# For the Global Environment

We have established an environmental management system in accordance with our Action Guidelines for Environmental Conservation, and work to cultivate an "eco-mindset."

#### KOKUSAI ELECTRIC Action Guidelines for Environmental Conservation

In accordance with KOKUSAI ELECTRIC's Corporate Statement, KOKUSAI ELECTRIC Way, and Guidelines and Commitments, we have established action guidelines for tackling environmental conservation in our business activities. In order to ensure the aims of the guidelines are achieved, we will continue following and making improvements to them through the ISO 14001 environmental management system.

# **Purpose**

In order to realize an environmentally harmonious and sustainable society through the provision of products and services, KOKUSAI ELECTRIC is committed to meeting its social responsibilities by promoting globally applicable Monozukuri aimed at reducing the environmental impacts of products throughout their entire life cycles, thereby ensuring global environmental conservation.

### **Action Guidelines**

- 1. Recognizing environmental conservation to be an important issue for all of humanity, we will fulfill our social responsibilities by working to realize an environmentally harmonious and sustainable society as a top business priority.
- 2. We will accurately identify needs related to preventing global warming, recycling and reusing resources, and preserving ecosystems, and strive to contribute to society by developing sophisticated and highly reliable technology and products that meet those needs.
- 3. Our manufacturing and environmental conservation will drive forward appropriate environmental conservation activities. Through the divisions they oversee, they will facilitate environmental conservation activities through measures such as establishing relevant rules and setting targets to reduce environmental impacts, confirm that said activities are being properly carried out, and make every effort to maintain and improve them.
- 4. We will operate a global manufacturing system that aims to identify and reduce environmental impacts at every stage — from product R&D and design to production, distribution, sales, usage, and disposal.
- 5. We will research and review the impact our manufacturing activities have on the environment, and implement technology and materials with properties that contribute greatly to protecting the environment by mitigating environmental impacts through saving energy, conserving resources, recycling, managing chemical substances, considering ecosystems, and other measures.
- 6. We will work to protect the environment by not only complying with international environmental regulations and the environmental regulations of individual countries and municipalities, but also by formulating our own standards as needed.
- 7. When carrying out global manufacturing activities, we will strive to implement measures that consider the impact on each region's environment and meet the needs of the community.
- 8. We will educate employees on wide-ranging environmental conservation activities and compliance with environmental laws, raise their environmental awareness, foster their interest in society at large, and encourage them to translate that into action.
- 9. We will assess the risk of environmental problems and work to prevent them. In the event an environmental problem does occur, we will take appropriate measures to minimize its impact on the environment.
- 10. We will make every effort to disclose information and proactively communicate with stakeholders about our environmental conservation activities, and work to enhance mutual understanding and cooperation.

Formulated June 1, 2018; updated March 30, 2021

# ISO 14001 Certification

The Company has established an environmental management system based on the international standard ISO 14001 to contribute to mitigating environmental impacts and protecting the environment. Through this system, we have put in place an organizational structure to facilitate environmental activities, provide environmental education, set objectives and targets for specific activities, and work to achieve them, and make continuous improvements to activities by following a PDCA cycle.

Specific information on ISO certification of individual KOKUSAI ELECTRIC Group locations in Japan can be found on the website of the Japan Accreditation Board (JAB).

http://www.jab.or.jp/

Certifying organization

Japan Quality Assurance Organization

Registration number of certifying organization JQA-EM7390

# Promotion and Evaluation of Environmental Management

#### Promotion of Environmental Management

We have established an environmental management system in accordance with the KOKUSAI ELECTRIC Action Guidelines for Environmental Conservation, and work to cultivate an "eco-mindset."

#### **Environmental Management System**

The environmental supervisor sets the environmental policies, and the environmental committee composed of the environmental supervisor, environmental manger, and the heads of each division promotes environmental conservation activities across the Group.

Environmental activities comprise three categories, consisting mainly of the following activities.

