



Editorial Policy

Hirose Electric and its group companies are undertaking CSR activities to implement their policy of promoting environmental protection and compliance. This report has been compiled to present information about these activities in a way that is easy for our stakeholders to understand. It is also posted on our website to make it accessible to many people both in Japan and abroad.

Period covered by this report

From April 1, 2022 to March 31, 2023

Companies covered by this report

Hirose Electric Co., Ltd.

Tohoku Hirose Electric Co., Ltd. (Miyako Plant) Koriyama Hirose Electric Co., Ltd. (Koriyama Plant)

Ichinoseki Hirose Electric Co., Ltd. (Ichinoseki Plant)

*The activities of some of our overseas production sites are also covered in this report. As of Sustainability Report 2015, $\rm CO_2$ emissions by overseas sites and our business partners, both within and outside of Japan are presented.

Date of publication

September 2023

This report refers to the following guidelines

Ministry of the Environment:

Environmental Reporting Guidelines (Fiscal Year 2018 Version):

GRI Standards 2016

Notations

For simplicity, the following names have sometimes been abbreviated as follows: Tohoku Hirose Electric Co., Ltd. is referred to as the "Miyako Plant," Koriyama Hirose Electric Co., Ltd. as the "Koriyama Plant," and Ichinoseki Hirose Electric Co., Ltd. as the "Ichinoseki Plant."

Disclaimer

This report includes not only past factual information but also plans and forecasts that were formulated at the time of publication. These data or statements were considered reasonable at the time of writing based on the currently available information, and thus the outcomes of our future activities may differ from what is described in this report.

CONTENTS

02 Message from the Top

03 Company Profile

Company Profile

Business Summary

04 Promotion of CSR Activities

CSR of the Hirose Electric Group

Results of Fiscal Year 2022 and Targets for Fiscal Year 2023

11 Basic Environmental Policy

Basic Environmental Policy

12 Contributions of connectors to environmental protection

Detachability of connectors

Application fields of connectors

13 Environmental Management

Environmental Management Structure

ISO14001 Certifications

Environmental activities linked to SDGs

Compliance with Laws and Regulations

Environmental Audit

Environmental Education

Environmental Objectives and Level of Achievement

Environmental Impacts due to Business Activitie

19 Activities to Reduce Environmental Impacts

Reduction of Energy Consumption

Reduction of Greenhouse Gas Emissions

Reduction of Water Usage

Reduction of Paper Usage

Reduction of Waste and Recycling

Activities for recycling sold products

Reduction of Environmental Impacts through Green ICT

Reduction of Environmental Impacts on Living Environment

Preparedness for Emergencies

Biodiversity Conservation

27 Communication

Social Action Programs

Communication with Stakeholders

29 Activities at Group Sites to Reduce Environmental Impacts

Activities of Domestic Plant to Reduce Environmental Impacts

Activities of Overseas Sites to Reduce Environmental Impacts

34 History of Social and Environmental Activities

History of Social and Environmental Activities

- 35 Third-party Opinion
- 36 Response to the Third-party Opinion

Message from the Top



We are undertaking CSR and environmental activities through bringing together the knowledge and wisdom of many people.

Kazunori Ishii President and Representative Director

Ever since it began to develop industry-leading connectors with its own technologies, Hirose Electric has established a position that has earned it trust and recognition as a specialized manufacturer of connectors. On a personal note, and on behalf of the entire company, I would like to express our deep gratitude to our customers and business partners. Without their ongoing support, we would not be where we are today.

Hirose Electric and its group companies adhere to a guiding philosophy of being a small company that brings together the knowledge and wisdom of many people, i.e., "a small company connecting wisdom." This concept encapsulates our wish to creating innovative products by open-mindedly garnering advice from the outside world and linking the wealth of information offered by external sources with the knowledge and insight that we have accumulated internally, together with our aim of placing high value on close-knit, agile and efficient communication, which is only possible in a small company, and to be an enterprise that is constantly seeking to make quantum advances.

