays or during the night.



Group-wide comprehensive emergency response drills

Number of participants in group-wide comprehensive emergency response drills (fiscal 2020)

1,175

System

The Kansai Electric Power Co., Inc.: Disaster Mitigation Group, Office of General Administration
Kansai Transmission and Distribution: Disaster Mitigation Group, General Administration Department

Goals

- Improve employee skills in responding to disasters and increase awareness about disaster preparation by implementing preventive measures for COVID-19, such as avoiding the Three Cs (crowded places, close-contact settings, and confined spaces), with the use of IT tools, in the group-wide comprehensive emergency response drills to allow more people to participate.
 - Fiscal 2020 results: 1,175 employees participated
- Actively participate in emergency response drills and disaster mitigation events held by concerned external organizations.
 - Fiscal 2020 results: Drill participation: 12 times Exhibited the PR booth: 4 times Held lecture/briefing sessions: 79 times
- Hold a disaster mitigation meeting on a regular basis to respond to special information related to the risk of the Nankai Trough Earthquake and take appropriate measures to the risks related to major disasters, including other natural disasters, cyber attacks, and the spread of COVID-19.
 - Fiscal 2020 results: Held disaster mitigation meetings: 20 times



SOCIAL



Efforts

● Response to special information related to the risk of the Nankai Trough Earthquake

Following the Cabinet Office's decision on the announcement of special information related to the risk of the Nankai Trough Earthquake in 2019, we examined a policy on how to respond to the major earthquake anticipated to occur when the special information is announced. Specifically, we will strive to fulfill our responsibilities for a safe and stable supply by continuing our business in areas subject to pre-evacuation and moving our offices to alternative bases. Going forward, we will proceed with further studies based on findings published by related organizations.

● Strengthening our disaster response system

Based on the inter-business collaboration plan in disaster responses (submitted to the Minister of Economy, Trade and Industry on July 9, 2020), we will strive for a stable power supply through quick recovery in the event of a disaster through cooperation with general power transmission and distribution business operators and related organizations. The plan sets out conducting joint emergency drills that involve 10 general power transmission and distribution companies including Kansai Transmission and Distribution, Inc., aiming for further enhanced cooperation to ensure a more resilient power supply. We will strengthen our efforts for swift disaster recovery.

In addition, 9 general power transmission and distribution companies, including Kansai Transmission and Distribution, Inc., have introduced a common chat response system for inquiries in the event of a large-scale disaster, with a dedicated inquiry center opened to jointly respond to inquiries.

● Strengthening collaborative ties with concerned external organizations

Even in times without disasters, we are working to build relationships with governments, police, fire departments, the Japan Self-Defense Forces and other concerned external organizations as well as other electric power companies in order to enable smooth mutual cooperation during times of emergency and restore electric and gas service as quickly as possible.

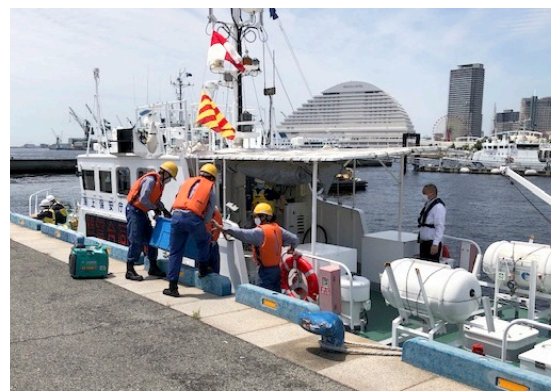
Specifically, we proactively participated in disaster response training sessions and programs held by municipalities and designated public corporations; moreover, we conducted joint training with the Self-Defense Forces and the Japan Coast Guard according to a cooperative system to respond to disasters.



Marine transport drill with Japan Maritime Self-Defense Force Maizuru Regional Headquarters in March 2021



Helicopter transport drill with Japan Ground Self-Defense Force Middle Army in March 2021



Marine transport drill with 5th Regional Coast Guard Headquarters in June 2021

● Contribution to raising awareness of disaster mitigation in local communities

We run booths at disaster drills and events held by local governments, and carry out activities to raise awareness of disaster mitigation using our Disaster Preparedness Handbook as well as through experience of operating seismic breakers.

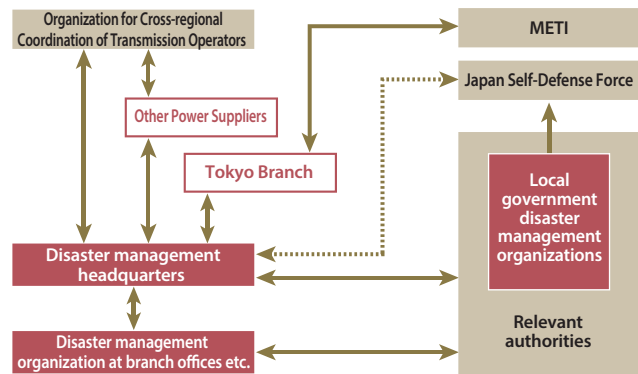
Moreover, for a wide range of generations, from students to neighborhood associations, we create opportunities to explain what damage and disruption could be expected following the Nankai Trough Earthquake, as well as the damage caused by disasters in recent years, and our routine preparations. Through these efforts, we contribute to promoting understanding of the importance of disaster response and preparedness.

◆ Disaster Preparedness Handbook

Disaster Preparedness Handbook is disclosed on the websites of the Kansai Electric Power Co., Inc. and Kansai Transmission and Distribution, Inc. It will help with disaster mitigation efforts in the home.



◆ Emergency system for communicating with relevant authorities



● Relevant data

	2019/3	2020/3	2021/3
Number of participants in group-wide comprehensive emergency response drills	907	908	1,175
Participation in emergency response drills held by concerned external organizations	—	79	12
Policy			
Emergency response policy	Established	Included in the Disaster Mitigation Plan https://www.kansai-td.co.jp/corporate/information/2020/pdf/20200605_1_01.pdf	

Communities



SOCIAL



Maintaining an ongoing community dialogue

Policy and Concept

● Our overall policy

As a business operator closely linked with its local communities and lives of their inhabitants, our Group fully recognizes that its own development is not conceivable without the development of the local communities associated with its business activities and therefore we will proactively contribute to the development of our local communities through initiatives to revitalize these communities and the local economy.

● Transmitting information with a positive attitude to local communities and maintaining open lines of communication

With a commitment “to create the future together through dialogue,” we are striving to meet the varied requests of residents in our local communities with a positive attitude by building a relationship of trust through close communication.

Additionally, after Kansai Transmission and Distribution, Inc. was spun-off from the Company in April 2020 amid growing social demands for bolstering the resilience of our power supply, Kansai Transmission and Distribution, Inc., is well placed to be of service to the area for a long period of time due to its extensive facilities in the Kansai area, and also as a contact point between the Group and the local community. Going forward, we will continue to promote closer communication with local residents, aiming to revitalize and develop the local community.

System

● Community relations system

The Kansai Electric Power Co., Inc.: Office of General Administration

Kansai Transmission and Distribution Inc.: Regional Communications Department

Goals

Maintain and create demand in cooperation with stakeholders

Efforts

● Proactive information exchange through participation in various types of meetings and other efforts

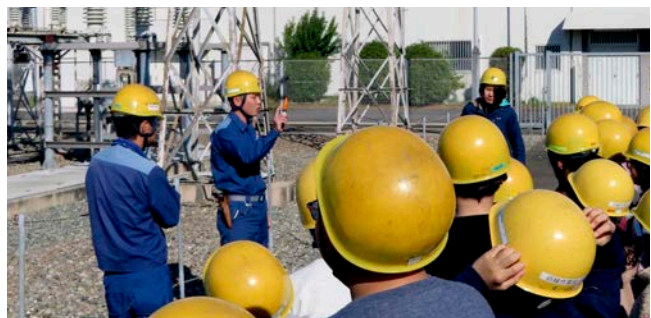
We have been participating in governmental assemblies such as the Meeting of Members of the Union of Kansai Governments and other organizations. In addition to explaining topics such as the state of power supply and demand, electricity rates, and nuclear power operation, we also receive a variety of opinions and otherwise exchange information. We are actively working for the resolution of various energy issues in local communities based on the opinions and other ideas we receive. In recent years, how we respond to severe natural disasters such as typhoons is becoming a pressing issue, and as a result we are bolstering our cooperation with local governments regarding disaster mitigation.



Opinion exchange with government office

● Ordinary communication with government offices

We undertake mutual communication with government offices on a daily basis. When we are asked questions, we hold study groups, for example, to answer them conscientiously.



Energy study session (facility tour) by employees of Kansai Transmission and Distribution, Inc.



Promoting "community energy business" that contributes to the development of local communities

Policy and Concept

● Efforts for regional stimulation

As the energy needs of customers and society at large have become increasingly diverse, our Company has been carefully monitoring trends to determine exact requirements. We seek to support regional revival and invigorate local economies with a commitment "to create the future together through dialogue."

System

The Kansai Electric Power Co., Inc.: Customer Solution Division

Goals

Maintain and create demand in cooperation with stakeholders

Efforts

● Our proactive contribution to regional revival and efforts toward the growth of the Company

To meet the expectations of customers and local communities for decarbonization, improved disaster mitigation, and regional revitalization, the Group is actively participating in initiatives to create smart communities aimed at improved efficiency of energy use and to develop renewable energy together with communities and local governments.

Not only in the Kansai but also in other regions, we are promoting activities drawing on the knowledge we have cultivated as an energy company.

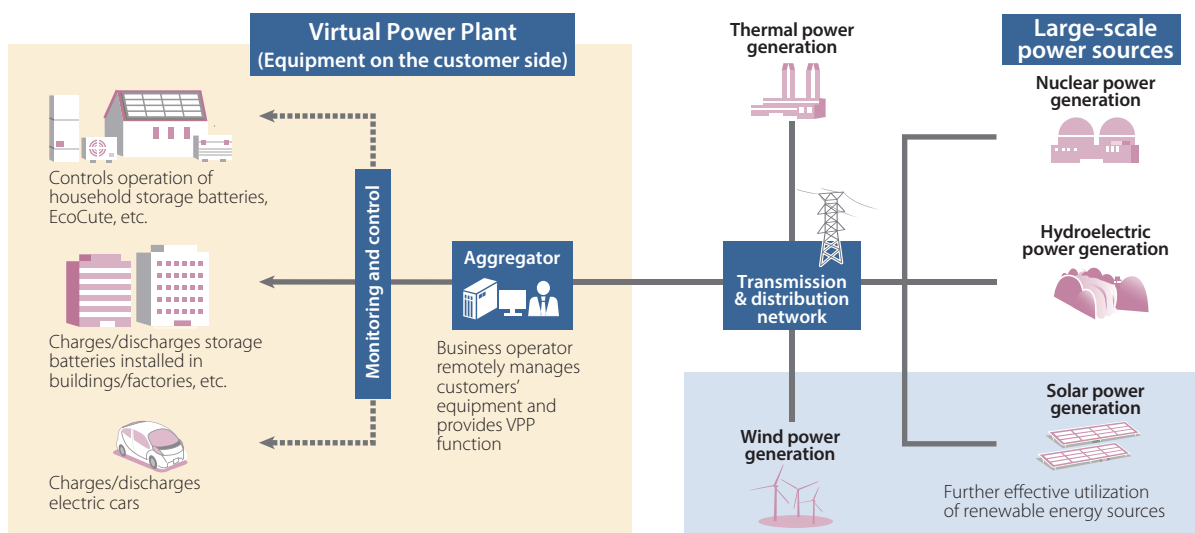
Recently, we have been working to create communities that can solve problems in a sustainable manner in a variety of fields, not just limited to the energy field.