### Eco-management

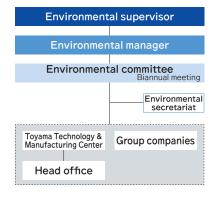
Promotion of environmental education, improvement activities conducted under the departments' environmental management programs, and environmental volunteer activities

#### Eco-product

Compliance with overseas product-related laws and regulations, management of chemical substances used in products, and eco-friendly product design

### **Eco-factory**

Reduction of energy use and waste generation



### **Evaluation of Environmental Management**

# Toyama Prefecture Recycling Certification System

Toyama Technology & Manufacturing Center was granted an Eco Business Certificate from Toyama Prefecture in March 2020. The certification will last until the end of March 2025. An "Eco Business" is defined as a "place of business that proactively engages in efforts such as curbing the generation of waste,

recycling, and environmentally friendly business activities." The Company has received the certification consecutively since 2010.

We believe this certification is in recognition of our 3Rs waste management efforts to reduce the final waste disposal volume, acquisition of ISO 14001 Environmental Management System certification, and environmentally friendly business activities such as reducing CO<sub>2</sub> in transportation to and from our business sites in Japan.



# For the Global Environment

# Targets and Results of Environment Actions in Fiscal 2020

The results and evaluation of the environmental action targets in fiscal 2020 are as follows. Since fiscal 2019, we have been vigorously promoting environmental activities toward the targets set for 2021, which is the second year of the medium-term plan.

Category			000	Index			Fiscal 2020		Funkasia
		Action goal	SDGs				Target	Results	Evaluation
		Nurture an environmental	13 tabilit	Participation rate in environmental education		100%	100%	***	
		mindset in all employees	13 GEMT	Training of "Eco People": Certification test not given due to measures to prevent the spread of COVID-19		20	0	•	
Eco- management	Ecosystem Perseveration	Number of ecosystem preservation activities implemented	15 th throat the second	Number of activities implemented	New	Implementation	5	5	- • • •
					Ongoing	Ongoing activities	30	30	
	Collaboration with Stakeholders for the Environment	Number of environment-related social contribution activities implemented	13 obstr	Number of activities implemented			2	2	***
Eco-product		Environmental design assessment	12 HENGRAL GENERALS AND INTERCENT OF THE PROPERTY OF THE PROPE	Assessment rate		100%	100%	***	
Eco-factory	Global Warming	Improve energy use per unit		Rate of Energy Use per Unit (compared to previous year or 5-year average)		99% or below	81%	***	
	Prevention	Reduce transportation energy per unit	7 шинил не	Rate of Transportation Energy Used per Unit of Production (reference year 2006)			50% or above	57%	***
	Effective Use of Resources	Improve waste and valuables generation pre unit		Rate of Waste and Valuables Generation per Unit (reference year 2005)			54% or above	54%	***

Note: Number of activities implemented in such areas as environmental education, information exchange, community contribution through cleanup projects, etc.,  $\stackrel{\cdot}{\text{lights-off campaigns, and community energy-saving activities.}}$ 

Evaluation criteria ••• Achieved 100% •• Achieved 80% or more • Achieved less than 80%

# **Environmental Accounting (The Company)**

The Company practices environmental accounting based on the Ministry of the Environment's Environmental Accounting Guidelines 2005.

Environmental conservation costs consist mainly of business area costs to reduce environmental impacts that occur in business activities and management activity costs for efforts that contribute indirectly to the reduction of environmental impacts that occur with business activities. Due to the increase in business area costs such as facility maintenance expenses and the increase in management activity costs such as environmental management system expenses, environmental conservation costs were higher than the previous year. Investments in environmental conservation have decreased slightly.

There was an increase in the economic effects of environmental conservation compared to last year, which are determined based on profits from the sale of recycled items, expenditure reduction through investments in energy-saving equipment, etc.

We are working to improve environmental return on investment taking these results into consideration.

#### **Environmental conservation cost**

Expenses (in millions of yen)

ltem	FY				Overview	
item	2017	2018	2019	2020	Overview	
Business area cost	307.4	310.9	332.8	372.2	Costs of maintenance of equipment with low environmental impact, depreciation, etc.	
Upstream/ downstream costs	0.0	0.0	0.0	0.0	Costs for green procurement and recycling	
Management activity costs	38.5	45.6	39.5	44.3	Environmental management personnel expenditures, environmental management system costs	
Research and development costs	0.0	0.0	0.0	0.0	Expenses for R&D and product design to reduce the environmental impact caused by products and production processes	
Social activity costs	0.2	0.3	0.0	0.0	Environmental improvements such as afforestation and beautification, PR and publicity expenses	
Environmental damage costs	0.0	0.0	0.0	0.0	Environment-related measures to over costs of environmental damages, contributions and levies	
Total	346.2	356.8	372.3	416.5		