Corporate Social Responsibility (CSR) and Environmental Activities

The Group has been promoting CSR as part of its corporate policy by reviewing its existing activities such as environmental protection and compliance within the framework of "Corporate Social Responsibility (CSR)". At the root of all of these activities is our corporate philosophy. The Group's approach to CSR is rooted in two fundamental principles: "Linking Wisdom" and "The Small Idea".

Our slogan, "A small company connecting wisdoms"

expresses our desire to maintain a high quality management structure in an efficiently run organization by constantly looking at our own company on a small scale, humbly seeking out the insight from those outside the organization, and connecting the vast amount of wisdom and knowledge we have accumulated.

Our approach to CSR is also based on this philosophy. We are committed to fulfilling our social responsibility for the development of a global society through the honest and humble efforts of each and every employee to fulfill his or her role.

Publication of Environmental Report 2023

Hirose Electric and its group companies have produced the Environmental Report 2023 in order to present our CSR and environmental activities to stakeholders and the general public in a clear and straightforward manner. We would appreciate it if you would read this report and give us your frank opinions so that we can continue to improve our activities in these areas.

Company

Company Profile

Name: Hirose Electric Co., Ltd. Founded: August 15, 1937 Paid-in capital: 9,404,000,000 yen

Sales: 183,224,000,000yen

(for the year ended March 31, 2023/Consolidation)

Operating profit: 46,751,000,000yen

(for the year ended March 31, 2023/Consolidation)

Number of employees: 4,944 (for the year ended March 31, 2023/

Consolidation)

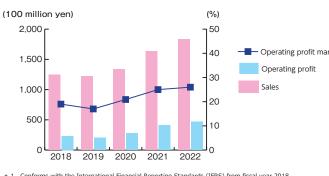
Address of Headquarters:

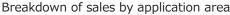
2-6-3 Nakagawa Chuoh, Tsuzuki-ku, Yokohama 224-8540, Japan

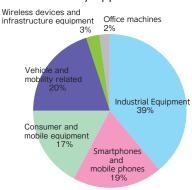
Number of subsidiaries:

3 in Japan, and 13 outside Japan

Changes in sales and profit







* 1 Conforms with the International Financial Reporting Standards (IFRS) from fiscal year 2018.

Business Summary

From the time they developed Japan's first one-of-a-kind connectors in Japan in 1959, Hirose Electric and its group companies (hereinafter referred to as the Hirose Electric Group) have been leading the industry in technology as a development-oriented enterprise. Our great strength has been industrial connectors, which are more difficult to develop than connectors for household use. Building on the technical know-how we had accumulated in this area, we entered the consumer products market in the recent past, and have been expanding the range of market segments in which we do business. We have received high recognition both within and outside Japan. The Hirose name is evolving into a global brand for connectors based on their capacity to meet a diverse range of international requirements.

(Business Areas)



Promotion of CSR Activities

CSR of the Hirose Electric Group

The Hirose Electric Group has incorporated its existing activities related to environmental preservation and compliance into its Corporate Social Responsibility (CSR), and will promote CSR as its main policy.

Code of Conduct

In pursuing our business activities, we are required not only to comply with laws and regulations but also to exercise our discretion informed by a higher sense of ethics, integrity and social responsibility. To enable our employees to exercise the above in every situation, in an ever-changing business environment, we have defined the following Code of Conduct to which every member of the Hirose Electric Group must adhere. We will continuously review and improve the contents of the Code of Conduct, which currently include:

- 1. Our Attitude in Business
- 2. Relations with Society
- 3. Relation between Personnel and Workplace
- 4. Management of Company Assets and Information
- 5. Scope of Application and System for Promotion
- 6. HRS Group Basic Policy on Antisocial Forces
- 7. HRS Group Privacy Policy
- 8. HRS Group Safety and Health Policy
- 9. HRS Group Basic Policy on Anti-Bribery

- 10. Facilitation Payments
- 11. HRS Group Basic Policy on Labor Management
- 12. HRS Group Basic Policy for Information Security
- 13. HRS Group Responsible Minerals Procurement Policy
- 14. HRS Group basic Policy on Corporate Ethics Management