We will continue to work on "community energy business" as the Kansai Electric Power Group, growing hand in hand with regional communities by combining solutions tailored to the problems faced by our customers and communities.

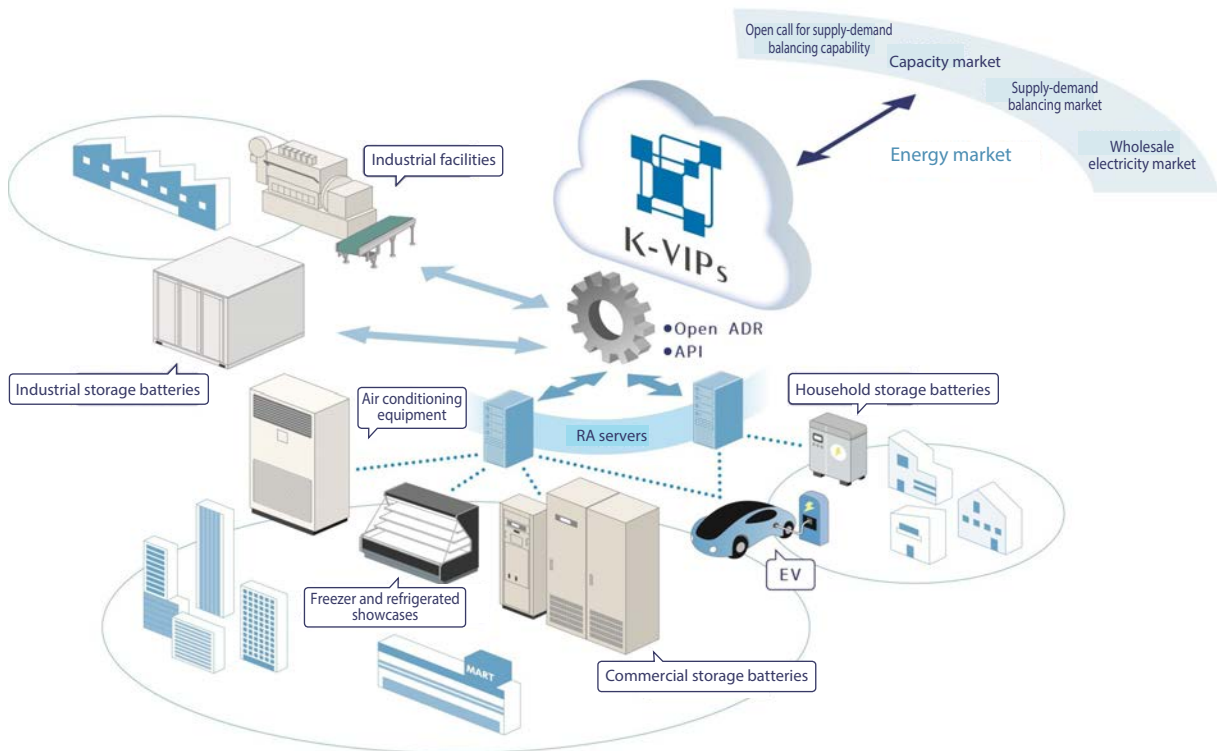
In addition, incorporating new technologies, we are implementing a demonstration project on virtual power plant (VPP)*, which has recently been attracting attention as an electric power supply-demand balancing method. Our integrated platform system K-VIPs, which supports electricity transactions on VPP that use resources on the customer side, has also been launched. With this technology, we will reduce grid stabilization costs, support the expanded introduction of renewable energy, and accelerate efforts to optimize energy management for the entire region.

* An IoT-based technology that remotely controls resources scattered in multiple regions (storage batteries, EV, etc.) in an integrated manner, so as to make them function like a single power plant

◆ Virtual Power Plant overview



◆ Image of K-VIPs



● Community development activities in urban areas of Osaka

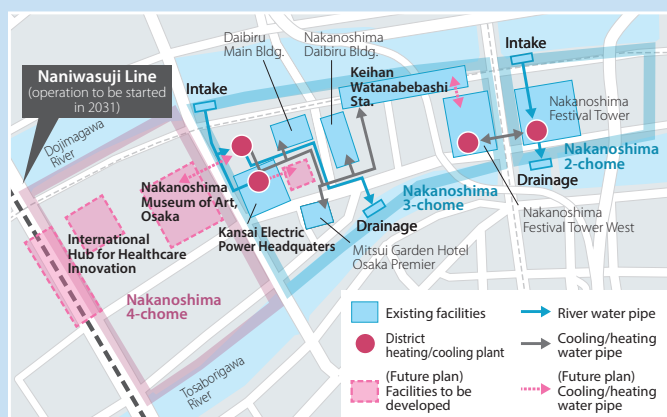
Our Company is contributing to community development in central Osaka and other locations with both hard and soft measures. One such effort is in Nakanoshima, Osaka where our head office is located.

As the secretariat of the Nakanoshima Future City Planning Council, which seeks to further develop and invigorate Nakanoshima, we are working toward the realization of the “Nakanoshima Regional Strategic Plan” together with local governments, land-owning businesses in the district and others. We are also contributing to the development of an environmentally conscious community. One such effort is the introduction of a regional cooling/heating system that utilizes river water. In addition, in our role at the secretariat of the “Osaka Lighting Project – City of Lights,” we are working to make the Nakanoshima area more attractive by creating and maintaining the city nightscape. Moreover, as a home-grown company, in cooperation with local governments and citizens as well as economic organizations, we will be contributing to the development of Yumeshima where the Expo 2025 Osaka, Kansai is to be held.

Examples of community development activities in urban areas of Osaka

District heating and cooling system using river water in the Nakanoshima area

In the Nakanoshima 2-chome and 3-chome areas, a regional energy management system has been introduced that uses a district heating and cooling system with river water. This system is expanding in line with the development of the surrounding areas. It will also be introduced to the Nakanoshima Museum of Art, Osaka, which is scheduled to open in 4-chome in February 2022. This energy business has been selected as a “Sustainable Architecture Initiative Project (CO₂-saving initiative),” which is promoted by the Ministry of Land, Infrastructure and Transport and Tourism, through joint application by Osaka City, Kanden Energy Solution Co., Inc., and our Company. In future developments in the Nakanoshima area, our Group will continue proactively working on CO₂-saving and contributing to community development through environmental-conscious town planning.



Coexisting with local communities

Policy and Concept

● Implementation of activities for coexisting with local communities

Through the Group's business and social contribution activities as a corporate citizen, we are contributing to resolving local issues and revitalizing communities.

System

The Kansai Electric Power Co., Inc.: Office of Corporate Communications
Kansai Transmission and Distribution, Inc.: Regional Communications Department

Goals

Proactive contributions for coexisting with local communities

Efforts

● Inspection of electrical facilities of cultural properties, etc.

We are cooperating with fire departments to inspect the electrical facilities of temples, shrines and other cultural properties. Other contributions include helping local residents beautify their surroundings.



Electrical equipment inspection at Mt. Koya, Wakayama



Cleaning activities at the Kasuga-Taisha Shrine, Nara



Cleaning of the Edison Monument, Kyoto

● Disaster recovery efforts

In the event of an emergency such as a typhoon, all the group companies shall unite to work together, regardless of whether the disaster has struck in an area in which we operate or not, through on-site responses, cooperating with related autonomous bodies and dispatching support teams to the area – regardless of whether we supply power there or not – aiming for rapid recovery and to ensure safe and stable electricity supply.



Dispatching a support team to an area where we are not involved with power supply (Typhoon No. 10 in Kyushu, September 2020)



Emergency power transmission with generator vehicles (December 2020)

● Contribution to solving global social issues

We are working to provide new values based on global issues and needs across society. To cite a few examples, we provide LED lantern rental services through a business alliance with WASSHA Inc. and conduct demonstration tests for introducing electric power and communication services jointly with SUCRECUBE Japon Inc. for regions in Africa that lack electrical services.



Tanzanian children using a lantern



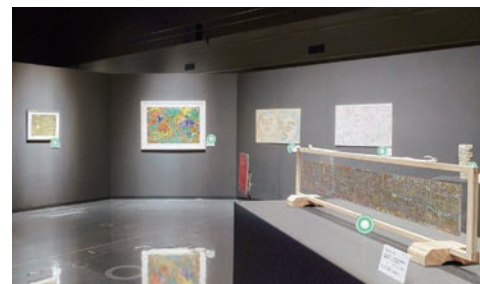
Training for partners in developing companies

● Social welfare efforts

Since 2001, we have been holding Kanden Collabo Art exhibit that provides an opportunity for individuals with disabilities to display their works. Visitors can appreciate the art and sense the potential of the artists. Works selected for exhibiting can also be seen on our website.



Open exhibition (Dojima River Forum)



Web exhibition

● Promoting art and cultural activities and nurturing the next generation

We are working to promote local culture by holding painting exhibitions, as well as to nurture the next generation by holding online puppet shows for parents and children.



Mihama Art Exhibition



Kanden Family Theater

● Coexistence and co-prosperity with local communities where our power plants are located

As a member of the local community, we strive to revitalize and contribute to the local communities where our power plants are located by promoting the revitalization of the local economy as well as investing in community development and running local events, etc., together with local residents.



Clean the Sea project



Cleaning activity at a child welfare facility

● Support for employees engaged in social contribution activities

To support employees engaged in community activities or volunteer programs, we established a volunteer time-off program, among other initiatives. Our Social Contribution website on our company web portal provides information on the activities of volunteers and various workplaces.