Investments (in millions of ven)

investmente (in imment of yen)							
ltem	FY				O um invi		
	2017	2018	2019	2020	Overview		
Investments in environmental conservation	65.6	153.8	77.6	58.4	Investments in facilities that directly reduce environmental impacts such as energy conserving facilities		

# Economic effects of environmental conservation

Economic effects (in millions of yen)

lan sa	FY				Occupations
Item	2017	2018	2019	2020	Overview
Net income effects	17.0	17.0	13.5	20.9	Profit on sale of recycled waste, etc.
Expenditure reduction	5.3	7.1	1.7	7.4	Cost-saving effects, etc. with energy conserving facilities
Total	22.3	24.1	15.2	28.3	

# We work to improve the entire product production process to prevent climate change and reduce environmental impacts and waste.

# **Operations and Environmental Impact**

The Toyama Technology & Manufacturing Center discharges CO2 and waste from expending resources and energy in order to make and provide products. It monitors their input and output, and works to reduce hazardous chemical substances and increase energy efficiency.

For information on efforts to reduce the environmental impact of products, see the "Environmentally friendly products" page.

### **Efforts to Address Climate Change**

Climate change is said to be due to global warming caused by greenhouse gases (mainly CO2).

As our own economic activities increase, our Scope 1-3 emissions increase year by year.

In order to fulfill our responsibility as a company that operates businesses globally, we are working to reduce the impact of our business activities on the environment. Specifically, we carry out energy-saving initiatives and are moving forward in deliberations to implement renewable energy from non-fossil fuels for the electricity used by our business bases.

And as concern for the long-term effects of climate change on corporate financial performance and business has grown, we plan to actively disclose information based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

In the area of ESG investment, the Carbon Disclosure Project (CDP) is one of the most influential organizations in the world and their data is among the most referenced worldwide. As a member, we disclose climate-related information of interest to institutional investors to the CDP, which they provide to customers on the supply chain upon request.

The values in parentheses show the change from fiscal 2019. Business activities at the Toyama Technology & Manufacturing Center Products/ Output Exhaust gas Energy **26,464** MWh (+7%) **12,224** t Electricity CO<sub>2</sub> emissions (+9%)[ **256,703**GJ] Direct CO<sub>2</sub> emissions 871 t Indirect CO<sub>2</sub> emissions 11,353t Fuel oil (heavy oil, kerosene) **173** kL (+57%) Γ **6,596** GJ ] SOx **0.0** Nm<sup>3</sup> (0%) Gas (city gas, LPG) **139,000** m³ (+11%) NOx 313 Nm<sup>3</sup> (+160%) **7,061** GJ ] Raw materials Waste and valuables **577** t **4,581** t Materials and parts Amount released (+48%)(+7%)515 t (+29%)Final disposal Packaging materials (-9%)Paper (+49%)Chemical substances **Chemical substances** PRTR-specified chemical Release, transfer and recycling of PRTR-specified chemical substances handled (+54%)(+2%)substances Water Drainage Tap water, industrial water 147,000 m<sup>3</sup> Amount of drainage 147,000 m<sup>3</sup> (-9%)(-9%)147,000 fm3) 12,000 m<sup>3</sup> 135,000 m<sup>3</sup> **0.5** t Industrial water BOD (-18%)

Note: PRTR: Pollutant Release and Transfer Register

Note: CO<sub>2</sub> emissions: Emissions were calculated based on the 2005 emission coefficients for electric power by country published by the International Energy Agency (IEA).

# Prevention of Global Warming and Energy Saving

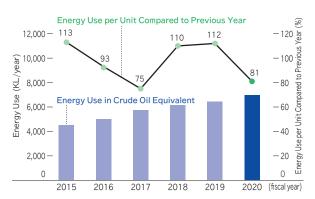
Much of the energy consumed by the Toyama Technology & Manufacturing Center goes toward operating the evaluation equipment used for process development. We therefore work to not use more electricity than necessary to lower the environmental impact of the equipment.

To save energy used by facilities, we carry out regular replacement of equipment, which includes upgrading to environmentally friendly air-conditioning equipment and switching to LED lighting. We are also working to ensure facilities run optimally through measures such as automatically collecting data by digitally measuring room temperature management data and installing an industrial water recycling system to increase energy use efficiency.