Participation in the UN Global Compact

On February 9, 2012, Hirose Electric and its group companies expressed their support for the "Global Compact" advocated by the United Nations, and were registered as participating companies. The Global Compact is a voluntary initiative in which each company provides creative and responsible leadership, acts as a good corporate citizen and participates in the development of a global framework for realizing sustainable growth. Companies participating in the Global Compact consent to support and abide by the ten essential principles of CSR that cover the protection of human rights, the elimination of all forms of unfair and unjust labor practices, the protection of the environment, anti-corruption measures, and are pledged to carry out activities to realize the above with the commitment of their chief executive.

Participation in the UN Global Compact prompted the Hirose Electric Group, as a good global citizen, to strengthen its ongoing CSR activities in order to contribute to the development of a sustainable society.

Social Responsibilities

The Hirose Electric Group has established a CSR and Risk Committee, consisting of full-time directors and executive officers. The committee makes decisions on important matters concerning CSR. Furthermore, we have assigned a CSR and Risk Officer as a person in charge of promoting CSR activities, and a CSR and Risk Secretariat in charge of the practical work of the CSR activities.



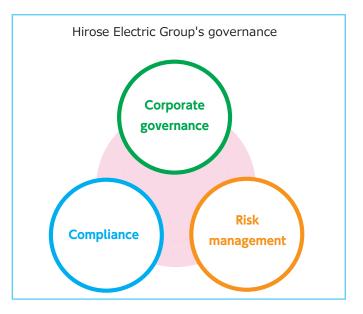
Governance

Governance over the Hirose Electric Group is based around three central pillars: corporate governance, compliance, and risk management.

[Corporate governance]

We place the highest priority on strengthening our corporate governance in order to maintain and enhance our long-term competitiveness in the global market. We are also working to increase our corporate value by streamlining our business management and augmenting our profitability while discharging our social responsibilities to stakeholders.

As part of our commitment to ensuring the integrity of our business decisions, Hirose Electric has invited five independent people from outside the company to serve on the board of directors or as auditors. From an objective standpoint, they oversee our business management practices and provide useful advice from a range of perspectives.



[Compliance]

The Hirose Electric Group fully recognizes the importance of fulfilling its social mission and corporate responsibilities in the course of its business activities. This is achieved by implementing management policy that is based on the company's core principles. To meet these responsibilities in all situations in the constantly evolving management environment, we have carefully formulated our guiding principles and criteria for action. These are contained in the Hirose Electric Group Code of Conduct issued in March 2004, and every employee is expected to follow it.

Being a global enterprise, we revised this code of conduct in 2007 to make it applicable to those working at our overseas sites. At the same time, to ensure that the code was understood and observed at these sites, it was translated into English, Chinese and the other languages spoken in all the areas in which we operate. We have been successively revising the HRS Code of Conduct, including addition of a supplementary policy.

Based on the code, we have been providing ongoing compliance education to ensure that every employee conducts themselves honestly and meets the highest ethical standards.

We introduced a whistle-blowing system in 2008.

(Risk management)

To address a variety of risks that may affect the Hirose Electric Group, we established a Risk Management Committee, which consists of full-time directors and executive officers, and relevant organizations that report to it. We share information about risks associated with our business activities, and implement risk management.

As a risk management measure, we formulated our Business Continuity Plan (BCP) in 2009. The types of risk assumed in the BCP include the novel coronavirus in addition to major earthquakes and fires. The BCP describes in detail the measures to be taken to prevent or mitigate operational risks so that our business can continue to operate or quickly resume operations in the event of an emergency or a disaster. This plan is distributed to all employees.

We also established our Information Security Policy in 2008. We regularly provide e-learning opportunities to our employees and others who handle information about the Hirose Electric Group so that everyone concerned will observe this policy in their business activities.

Social Responsibilities

The Hirose Electric Group considers it important to assume the five social responsibilities shown in the following figure.