Active communication inside and outside the Company

Policy and Concept

● Communication inside and outside the Company through public relations and public hearing activities

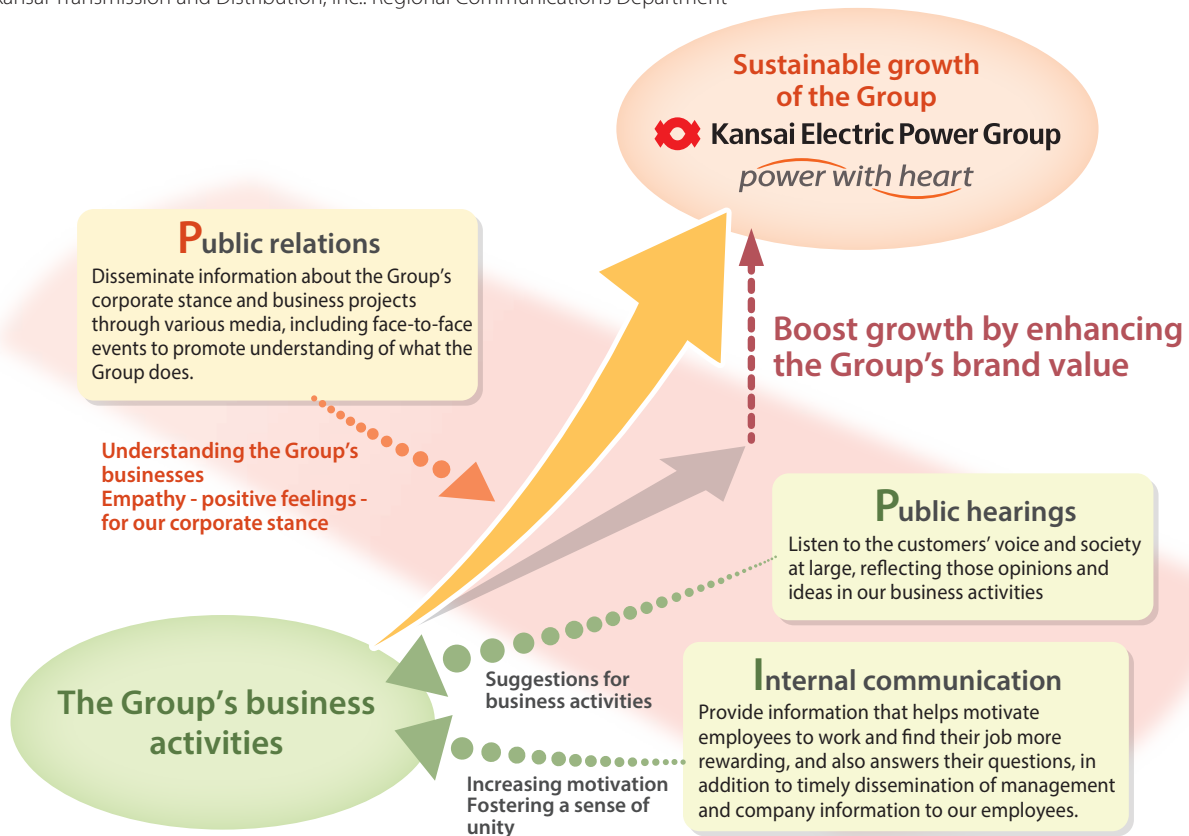
Through public relations and public hearing activities, we deliver information to our stakeholders in an appropriate manner to promote their understanding of our Group businesses. Opinions and requests are shared with management and employees and reflected in our business activities as an effort to establish bilateral communication to maintain a sense of trust.

We will seek their understanding of our Group businesses and conduct highly transparent and open business activities with the thought represented by our brand statement, "power with heart."

System

The Kansai Electric Power Co., Inc.: Office of Corporate Communications

Kansai Transmission and Distribution, Inc.: Regional Communications Department



Goals

Supporting smooth business activities and driving medium- to long-term growth through communication that goes a step beyond, leading to stronger engagement with customers, communities, and employees

Efforts

● Improving information disclosure to stakeholders

Through our securities reports, corporate governance reports, integrated reports, etc., the Group proactively discloses financial information to shareholders and other stakeholders, such as the Company's financial position and operating results, as well as non-financial information related to management strategies and issues, risks, and governance. Regarding contents stipulated by the Companies Act and other laws as well as information that is considered to be useful for dialogue with our shareholders and other stakeholders, we strive to offer detailed and accurate explanations that add value.

We also provide overseas investors with information as needed through English-language media.

The Group facilitates constructive dialogue with its shareholders and investors to gain their understanding of the Group's basic stance, encompassing legal compliance, and basic management policies including our medium-term management plan. By reflecting the opinions we receive in our approach to business management, we will, over time, restore the trust of our stakeholders and build a solid relationship based on trust.

● Working with the media

Information reported by television and newspapers has a significant impact on stakeholder perceptions of and attitudes toward our Group. For this reason, it is necessary to deliver more accurate information. We hold press conferences with our president and make other efforts to provide information to the media actively. At the same time, we respond accurately and in a timely manner to media inquiries to promote understanding of our Group business operations.

● Delivering information through mass media

We utilize various forms of mass media to convey information about our efforts associated with our brand statement, "power with heart," and the business activities of our Group to customers and other members of society in a timely and appropriate manner.

By vitalizing communication with more customers using tools such as TV commercials, newspaper ads, websites, and social media, we seek to gain understanding and trust in our Group business operations.

◆ TV commercials and newspaper ads

Television commercials can convey information in an easy-to-understand manner with video and music, while newspaper advertisements enable readers to take time to review relatively large amounts of information. Taking advantage of the strengths of each type of media, we provide information on our Group initiatives such as Zero Carbon Vision 2050.

◆ Our website

We are making continuous improvements to our website, aiming to make it easier for customers to view and understand by updating its top page and other means. Along with our attitude and thoughts regarding safe and stable supply, we proactively send out information on our new businesses, innovations, international businesses, and other developments in new business areas.



Our Company's website



Our Company's website

◆ Social networks

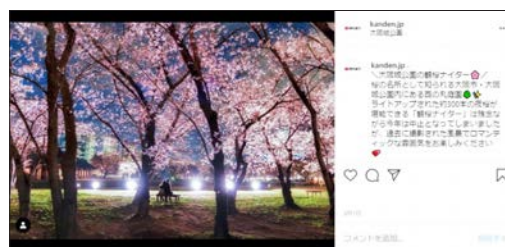
We disseminate information on social media, in the hope that this information on the Group's businesses will strike a chord with customers. On Facebook and Twitter, we use videos for posts focused on our employees performing their work and for bilateral communication. On Instagram, we introduce beautiful scenes from the Kansai region, with the theme of "lighting" and "warmth."



Our Group's Facebook account



Our Group's Twitter account



Our Company's Instagram account

◆ Publishing videos online

To help our stakeholders deepen their understanding about energy and feel close to our Company, we have released videos: “The Message of the 50th Year—Half a century since we launched commercial operation of nuclear power,” which expresses our thoughts and sense of mission for nuclear power generation, and “Anthropomorphic Equipment Series II” in which personified power generation equipment is introduced using stories.



The Message of the 50th Year



Equipment with a human touch II

● Efforts to promote understanding about energy

We hold on-site information sessions for companies and organizations, as well as on-site classes for elementary and junior high schools, using our ingenuity in developing programs that include experiments on energy and a VR-based simulated power plant tour experience for deeper understanding. We will remain committed to promoting understanding.



On-site classes



On-site information session using VR headsets

● Vitalizing internal communication

With the aim of creating a new Kansai Electric Power Group and enhancing employee engagement, we are advancing initiatives to deepen bilateral communication between management and employees, as well as between employees themselves. Information on nuclear power generation and other important matters in business management, our Group businesses, initiatives related to “power with heart,” and similar topics is disseminated in a timely manner through our in-house newsletter and company web portal/TV.

In addition to the above, our in-house newsletter “The Kansai Denryoku Shimbun” is also published on our website as an opportunity for customers and communities to get to know the Group’s thoughts and initiatives, in an effort to disclose more transparent information.



Communication between management and employees



Distributing the President’s video message over in-house TV, etc.

● Reflecting the voice of society in our business activities

The Group pays attention to the voices of stakeholders, shares the opinions and requests received with management and employees, and reflects these opinions and requests in our business activities as part of our efforts to earn trust.

● Relevant data

	2019/3	2020/3	2021/3
Efforts to promote understanding by local governments	About 4,600	About 5,100	About 5,200
Volunteer time-off program	63 (161.5 days)	87 (201 days)	26 (50 days)
Number of social contribution activities (including on-site classes)	864	1044	467
Amount of social contribution activities*1	478 million yen	516 million yen	1,615 million yen
Amount of donations made in the above figure	430 million yen*2	468 million yen*2	1,292 million yen

	2019/6	2020/6	2021/6
Total number of sustainable community development plans realized*2	7	10	11

*1 From fiscal 2020 onward, figures include part of the amount of social contribution activities through business activities.

*2 Figures from the Kansai Electric Power Co., Inc. (non-consolidated)

Supply Chain Management



SOCIAL



Policy and Concept

● CSR-based Procurement Policy

With safety as the highest priority and the ideal of cost reduction and stable procurement at the same time, the procurement divisions of our Company are procuring materials and services that are outstanding in terms of safety, quality and price at appropriate times. We follow our Action Standards for Procurement Activities, which is comprised of seven items, including quality maintenance, consideration of the environment and human rights, and thorough compliance. Doing so, we undertake purchasing activities based on corporate social responsibility and endeavor to contribute to society and create value. Since these procurement activities are supported by our suppliers, who are valuable partners, we are using contract negotiations, supplier visits and other opportunities to work to explain our CSR-based Procurement Policy and deepen their understanding of our efforts. In fiscal 2020, we conducted questionnaire surveys targeting key business partners and confirmed the status of their CSR efforts. We will continue working on CSR activities in the future.

◆ Action Standards for Procurement Activities

1. Place the highest priority on safety.
2. Promote cost reduction efforts.
3. Ensure the stable procurement of equipment, materials, and services while maintaining or improving quality and technical expertise.
4. Establish strong partnerships.
5. Contribute to society and always consider the health of the environment.
6. Maintain the openness and transparency of all business transactions.
7. Fully comply with laws and regulations.

System

Director responsible: Nobuhiro Nishizawa (Executive Vice President) of the Kansai Electric Power Co., Inc.

Management office: Planning & General Management Group, Sourcing and Procurement Division of the Kansai Electric Power Co., Inc.

Goals

● Implementation of the CSR-based Procurement Policy and promotion of their adoption by suppliers

CSR questionnaire implementation rate for new suppliers (Sourcing and Procurement Division contracts) 100%

→ Implementation rate of 75%

Implement CSR questionnaire in fiscal 2019-2021 for our top 200 business partners whose transaction amounts are among the largest.

→ Scheduled to be fully completed by the end of FY 2021 (42% completed)

Efforts

● Implementation of an internal training and supplier questionnaire, and establishment of a Procurement Review Committee

The Sourcing and Procurement Division provides CSR-related training as part of our new employee training program, for the purpose of implementing the CSR-based Procurement Policy and promoting their adoption by suppliers. We also confirm how well CSR is being understood through regular skill checks. We take supplier registration and other opportunities to explain our CSR-based Procurement Policy to our business partners, and conduct CSR questionnaires to see how they address tasks such as consideration to the environment, respect for human rights, improvement of the working environment, and thorough compliance.

Additionally, in order to ensure the appropriateness and transparency of construction orders and contract procedures, we have set up a Procurement Review Committee, which includes external members. The Committee regularly examines the procurement process and provides guidance and advice from the perspective of external experts.