With regard to operations, in support of the national campaign against global warming promoted by the government since 2005, we implemented "Cool Biz" and "Warm Biz" campaigns. Furthermore, twice per year we have a "lights-off" day where we turn off the lights in Toyama Technology & Manufacturing Center

for a certain period of time so employees can gain a renewed understanding of the importance of the environment and experience first-hand the path toward achieving a low carbon society.

# Improvement in energy use and in the per-unit use index



# **Reduction of Waste**

To curb waste generation, the Toyama Technology & Manufacturing Center works to reduce Waste and Valuables Generation per Unit.

In fiscal 2020, this per-unit generation index showed an improvement from the previous year. Specifically, it came to 46, an improvement of 54% relative to fiscal 2005. We are also carrying out activities to reduce landfill waste for zero emissions. And in addition to efforts to recycle waste at the final disposal stage, twice per year we provide waste education to all employees to raise their awareness on waste reduction and the efficient use of resources.

# Improvement in the generation of waste and valuables and in the per-unit generation index



#### **Proper Disposal of Waste**

Much of the waste discharged from the Toyama Technology & Manufacturing Center is recycled. Previously most of the recycling of plastic waste produced from packaging materials was done via thermal recycling, but thanks to enhancing material and color sorting, we can now carry out material recycling of a portion of that waste. And to mitigate the impact on the environment as much as possible, we will conduct due diligence on proper disposal methods and utilize resources effectively.

We also make it a rule to visit the sites of waste treatment companies to confirm that our waste, which includes industrial waste, general waste and waste sold as valuables, is treated appropriately throughout the process from collection and transportation to disposal. And as we view legal compliance and environmental conservation as top priorities, we make every effort to ensure environmental pollution does not occur due to improper disposal.

# We also focus efforts on next-generation products that are environmentally friendly throughout the product life cycle.

# **Environmentally friendly products**

# **Eco-products**

The Company carries out Design for the Environment assessments to reduce the impact its products and services have on the environment, and produces products and services that consume less energy and resources than conventional products.

Furthermore, we work to contribute to the realization of a low carbon society by proposing environmentally friendly products in our offerings of products and services to customers.

# Appropriate Management of Chemical Substances Used in Products

In accordance with its environmental policies, the Company manufactures products by appropriately managing the use of chemical substances in the products to ensure safety based on the international rules and on both domestic and overseas environmental laws and regulations in order to prevent environmental pollution. We collect the latest information about environmental regulations enforced in each country and share that information with employees and business partners.

With purchased products (catalogue products), we make every effort to properly manage chemical substances by obtaining information and Certificate declaring that a product does not contain banned substances through chemSHERPA® (an information communication scheme for chemical substances used in products). Furthermore, since January 5, 2021, companies have been required to register SVHCs on the SCIP database in accordance with the EU Waste Framework Directive, and we have registered our product information accordingly. For processed products, we research the chemical substances of auxiliary materials used in the manufacturing process of our business partners through the chemical substance management certification program, and have built and operate a system to mitigate the risk of processed products containing prohibited substances specified as voluntarily controlled substances by the Japanese government.

Note: chemSHERPA is a registered trademark of Joint Article Management Promotion-consortium. Note: SVHC (substances of very high concern), substances in the Candidate List for eventual inclusion in Annex XIV of the REACH regulation.

# **Reducing Energy Use in Transportation**

We work to reduce the environmental impact of the distribution of our products in Japan.

- 1. Monitoring of CO<sub>2</sub> emissions reduction: We carry out a variety of measures to reduce energy in transportation, and drive forward measures to calculate and reduce the rate of transportation energy used per unit.
- 2. Stacking of truck cargo: We effectively utilize the empty space above cargo that could not be stacked due to differences in size and number of pieces.
- 3. Modal shift: We are increasing our efforts to shift from truck transportation we have used so far to coastal shipping and rail transportation.
- 4. Overseas shipments of products: We have switched to using nearby ports of entry and airports to cut costs and shorten distances in transportation.
- 5. Using returnable boxes: We use returnable boxes for some parts when shipping to customers in Japan.
- 6. Cardboard packaging: We have switched from using wooden crate packaging to simple packaging made with light and high-quality corrugated cardboard.