[Responsibilities to our customers (guaranteeing product quality)]

The responsibility of the company and its employees is to provide high-quality and highly value-added products that meet the needs of our customers. This concept is incorporated in our "Quality policy" and is observed by all employees.

Quality Policy

- Abide by the "QUALITY FIRST" policy and always be committed to advance customer's satisfaction.
- 2. Proactive approach towards QUALITY needs of market and developing new products accordingly.
- 3. Aim to be an industry leader by continuous & reliable QUALITY improvement.

For the purpose of always delivering valuable products to customers, we have established a quality management system that covers all activities (planning, design, production, distribution, and service, in connection with products) and work to improve quality every day.

We sell as many as fifty-something thousand kinds of products, many of which are constantly revised into new products. By establishing a unique development system, in which even engineers actively visit customers in order to keep up with customers' current needs, and by having not only the Technical Section but also the Production Techniques, Production, Purchase, and Quality Assurance Sections join the development team, we aim to supply high-value added products that will satisfy customers, in a short development period.

The policies, strategies, and goals concerning quality, as well as important measures for quality improvement, are discussed and determined in Quality Management meetings. Quality goals, when incorporated into management policies, are made known to each employee of each section, and continuous quality improvement is being promoted under the guidance of the top management.

Furthermore, we are engaged in various quality improvement activities for the purpose of realizing strong workplaces in which employees can think and solve problems all by themselves.

[Responsibilities to our suppliers and contractors]

We have formulated the Green Procurement Guidelines and the Purchase Management Rules to ensure that we procure raw materials and equipment that are free from harmful substances, and build a strong partnership with our suppliers so that we work with them closely in our business operations. We also request our suppliers to establish their own CSR systems.

[Responsibilities to our employees]

We provide education and trainings in a planned and consistent manner for the purpose of cultivating human resources who understand our corporate philosophy, firmly collaborate in achieving our goals, and are active globally. We provide language trainings (especially English training) for the purpose of our employees' language development and send our employees to work overseas through overseas study programs, etc., thereby actively cultivating human resources who can work globally.

In addition, we make efforts to create workplace environments that are considerate of our employees' safety and physical/mental health, and take measures for prevention of disasters and to respond to emergencies. Every year, we conduct workplace patrol and risk assessment at every office in order to detect and prevent potential dangers hidden in the workplace. In addition, we continue to provide trainings on safety. Furthermore, toward preventing traffic accidents involving company cars and offices that permit commuting by car, we conduct safe driving trainings at each office with the help of the local police station, trying to make our employees conscious about safe driving.

We encourage our employees to have and follow up the results of routine physical examinations and complete medical checkups. Recently, we have established a consulting system in which our employees can consult





Training camp for new recruits

our contracted industrial physicians and counselors, and we have begun to provide training sessions for managers, as measures for mental healthcare. Since 2016, we have been conducting stress checks among employees.

With regard to fire prevention, we have established a self-defense fire-fighting team at every office and conduct an emergency drill, including escape, notification, and initial firefighting, with the help of the local fire department every year.

[Responsibilities to our stockholders and investors]

To ensure that the company's accountability obligations are satisfied, and to maintain a high level of management transparency for stockholders, investors and other stakeholders, we are disclosing required information accurately, on a timely basis, and in a fair manner. In addition, we are providing appropriate information at financial results briefing sessions and through our website in accordance with our information disclosure policy.

[Responsibilities to the general public and local community]

We have defined the Hirose Electric Group Code of Conduct, which requires us to interact with local communities,

and, in the international sphere, respect the culture and customers of the countries in which we operate, and contribute to the development of these countries. All our employees are working in accordance with this code of conduct. In addition, we are providing extensive support for art and cultural activities. We are also engaged in other activities, such as providing scholarship assistance to international students from various Asian countries through the Hirose Foundation (a public interest incorporated foundation) chaired by our President and Representative Director.