● Relevant data

Policies

CSR-based Procurement Policy	Established	https://www.kepcoco.jp/sustainability/csr/proc/index.html
Code of Conduct and Procurement Policy for Suppliers	Established	https://www.kepcoco.jp/sustainability/csr/proc/client.html

Governance

G

Governance

- ◆ Corporate Governance
- ◆ Risk Management
- ◆ Compliance

Corporate Governance



GOVERNANCE



Basic concept on corporate governance

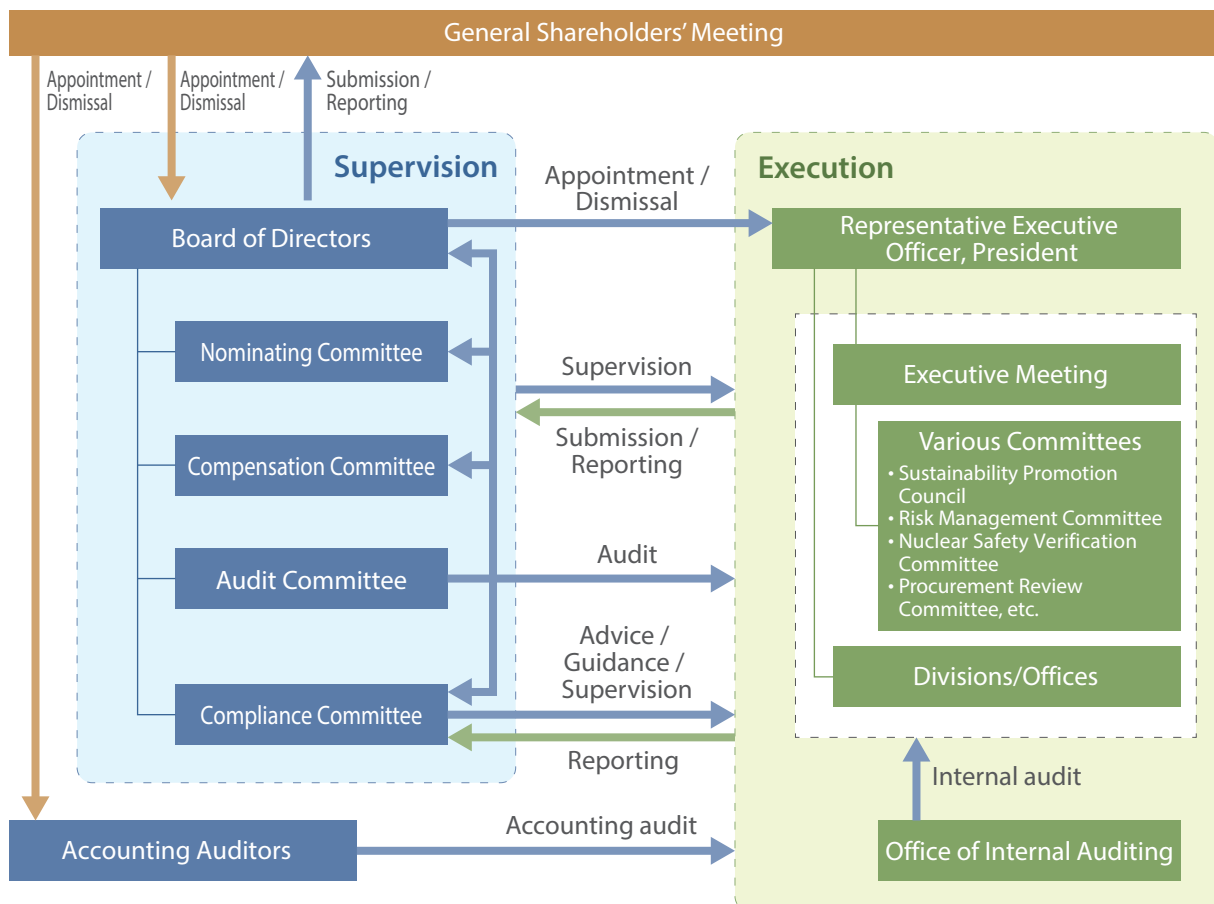
Based on the Kansai Electric Power Group Purpose & Values, the Group will continue to meet the expectations of all its stakeholders, thereby contributing to the sustainable improvement of corporate value and the sustainable development of society.

Recognizing that the most important management issue for achieving this goal is strengthening corporate governance, we have adopted the institutional design of a company with a nominating committee, etc., which clearly separates execution and supervision for our corporate governance, with the aim of enhancing management transparency and objectivity in business management.

In terms of supervision, in order to reflect the perspectives of all our stakeholders, we have established a system with a Board of Directors at the core focused on objective and diverse perspectives as outsiders. By appropriately supervising execution, we will improve transparency and objectivity in business management.

Overview of current corporate governance

In our Company, the Executive Meeting and various committees are placed under the Board of Directors, which has been charged with management responsibility by the General Shareholders' Meeting. While executing operations appropriately, we supervise the execution of duties by our directors and executive officers through the Board of Directors. We have adopted the institutional design of a company with a nominating committee, etc. since June 2020, which clearly separates execution and supervision for our corporate governance, with the aim of enhancing management transparency and objectivity in business management.



* The Kansai Electric Power Co., Inc. will also implement an appropriate governance system for Kansai Transmission and Distribution, Inc. insofar as the Company has the right to do so as its shareholder, based on the premise of ensuring neutrality as a general power transmission and distribution business operator.

Corporate governance systems

1. Supervision

● Board of Directors

◆ Structure

In light of our business scale, business description, approach to managerial issues, and supervisory function, as well as diversity, including gender and internationality, the Board of Directors is a necessary and appropriate structure comprised of independent outside directors (eight persons) with ample experience and knowledge cultivated as executives or professionals in a wide range of fields and inside directors (six persons) who have abundant expertise and abilities in our business.

In addition, from the perspective of appropriate decision-making and effective supervision, the number of the Board members shall be 20 or less, a majority of which shall be independent outside directors.

The Chairperson of the Board of Directors shall be an independent outside director.

◆ Roles and responsibilities

Based on the standpoints of our diverse and wide-ranging set of stakeholders, the Board of Directors aims to achieve sustainable growth and increase the corporate value of the Group over the medium to long term. To achieve these ends, the Board takes on the following main responsibilities: ① to illuminate the future path of the Group, including our corporate strategy, ② develop an environment that supports appropriate risk-taking by executive officers, and ③ provide highly effective supervision of management from an independent and objective standpoint.

We will decide basic management policies such as management plans after thorough discussions from a variety of perspectives, regularly monitor progress and reflect results in our future policies. In addition, we will establish effective internal control and risk management systems, supervise management with a focus on compliance, and support executive officers for their swift and strong-minded decision-making.

From the standpoint of clearly separating execution and supervision, the Board of Directors, in principle, delegates decisions on business execution to executive officers in line with basic management policies. Regardless of whether or not delegation to executive officers is made, if necessary, especially important decisions on business execution are discussed in advance at the Board of Directors meeting while they are being considered, and appropriate opinions and advice are provided from outside directors and other directors before decisions are made.

● Nominating Committee

The Nominating Committee is chaired by an independent outside director and all of its four members are independent outside directors.

The Nominating Committee resolves proposed agenda for General Shareholders' Meeting regarding the appointment and dismissal of directors after establishing the "Policy for nominating director candidates." The Committee also resolves/deliberates on matters related to the appointment of executives. In addition, the Committee is responsible for formulating a successor plan for the Executive Officer and President, as well as developing candidates in a planned manner, with sufficient time and resources. In the course of this process, it is important for the Committee to recognize the appointment of the Executive Officer and President as the most important strategic decision-making for sustainable growth of the entire Group and improvement of corporate value over the medium to long term. In formulating the successor plan, the Committee deliberates the outcome, required experience and skills, competency (ability), potential (quality), sense of value, and personality expected from the next Executive Officer and President, and reviews "what the President is supposed to be."

Moreover, utilizing internal assessment and external assessment by third-party organizations, the Committee collects information on candidates in a multifaceted way. Members also directly interview candidates to clarify the appointment process, with high transparency and objectiveness ensured.

Chairperson: Sadayuki Sakakibara

Committee members: Takamune Okihara, Tetsuya Kobayashi and Kazuko Takamatsu

● Compensation Committee

The Compensation Committee is chaired by an independent outside director and all of its four members are independent outside directors.

The Compensation Committee resolves compensation of respective directors and executive officers after establishing the "Policy for determining the compensation of directors and executive officers." The Committee also resolves/deliberates on other matters related to executive compensation. When considering various compensation-related issues, such as the standard of compensation of directors, the Committee uses data from external specialized organizations and examples from other companies.

Chairperson: Tetsuya Kobayashi

Committee members: Sadayuki Sakakibara, Takamune Okihara and Atsuko Kaga

● Audit Committee

The Audit Committee is chaired by an independent outside director and consists of four outside and two inside directors not concurrently serving as executive officers. To serve as an Audit Committee member, each director is required to have appropriate experience and abilities as well as necessary knowledge of finance, accounting, and legal affairs.

The Audit Committee establishes basic policies and rules necessary to execute its duties, and then audits the execution of duties by executive officers, directors, employees and others of the Company or its subsidiaries, from the viewpoint of legality and appropriateness. In addition to that, the Committee reports the status and results of audits to the Board of Directors. When necessary, the Committee provides advice and recommendations to executive officers, etc.

The Audit Committee, the Office of Internal Auditing and accounting auditors will conduct efficient and effective audits in close collaboration as appropriate through exchanging opinions on audit plans and audit results.

The Committee members are engaged in auditing activities on a daily basis through their attendance at important meetings (other than Board of Directors meetings) to audit operations and assets of our key business offices.

Chairperson: Hiroshi Tomono

Committee members: Shigeo Sasaki, Atsuko Kaga, Fumio Naito, Yasushi Sugimoto and Yasuji Shimamoto

● Compliance Committee

For the purpose of strengthening the Group's function to supervise compliance, we have established a Compliance Committee, which is independent from the President and other executive officers. The Committee is under the direct control of the Board of Directors. The Committee, a majority of which including the Chairperson are external experts, deliberates and approves particularly important matters such as basic policies for promoting compliance and policies for addressing problematic events associated with directors, executive officers, and others. When necessary, the Committee also directly guides, advises and supervises the President and other executive officers, as well as reporting periodically to the Board of Directors.

● Directors

◆ Nomination policy

In performing their duties, our directors must be willing to conduct themselves with emphasis on compliance, in accordance with the basic orientation of business management and guiding principles specified in the Kansai Electric Power Group Purpose & Values, the Kansai Electric Power Group Code of Conduct, etc. Regarding the nomination of director candidates, the Nominating Committee makes a decision after deliberating comprehensively on whether the candidate's ability, experience, personality, insight, and other elements are good enough to take on management of the Company, also in light of diversity, including gender and internationality, from the viewpoint of appropriate decision-making and effective supervision. As for outside director candidates, we ensure in particular that they have independence from an outsider's objective viewpoint and also take into account their role of enhancing the supervisory function of the Board of Directors.

The Company has established its own judgment criteria for independency, as described below, in light of the requirements for independent officers stipulated by the Tokyo Stock Exchange, Inc. We assess the independency of outside directors by these criteria.

If an outside director concurrently serves as an officer at another listed company, the number of concurrent positions is within a reasonable range so that the time and labor required to properly fulfill the roles and responsibilities as an outside director of the Company can be secured.

【Judgment criteria for independency established by the Company】

The Company considers an outside director to be independent when the outside director does not fall under any of the categories of 1 to 9 below.

1	A person to whom the Company is a major business partner, or a business executive for that person
2	A major business partner of the Company, or its business executive
3	A consultant, accounting professional or legal professional who receives a large amount of money or any other assets, other than executive compensation, from the Company (if the consultant, etc. who receives such assets is an organization such as a corporation, a person who belongs to that organization)
4	A person who receives a large amount of donations or membership fees from the Company, or a business executive for that person
5	A business executive of the auditing firm of the Company
6	A person who is a major shareholder of the Company, or a business executive for that person and a business executive of a company for which the Company is a major shareholder
7	A business executive of a company which has accepted an executive from the Company or a subsidiary of the Company
8	A person who has fallen under any of the categories of 1 to 7 above recently
9	A spouse or relative within the second degree of kinship to a person described in either of the following items (excluding those who are not in applicable positions) ----- (1) A person listed in 1 to 3 above ----- (2) A person who is currently or has recently been a business executive of the Company or a subsidiary of the Company

【Directors' skill matrix】

In order to ensure diversity in knowledge, experience, abilities, etc. across the Board of Directors, skills required for directors to manage important issues were selected by the Company and decided by the Nominating Committee, in addition to basic skills in line with the Corporate Governance Code.

Directors	Management experience	Governance/ Risk management	Finance/ Accounting	Legal affairs/ Compliance	Technologies	Industrial policies	Public relations strategies	Global experience	Sales/Marketing
Sadayuki Sakakibara	●	●			●	●		●	
Takamune Okihara	●	●	●					●	●
Tetsuya Kobayashi	●	●					●		●
Shigeo Sasaki		●		●					
Atsuko Kaga					●	●			●
Hiroshi Tomono	●	●			●			●	
Kazuko Takamatsu	●						●	●	
Fumio Naito		●	●						
Takashi Morimoto	●					●			●
Toyokazu Misono	●							●	●
Koji Inada	●				●	●			
Nozomu Mori					●	●			
Yasushi Sugimoto		●	●						
Yasuji Shimamoto	●				●				

◆ Roles and responsibilities

Directors shall actively express their opinions and have thorough and constructive discussions at the Board of Directors, etc. When executing their duties, directors shall diligently collect sufficient information by requesting explanations from other directors and executive officers and through other means.

Outside directors' roles include strengthening the supervisory function of the Board of Directors from their objective external perspective, making use of their abundant experience and insight as corporate managers and specialists. Additionally, from the perspective of actively contributing to discussions at the Board of Directors, outside directors actively exchange opinions and cooperate fully with executive officers.

◆ Training

We hold training sessions for directors when and after they take up their post on a periodical basis to provide the knowledge necessary to fulfill their roles and responsibilities.

For outside directors, we provide explanation about the Group's business, finances, organization, and other aspects on a continual basis when and after they take up their post so they can acquire the knowledge necessary to fulfill their roles and responsibilities. In addition, we hold tours of our facilities as appropriate and provide opportunities for them to talk with our frontline staff to promote their understanding of our business.

2. Execution

● Executive Officers

◆ Appointment policy

In performing their duties, our executive officers must be willing to conduct themselves in accordance with the basic orientation of business management and guiding principles specified in the Kansai Electric Power Group Purpose & Values, the Kansai Electric Power Group Code of Conduct, etc., and in adherence to the spirit of the President's Oath to Stakeholders. Regarding the appointment/dismissal of executive officers, the Board of Directors makes a decision after deliberating comprehensively on whether the officer has abundant expertise, and whether his/her experience, business execution ability, personality, and other elements are good enough to take on management of the Company.

◆ Roles and responsibilities

Executive officers make decisions on how the business of the Company is carried out, which is delegated to them by the Board of Directors and by the resolution of the Board of Directors, and also execute the operations of the Company.

◆ Training

We hold training sessions for executive officers when and after they take up their post on a periodical basis to provide the knowledge necessary to fulfill their roles and responsibilities.

● Executive Meeting and Committees

In order to deliberate on important business execution policies, plans, and execution of business for the entire Group and to receive necessary reports, based on the basic policies determined by the Board of Directors, we hold Executive Meeting every week as a general rule. The Executive Meeting is chaired by Executive Officer and President, and consists of all our executive officers to ensure swift and appropriate corporate management. In addition to the above, for the purpose of ensuring appropriate and smooth business execution, we have established various committees that support decision-making through the Executive Meeting and the business execution by respective divisions. These committees mostly consist of executive officers in charge of duties related with respective goals, and meetings are convened periodically or on an as-needed basis.

◆ Sustainability Promotion Council

To address sustainability-related issues, our Group's basic concept and code of conduct that we should strictly observe are stipulated in the Kansai Electric Power Group Code of Conduct. We also set up a Sustainability Promotion Council to draw up comprehensive sustainability measures for the entire Group and check implementation status. At the same time, we perform concrete activities for the Group to contribute to the sustainable growth of society.

◆ Risk Management Committee

Risks associated with the Group's business activities are managed autonomously by each operating division in accordance with the Kansai Electric Power Group Risk Management Rules. Risk management for risks considered to have cross-organizational importance (information security, business management of subsidiaries, safety and health, market, credibility of financial reporting, environment, disasters, and compliance) are enhanced by the supervision of departments with specialized expertise on each risk category that provide advice and guidance to the various operating divisions on an as-needed basis. Furthermore, a Risk Management Committee is established to put risks under central management. The Committee Chairperson is appointed as the Risk Management Officer, and the Committee strives to manage risks associated with the Group business activities at the appropriate level through this system.

◆ Nuclear Safety Verification Committee / Nuclear Safety Enhancement Committee

Regarding nuclear safety, our principles associated with nuclear safety to be succeeded to our employees in future generations are clearly stated in our Commitment to Enhancing Nuclear Safety. Based on this, we are making constant efforts to improve safety. A Nuclear Safety Enhancement Committee has been set up to enhance the safety of nuclear power on a company-wide basis. The Committee checks and conducts discussion on the promotion of recurrence prevention measures and fostering of safety culture following the accident at Mihama Nuclear Power Station Unit 3 and activities from a broad range of viewpoints, including voluntary and continuous activities following the accident at Tokyo Electric Power Fukushima Daiichi Nuclear Power Station. In addition, opinions and advice provided by the Nuclear Safety Verification Committee from its independent position have been reflected in our safety improvement initiatives.

◆ Procurement Review Committee

For the purpose of ensuring appropriateness and transparency in the procedures of construction orders and contracts as well as payment of donations and cooperation funds, we have established a Procurement Review Committee, the majority of which are outside experts, with an examination mechanism from the perspective of such experts put in place.

◆ Internal Auditing Committee

Regarding internal audits, we have established an Internal Auditing Committee in order to share and deliberate widely-ranging management issues, such as safety and quality, gain insights and information from outside the Company, and ensure the adequacy of the internal audit process for the entire Group from a fair and professional standpoint.

In addition, as a dedicated organization for conducting internal audits, the Office of the Internal Auditing Committee has been set up to audit the adequacy and effectiveness of the system and operational status on a regular basis, this ensuring the adequacy of operations.

3. Advisors

After deliberation by the Nominating Committee, the Company has abolished the conventional senior advisor and advisor system and put a new advisor system in place. Under the new advisor system, the post of senior advisor has been abolished and excluded from eligibility for part-time engagements of retired officers.

◆ System

Advisors may be appointed on an as-needed basis, if doing so contributes to the sustainable development of the Group.

◆ Appointment/remuneration determination process

From the perspective of ensuring objectivity, when appointing an advisor to a person who retired from the post of a director or executive officer, the Nominating Committee, the Compensation Committee, and the Board of Directors decide the necessity of such appointment, job description, and remuneration after rigorous deliberation, and disclose the commissioned duties and the individual amount of remuneration of the advisor.

◆ Roles

Advisors contribute to society through activities in business and industrial communities and respond to requests from regional economic communities by making full use of their own experience and human networks, toward the growth of the economy in the Kansai region as well as the business of the Group. Advisors do not provide guidance or advice on business management.

4. Remuneration of directors and executive officers

Remuneration of directors and executive officers is determined by the Compensation Committee in accordance with the provisions of the Companies Act.

Remuneration of directors not responsible for execution of business consists only of basic compensation, in consideration of their roles. Remuneration for executive officers responsible for the execution of business consists of basic compensation that takes into account the responsibilities required for each executive officer's position, etc., and short-term incentives, which are results-based compensation and stock-based compensation as a medium- to long-term incentive, in order to contribute to the sustainable improvement of our corporate performance and corporate value. Proportion of the payment will be set using "basic compensation: results-based compensation: stock-based compensation = 6:3:1" as a guide.

5. Management of subsidiaries

We try to instill in our subsidiaries the basic approaches to management and action standards that are embodied in, for example, the Kansai Electric Power Group Purpose & Values and the Kansai Electric Power Group Code of Conduct. In addition, we ensure the propriety of our corporate group's business activities at our subsidiaries by supporting them and providing advice on the arrangement of their autonomous management structures based on our internal regulations related to subsidiary management.

We also strive to prevent any losses to the corporate value of the Group as a whole, or at least keep them to a minimum, by participating in important decision-making by our subsidiaries, and periodically checking on their management status. Moreover, our Executive Meeting deliberates execution directions and plans for important business, particularly for the core companies responsible for businesses that are the pillars for the future growth of the Group.

6. Effectiveness evaluation and response policies for the Board of Directors

● Method of effectiveness evaluation

The Board of Directors uses a third-party organization to conduct an annual questionnaire survey targeting all directors on the effectiveness of the Board of Directors, etc. Based on the aggregated results of the questionnaire, the Board of Directors evaluates its effectiveness and takes proper steps to improve corporate governance, including operation of the Board of Directors, etc.

In 2020, we conducted a questionnaire survey on the effectiveness of the Board of Directors, etc. with a question added to confirm the status of efforts in implementation of our business improvement plan formulated to prevent problem recurrence (including the transformation to a company with a nominating committee, etc. as of June 25, 2020 aimed at further strengthening of the supervisory function by clearly separating execution and supervision), based on reflection regarding issues such as receiving money and gifts and compensation paid to officers for their part-time engagements after retirement.

● Results of effectiveness evaluation

Fiscal 2020 overall evaluation
Survey results indicate that many respondents consider appropriate or generally appropriate the "Construction of a meeting management system due to the change in the organizational design associated with the transformation to a company with a nominating committee, etc. (ensuring of appropriate agenda items for the Board of Directors, basic operation of each committee, etc.)," "Composition of the Board of Directors," and "Implementation of efforts toward fulfilling discussions at the Board of Directors (such as providing information to outside directors beforehand) and resultant active discussions by the Board of Directors." In consideration of the above, the Board of Directors determined that the effectiveness of the Board of Directors, etc. for fiscal 2020 has been ensured.
Issues in the future
<ul style="list-style-type: none"> • Enhancing opportunities for communication between outside directors and the management • Further strengthening of reporting on the operational status of internal control system, etc.
Response policy
<p>Taking into account the above issues, the Board of Directors will formulate an improvement plan, and outside directors and executive officers will thoroughly discuss our medium- to long-term management policies, the direction of growth strategies, and other matters to enhance opportunities to develop clear understanding of the Company and its operations.</p> <p>In addition, through further enhancement of reporting details, including the business management status and risk management status of affiliated companies as well as the operational status of the whistleblowing system, we will implement and strengthen our group governance. The Board of Directors will continue to share issues based on the evaluation of effectiveness and make continuous efforts to further improve our effectiveness.</p>

● Operating status of fiscal 2020

◆ Board of Directors

Based on laws and regulations and the rules of the Board of Directors, the Board of Directors resolves proposals submitted to the General Shareholders' Meeting, members comprising each committee, and other important matters related to the management of the Group, such as Kansai Electric Power Group Purpose & Values, Kansai Electric Power Group Medium-term Management Plan (2021-2025) and Zero Carbon Vision 2050. Moreover, the status of efforts in implementation of our business improvement plan in line with the Electricity Business Act, quarterly financial results, operational status of the internal control, and other matters are reported and deliberated on a regular basis. For the resolutions and deliberation stated above, with the aim of ensuring fulfilling discussions at the Board of Directors and strengthening corporate governance, in fiscal 2020, six opinion exchange meetings were held by directors, and one meeting was held only attended by independent outside directors to discuss a wide range of themes such as management issues and the direction of future growth strategies of the Company. Views obtained through these meetings are reflected in our business management and subsequent discussions at the Board of Directors. Furthermore, various measures are implemented for outside directors throughout the year, such as prior briefing on board meeting agendas from the executive side; visiting front-line workplaces including nuclear power plants; and dialogue with employees.

◆ Nominating Committee

The Committee decides the content of proposals for appointment and dismissal of directors, submitted to the General Shareholders' Meeting, as well as the policy for selecting directors, and deliberates the details of a successor plan for the Executive Officer and President, successor development process, commissioning of advisors, and other matters. Priority items discussed in fiscal 2020 include the following:

- ✓ Successor plan for Executive Officer and President
- ✓ Skills directors should have (skill matrix)
- ✓ Independence criteria for outside directors

◆ Compensation Committee

The Committee decides on the policy and details of compensation of respective directors and executive officers, and deliberates on compensation for advisors. Priority items discussed in fiscal 2020 include the following:

- ✓ Compensation standards for officers in the Company based on the results of surveys related to compensation standards of other companies, trends in compensation policies, etc.
- ✓ Performance-based compensation system and goal setting

◆ Audit Committee

The Committee formulates audit plans encompassing important matters related to the Group's management decided by the Board of Directors, and performs audits from the perspective of whether or not the Group is conducting business activities legally and appropriately, and making decisions and executing business properly and reasonably to prevent risks and improve corporate value. Deliberation is made among the Committee members, and their opinions and recommendations are provided to the Board of Directors and the executive side. Priority audits and other items conducted in fiscal 2020 include the following:

- ✓ Confirmation of the status of efforts to strengthen compliance and governance in line with our business improvement plan
- ✓ Confirmation of the status of efforts such as improving profitability of the comprehensive energy business
- ✓ Dialogue with front-line workers
- ✓ Response to proceedings for damages against our former officers filed by the Company concerning problems such as receiving money and gifts and compensation paid for their part-time engagements after retirement.

Board of Directors, Nominating Committee, Compensation Committee, and Audit Committee meetings held in fiscal 2020 and the attendance status of respective directors are as follows.

Name	Meetings held and attendance status			
	Board of Directors	Nominating Committee	Compensation Committee	Audit Committee
Sadayuki Sakakibara*	◎100% (13/13 attendances)	◎100% (8/8 attendances)	100% (3/3 attendances)	—
Takamune Okihara*	100% (18/18 attendances)	100% (8/8 attendances)	100% (3/3 attendances)	—
Tetsuya Kobayashi*	100% (18/18 attendances)	100% (8/8 attendances)	◎100% (3/3 attendances)	—
Shigeo Sasaki*	94% (17/18 attendances)	—	—	95% (18/19 attendances)
Atsuko Kaga*	89% (16/18 attendances)	—	100% (3/3 attendances)	84% (16/19 attendances)
Hiroshi Tomono*	100% (13/13 attendances)	—	—	◎100% (13/13 attendances)
Kazuko Takamatsu*	100% (13/13 attendances)	100% (8/8 attendances)	—	—
Fumio Naito*	100% (13/13 attendances)	—	—	100% (13/13 attendances)
Takashi Morimoto	100% (18/18 attendances)	—	—	—
Toyokazu Misono	100% (18/18 attendances)	—	—	—
Koji Inada	100% (18/18 attendances)	—	—	—
Yasushi Sugimoto	100% (18/18 attendances)	—	—	100% (19/19 attendances)
Susumu Yamaji	100% (13/13 attendances)	—	—	100% (13/13 attendances)

Notes: 1 The numbers in parentheses indicate the number of attendances/the number of meetings held during the term of office.

2 ◎ represents the chairperson of the board/committee.

3 * represents an independent outside director.

4 The attendance status of the Audit Committee includes the Audit & Supervisory Board meetings held before the 96th Ordinary General Shareholders' Meeting held on June 25, 2020, when the Company transitioned to a company with a nominating committee, etc.

Risk Management



Policy and Concept

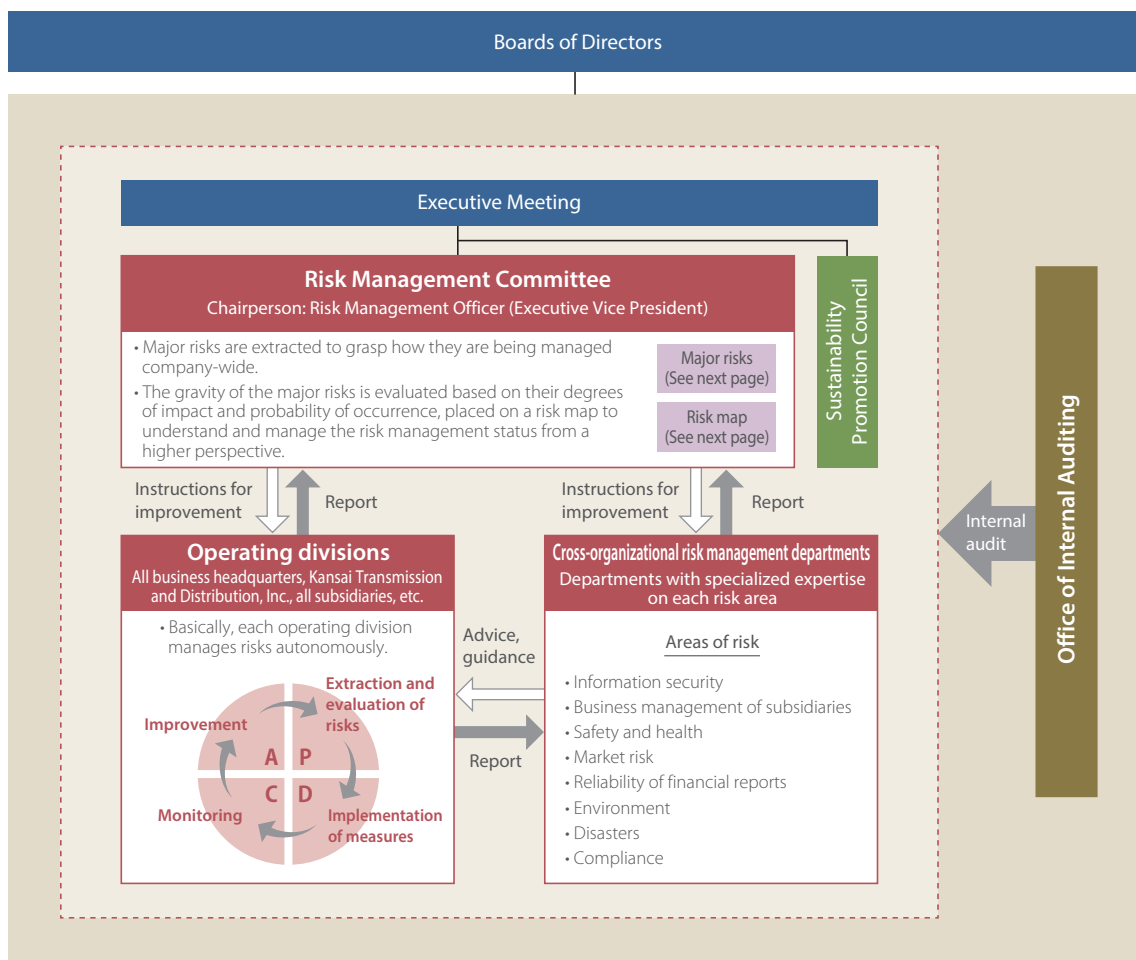
In accordance with the Kansai Electric Power Group Risk Management Rules established in April 2006, risks that have the potential to affect the achievement of organizational goals are to be recognized and identified. Then, an assessment is to be made, followed by implementing necessary measures to deal with the risks. The impact of risk on the Group shall be managed at an appropriate level through this series of processes.

System

Risks associated with the Group's business activities are to be managed autonomously by each operating division. Risk management for risks considered to have cross-organizational importance, such as information security, business management of subsidiaries, safety and health, market risk, reliability of financial reports, environment, disasters and compliance, will be enhanced by the supervision of departments with specialized expertise on such risks that provide advice and guidance to the operating divisions on an as-needed basis. Furthermore, a Risk Management Committee comprising 14 members headed by Toyokazu Misono, Executive Vice President, has been established to put risks under central management. The Committee Chairperson is appointed as the Risk Management Officer, and the Committee strives to manage risks associated with Group business activities at an appropriate level through this system.

The Risk Management Committee presents the risk evaluation results to the Executive Meeting and the Sustainability Promotion Council so that necessary risk measures are reflected in plans and policies for the entire Group with the aim of realizing our sustainable growth into the future. The Committee also periodically reports its risk management findings to the Executive Meeting and the Board of Directors. If necessary, it improves the structure and system of risk management. Furthermore, the Office of Internal Auditing conducts internal auditing on the maintenance and operation of the risk management system, and we will make improvements based on the audit results.

Risk Management System



Efforts

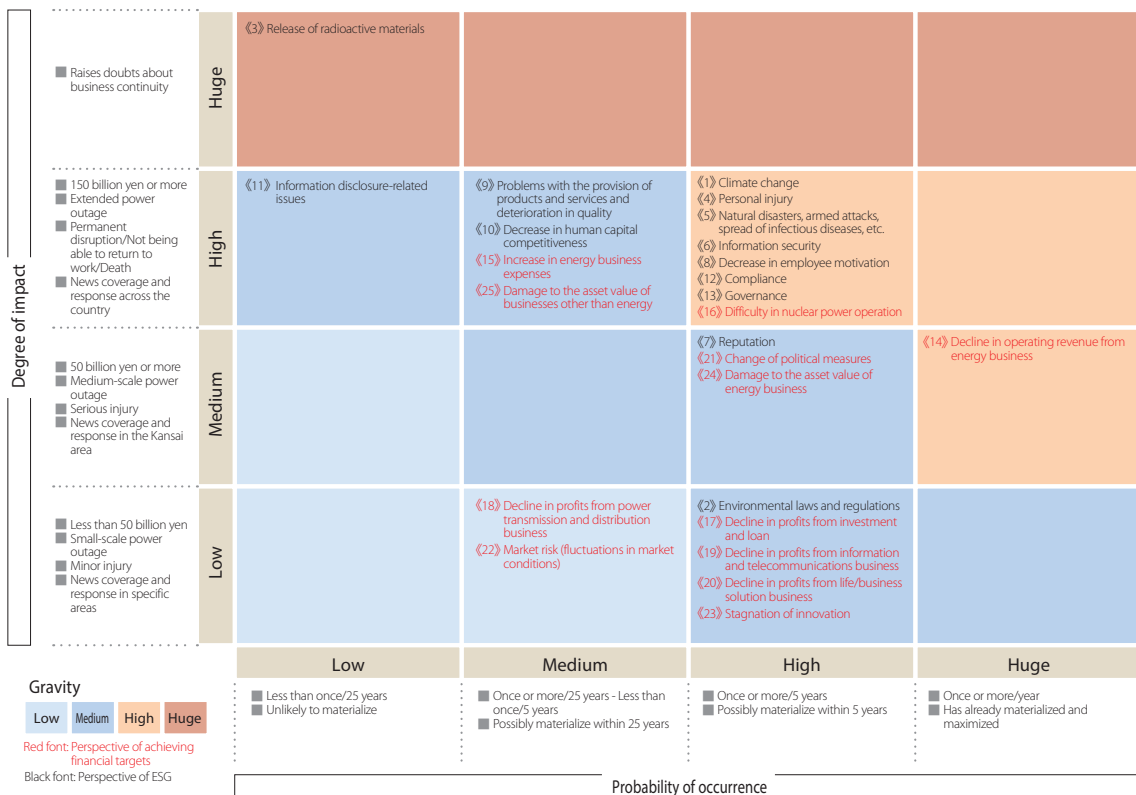
The Risk Management Committee held meetings four times during fiscal 2020. Meetings ascertain and evaluate how major risks that could greatly affect our Group's business activities are being managed company-wide. These major risks are systematically sorted out not only for our Group's sustainable growth but also with the aim of achieving our financial targets and ESG goals, to contribute to the sustainable development of society by solving global social issues covered under SDGs. The gravity of the major risks is evaluated based on their degrees of impact and probability of occurrence, classified and organized on a risk map to clarify, manage, and evaluate how the risks are being handled from a higher perspective, and instructions for improvement are given to operating divisions, as necessary, based on the evaluation results. For details of and countermeasures for major risks that could affect the Group's business results and financial position, please refer to the "Operational risks" section of our securities report for the fiscal year ended March 31, 2021 and financial results for the three months ended June 30, 2021 (only available in Japanese).

Major risks

Classification	Major risks
E	《1》 Climate change
	《2》 Environmental laws and regulations
	《3》 Release of radioactive materials
S	《4》 Personal injury
	《5》 Natural disasters, armed attacks, spread of infectious diseases, etc.
	《6》 Information security
	《7》 Reputation
	《8》 Decrease in employee motivation
	《9》 Problems with the provision of products and services and deterioration in quality
	《10》 Decrease in human capital competitiveness
	《11》 Information disclosure-related issues
G	《12》 Compliance
	《13》 Governance

Organizational goals/Classification		Major risks		
Achievement of financial targets	Achievement of profit targets (P/L)	Operating revenue	《14》 Decline in operating revenue from energy business	
		Energy	Expenses	《15》 Increase in energy business expenses
			Investments and loans	《16》 Difficulty in nuclear power operation
		Transmission & Distribution	《17》 Decline in profits from investment and loan	
		Information & Telecommunications	《18》 Decline in profits from power transmission and distribution business	
		Life/Business Solution	《19》 Decline in profits from information and telecommunications business	
			《20》 Decline in profits from life/business solution business	
		Business environment	《21》 Change of political measures	
			《22》 Market risk (fluctuations in market conditions)	
		Maintenance and improvement of asset value (B/S)	Energy	《23》 Stagnation of innovation
			Other	《24》 Damage to the asset value of energy business
			《25》 Damage to the asset value of businesses other than energy	

Risk map



[Note] Probability of occurrence indicates that, for example, a risk classified as "Medium: Once or more/25 years - Less than once/5 years" does not always occur at least once in 25 years, but viewed relatively, it is evaluated to have that degree of probability. The monetary impact reflects lower sales and higher expenses.

◆ Investment risk management

Regarding investment in the domestic renewable energy business, international and our group businesses, and new businesses, in addition to the investment appropriateness evaluations, we have established and operated a series of management processes including post-investment monitoring, as well as consideration and implementation of disinvestment/replanning measures. The internal meeting structure (Investment Evaluation Committee), which consists of executives in charge of business promotion and corporate divisions, deliberates and examines such processes based on their specialized knowledge. In these ways, we support appropriate decision-making for individual projects and take timely measures when risks manifest to manage investment risks suitably. We regularly report these states of management to the Executive Meeting, and we reform frameworks and methods for evaluation and management as necessary.

<Investment appropriateness evaluations>

When implementing investments, along with conformity to company-wide policies for investment goals and objectives, with the assurance of profitability as a prerequisite, we are evaluating the appropriateness of each project based on sufficiently examining risks and sustainability.

<Monitoring>

After making investments, we regularly conduct monitoring of individual projects to confirm their states of achieving investment objectives and profitability. We demand the implementation of necessary countermeasures when profitability decreases or other issues arise.

<Investigations on disinvestment and replanning>

For projects that have greatly worsened profitability or that have decreased retention value, based on comprehensive consideration of risks and other conditions, we promptly investigate and deliberate disinvestment and replanning as we strive to appropriately deal with risks.

Compliance

GOVERNANCE

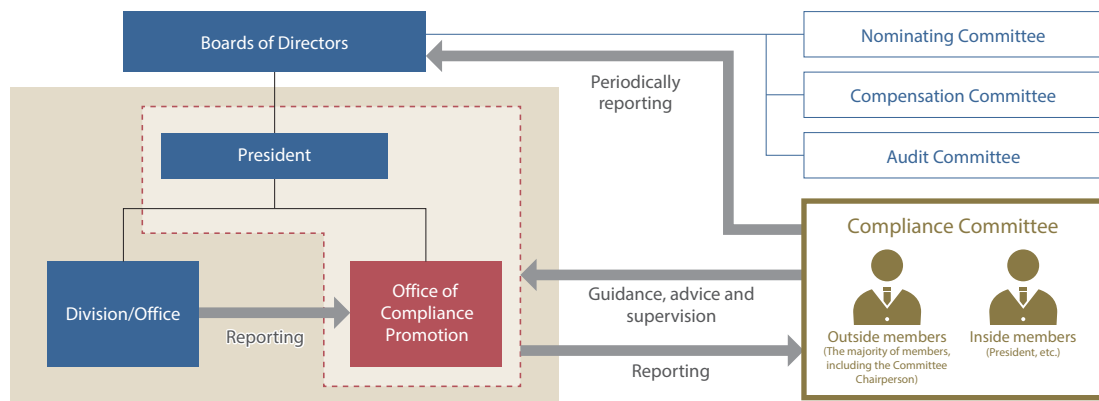
Compliance system

In order to radically strengthen our system of observing laws and regulations, the Group has decided to rebuild its compliance system by utilizing external human resources, and we established a Compliance Committee and an Office of Compliance Promotion in April 2020. Aiming to strengthen supervisory functions related to compliance, the Compliance Committee is organized directly under the Board of Directors as a committee independent from the President and other executive officers. The majority of the committee members, including the chairperson, are from outside the Company.

The Office of Compliance Promotion was newly established as a business organization independent from the Office of General Administration in order to strengthen its promotion functions related to compliance. The Office is composed of employees with legal knowledge as well as employees with diverse work experience. Besides formulating and implementing the Group's compliance promotion plan and responding to problematic events, the Office reports on and brings up compliance-related events for discussion to the Compliance Committee. Then, with the guidance, advice and supervision of the Compliance Committee, the President and other executive officers are able to act and take concrete measures.

In addition, an executive in charge of the Office of Compliance Promotion periodically reports on the status of compliance promotion to the Compliance Committee Chairperson, and in return he/she receives guidance, advice and supervision.

◆ Compliance System



● <Reference> Compliance Committee meetings held in fiscal 2020

Meetings of the Compliance Committee are held regularly on a quarterly basis, and will also be held swiftly and flexibly when a particularly problematic event arises.

In fiscal 2020, a total of nine meetings were held, focusing on the deliberation of compliance promotion plan, compliance-related training, and investigation reports on compliance problematic events.

Efforts to promote compliance

For fiscal 2021, we selected "Raising awareness through basic policy penetration for compliance promotion," "Promoting utilization of the Compliance Hotline," and "Group-wide application of the said two points" as priority compliance promotion themes that the entire Group should recognize and work on. With these priority themes at the core, we will strive to cultivate awareness of compliance for all Group employees.

Compliance Promotion Plan for fiscal 2021

1. Actively raising awareness of compliance

In addition to continuing integrity approach training* to "think about the strong points of the Kansai Electric Power Group," which has been held since last year at each workplace, we will provide integrity approach-based training to all employees including to our group companies to promote penetration of the purpose of our basic compliance promotion policy. We will also develop and utilize educational tools, and further enrich and improve the content of e-mail newsletters, promotion websites, etc. to help compliance become more familiar to

employees.

Additionally, in the wake of the issue of receiving cash and gifts, in December 2019, we established and brought into operation “Rules on Gifts, Reception and Entertainment” based on the idea that we must not receive gifts or entertainment. In April 2021, the Rules were revised to add new provisions for offering gifts and entertainment. We will make continuous efforts to thoroughly communicate the purpose of these rules.

* Integrity approach training: Training to raise awareness toward better behavior.

2. Promoting utilization of the Compliance Hotline

◆ Creating an environment for using the Compliance Hotline

We will continue to inform employees that confidentiality is securely protected and that any detrimental treatment is strictly prohibited, and will consider and implement measures to develop an environment that facilitates the use of our whistleblowing system by sending messages and creating tools.

◆ Compliance Hotline staff training

We will provide training on compliance consultation for the Compliance Hotline staff at our group companies.

3. Communication inside and outside the Company

◆ Communication between outside members of the Compliance Committee and employees

Last year, the Nuclear Power Division held dialogues between outside members of the Compliance Committee and employees.

This year as well, we will set up opportunities for direct dialogue with outside Committee members to raise employee awareness of compliance.

◆ Communication between the Office of Compliance Promotion and each division/group company

In addition to holding information liaison meetings between the Office of Compliance Promotion and each division and group company, the Office of Compliance Promotion visits each division and group company to exchange opinions and support provision of training.

Autonomous compliance promotion in accordance with the characteristics of each division/group company

Promoting compliance in each company division and group company

By having each division and group company actively facilitate the functioning of PDCA cycles and promote compliance, we seek to have the idea that “compliance is a foundation of business” permeate and become established throughout the entire Group.

Specifically, each division has created their own “compliance promotion plans” and is striving to implement, evaluate and improve their promotion efforts. When doing so, they are considering the Company’s fundamental policies and major themes, the business and work characteristics of their divisions, and compliance risks that could occur in the future along with changes in the business environment, unacceptable incidents that occurred in the past both inside and outside the Company, and other factors.

Furthermore, considering our fundamental policies and major themes, each of our group companies is autonomously promoting compliance based on the characteristics and sizes of their businesses, as well as other real conditions.

◆ Compliance awareness survey (Results of questionnaire given to all employees on CSR/executed November 2020)

Are you acting with awareness of compliance on a daily basis?

Yes
96.8%

Supporting the efforts of each division and group company

In addition to leading the promotion of efforts of the Group as a whole, our Office of Compliance Promotion is supporting the efforts of each division and group company. Last year, as support for compliance-related awareness-raising activities across our Group, we asked for submissions of catchphrases from all Group employees, received a large number of applications, and adopted many of them. Going forward, we will further enhance discussion materials and strengthen support through communication with each division and group company.

Efforts to prevent overseas bribery

The Group is globally operating business in Asia, North America, Europe, and many other regions, and we believe that complying with local legislation and rules is a major premise for global business expansion.

In particular, as tightening of bribery regulations has become a global trend, we have established internal rules to prevent bribery of foreign public officials, etc., and clarified prohibited items such as gift-giving and entertainment with wrongful intentions as well as items to be observed. At the same time, we are continuously informing divisions involved in international transactions, including the International Business and Cooperation Division, through training and other means.

We will continue to strive to prevent inappropriate bribery through these efforts.

Compliance Hotline

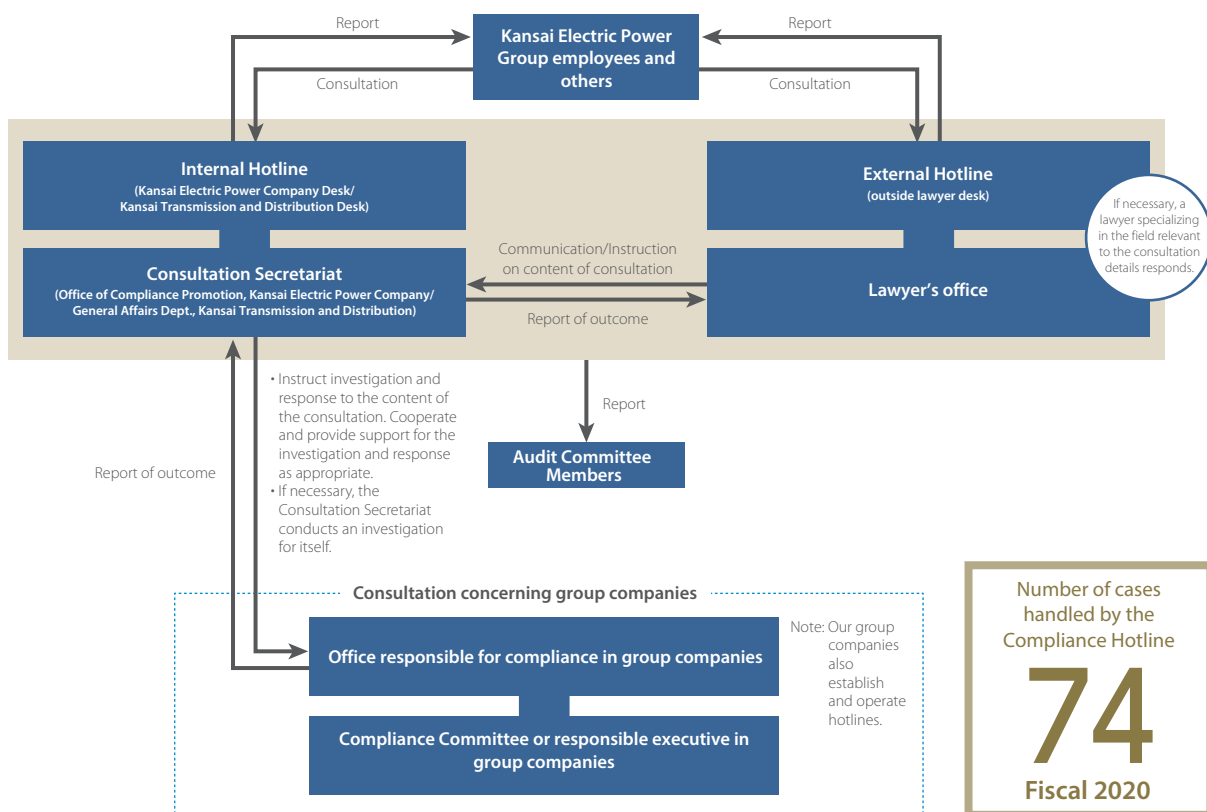
The Kansai Electric Power Group Code of Conduct stipulates how to report to and consult with the hotline when feeling doubt or discomfort related to compliance.

Our Compliance Hotline is for consultation when people have doubts related to compliance in their workplaces, including various legal violations and improper work conduct. This hotline is available not only to employees of our group companies but also to our contractors, and is designed to prevent, detect early, and correct inappropriate behavior in terms of compliance. If required, a lawyer specializing in the field relevant to each issue will respond, and he/she can request the Compliance Committee or Audit Committee to take effective measures at his/her own discretion. We are working to create an environment offering a more approachable service that can accept anonymous consultations and that allocates female consultants, for example, and are strictly prohibiting detrimental treatment of consulters due to having received consultation. Paying close attention to protecting the confidentiality of consulters, we disclose consulters' names only to the minimum parties required for fact-finding and taking action, and impose confidentiality obligations on them. In addition, we proceed with a fact-finding survey while confirming the intention of each consulter.

Considering the importance of using the hotline, with posters and various educational tools, we are continuously informing and encouraging each of our divisions and group companies to use the hotline.

Last year, a consultation with an outside organization (a lawyer's office) revealed the fact the Company and its group companies had received cash and gifts. Based on the advice and guidance of the Compliance Committee, we conducted an objective and thorough investigation using an outside lawyer, and announced the investigation results.

◆ Kansai Electric Power Group Compliance Hotline



Responding to compliance violations

Based on our business improvement plan formulated in fiscal 2019, the Company and Kansai Transmission and Distribution, Inc. have established a reporting system when a problematic event occurs, and stipulated the reporting rules for executives and employees in our internal rules.

In the relevant divisions, should respective division heads become aware of any information on major violations of laws and regulations (including omission of procedures stipulated by laws and regulations) or fraud and other compliance-related issues that affect the Company's and the Kansai Transmission and Distribution's credibility with the external stakeholders, they shall immediately report these matters to the General Manager of the Office of Compliance Promotion. The General Manager of the Office shall take appropriate measures and report on these matters to the Compliance Committee to receive guidance, advice and supervision.

When executives become aware of an event that causes or is likely to cause a compliance issue, they shall report it to the outside members of the Compliance Committee and the Chairperson of the Board of Directors.

In the same situation, employees shall report to their superiors. If it is judged appropriate based on the details of the report, employees can report to the Compliance Hotline set up inside and outside the Company, instead of reporting to their superiors. When a report is received, the Hotline shall investigate and take action in cooperation with relevant divisions and related parties as necessary. If the investigation reveals a violation of laws and regulations, the relevant divisions and related parties shall promptly take corrective and recurrence prevention measures, and if necessary, report to the relevant administrative agency and announce the issue to the news media.

The Compliance Hotline shall also follow up with related divisions and parties as necessary, and check whether the corrective and recurrence prevention measures are functioning sufficiently, as well as checking if any compliance issue has reoccurred. If a compliance issue has reoccurred, the Hotline can be used to discuss necessary measures with relevant divisions as well as other related divisions.

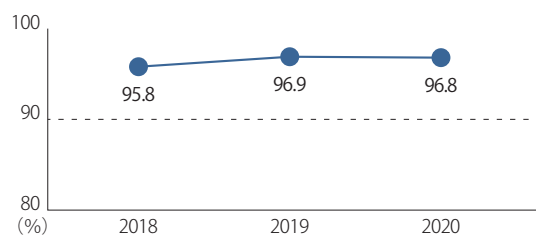
Regarding compliance-related risk assessment

Each year the Kansai Electric Power Group assesses compliance-related risks, including anti-corruption, and selects compliance risk items to be addressed. We formulate and implement concrete preventive measures against these risks.

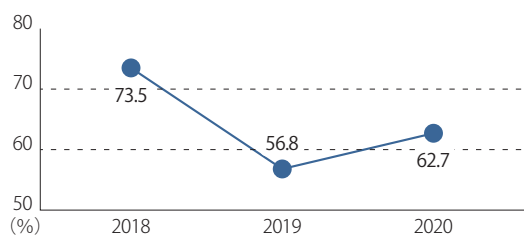
Results of a questionnaire for all employees regarding compliance awareness, etc.

The Company and Kansai Transmission and Distribution, Inc. conduct a "CSR-related questionnaire for all employees (conducted every year since fiscal 2006)" which includes a survey on compliance awareness. Utilizing the results of the survey, we will continue to work on correcting our corporate structure and fostering a sound organizational culture that emphasizes compliance.

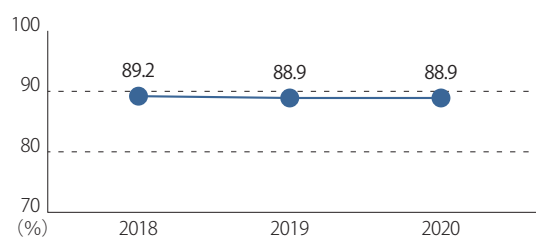
Q. You always act with an awareness of compliance.



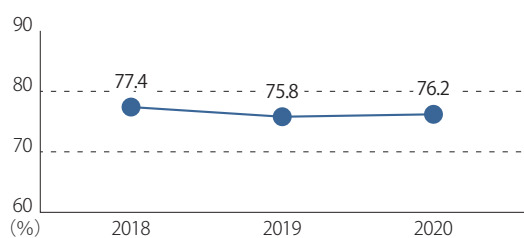
Q. You feel that the management has a strong sense of integrity and is taking the lead in reform of your company.



Q. You are doing your job with a sense of mission.



Q. You find your job rewarding and are proud of it.



Survey period: November 4 to 25, 2020
 Respondents: All employees of the Kansai Electric Power Co., Inc. and Kansai Transmission and Distribution, Inc.
 Number of respondents: 16,667 [Response rate: 87.4%]

[How to read charts]
 The graph of secular change shows the transition of the total value of the percentages of "Strongly agree" and "Moderately agree" in all responses.
 The survey was conducted in January for 2019, and in November for other years.

Information security measures

Policy and Concept

Amid rising awareness of personal information and accelerating data utilization with the progress of digitization, the Personal Information Protection Law imposes more stringent obligations on business operators that handle personal information.

The Group believes that the proper protection of personal information is an important responsibility in order to earn the trust of customers and many other people in society, as well as to fulfill our mission as an enterprise. Fully recognizing the importance of personal information the Company and group companies obtain from our customers, etc. that we must handle carefully under principles of respect for the individual, we deal with personal information appropriately in consideration of rights as the right to privacy, in compliance with the Personal Information Protection Law and other guidelines.

With regard to information security – including proper handling of business and personal information – measures on an organizational, personnel, physical and technical level have been implemented. We seek to improve on these measures by incorporating internal and external events as well as reviewing the latest technology and knowledge as appropriate.

System

Director responsible: Makoto Araki [Kansai Electric Power CISO (Executive Vice President)]

Deliberative body: Executive Meeting

Management office: Cyber Security Administration Group, Office of IT Strategy (Information Security Management Office)

Efforts

The Group works to enhance information security. Our efforts include strengthening physical and technical measures such as entry/exit controls and access controls for information systems. Organizational and personnel measures such as reviewing internal rules, training employees, and training to defend against targeted email attacks are also ongoing.

Participation rate of
information security
training
(conducted December
2020–February 2021)

98.9%
(17,715 participants)

Relevant data

Policies		
Compliance Guidelines	Established	Compliance Guidelines https://www.kepco.co.jp/sustainability/csr/principle/pdf/compliance_guidelines.pdf
Ethical Code	Established	Included in the Kansai Electric Power Group Code of Conduct https://www.kepco.co.jp/corporate/policy/charter/index.html
Anti-Corruption Guidelines	Established	—
Anti-Bribery Guidelines	Established	—
Rules on Gifts, Reception and Entertainment	Established	—
Whistleblower Protection Policy	Established	—
Privacy Policy	Established	Privacy Policy https://www.kepco.co.jp/siteinfo/privacy/
Information Security Guidelines	Established	—

	2019/3	2020/3	2021/3
Number of cases handled by the Compliance Hotline	73	74	74
Number of major compliance violations among these	0	0	1
Major social compliance violations	3	7	7
Number of information security training participants	17,404	17,979	17,715
Major information security incidents	1	2	1

	2019/3	2020/3	2021/3
Awareness of compliance (internal questionnaire)	95.8%	96.9%	96.8%

power with heart

We wish to be a source of power for our customers and communities by serving them with sincerity and passion.