Scholarship students exchange meeting



Development of Products that are Eco-friendly and Comply with Laws and Regulations

Development of Eco-friendly Products

The Hirose Electric Group provides eco-friendly connectors, designed with due consideration given to product lifecycles, to customers engaged in a wide variety of fields, including mobile devices, communications and broadcasting, computers, automobiles, consumer electronics, and measurement and control. In every one of those fields, we have minimized connector sizes. This contributes, in turn, to miniaturization of the customers' products and to overall savings in use of resources, from components through finished products. We display details of materials used in and on our packaging materials, such as embossed carrier tapes and reels, to facilitate recycling of such materials. We are also making our connectors more energy-efficient and easy to disassemble and recycle.

Compliance with Laws and Regulations

The Hirose Electric Group is strengthening its quality control by responding rapidly to revisions of laws governing chemicals contained in products and the resulting changes in customer requirements, both of which are becoming increasingly stringent, year on year.

During product design, we select eco-friendly parts and materials that comply with our green procurement guidelines. At every important stage in the development process, we ascertain that the product concerned both satisfies customer requirements and complies with relevant laws and regulations.



Design review (Mass production DR)

We started to bring our activities into line with the RoHS directive*¹ in 2005. On June 4, 2015, a revised directive with four prohibited substances added was promulgated, and we completed the build of a preparation and warranty system for substitute products by July 2018, which is one year before the enactment of the law.

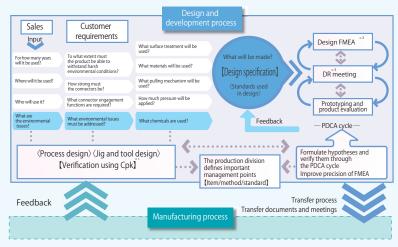
Ever since a list of substances of high concern (SVHC) associated with the REACH regulation*² was first released in November 2008, we have been meeting the compliance requirements for substances on the list, which is updated frequently, and publicly disclosing information regarding chemicals used in our products, in response to customer requests.

- * 1 RoHS directive: This was promulgated on February 13, 2003 and enforced on July 1, 2006 by the European Union (EU). This directive restricts the use of ten specified toxic substances in electric and electronic products: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl (PBB), polybrominated diphenyl ether (PBDE), and four kinds of phthalate esters (DEHP,BBP,DBP,DIBP).
- * 2 REACH regulation: Regulation concerning registration, evaluation, authorization and restriction of chemicals, promulgated on December 30, 2006 and enforced on June 12, 2007. This regulation prohibits selling products that contain unregistered chemicals within the European Union. It also includes regulations governing the conduct of producers and importers, and the supplier's obligation to make relevant information public.

Design Review

In line with our quality standards, we check to ensure that each product meets customer requirements, complies with relevant laws and regulations, and is designed with due consideration for the environment. Three-dimensional graphics are used to improve design review efficiency and reduce paper consumption. This also leads to reductions in development periods and costs.

- * 1 Cpk: Process capability index
- * 2 FMEA: Failure mode and effect analysis
- * 3 DR: Design review



Results of Fiscal Year 2022 and Targets for Fiscal Year 2023

The following table shows the results of fiscal year 2022 and the CSR targets of the Hirose Electric Group for fiscal year 2023. The results are evaluated using a three-grade scale: (\bigcirc : targets achieved; \triangle : relevant activities in progress; and \times : targets not yet achieved). We will continue these activities in order to fulfill our social responsibilities.

Item	Issue	Targets for fiscal year 2022	Results of fiscal year 2022	Evaluation	Targets for fiscal year 2023
	Strengthen the organizational structure for the promotion of CSR	By strengthening the CSR management system, we will aim to make a system that will enhance PDCA in more detail.	Maintained internal regulations based on the annual plan and established a system to engage in the PDCA process based on those regulations.	0	Maintain the CSR management system and enhance PDCA to make improvements.
1.Responsibilities to customer	Support of the responsible minerals procurement policy	Continue approaches according to the Responsible Minerals Procurement Policy that has been made public by the company, and educate employees and inform suppliers.	Engaged in approaches according to the Responsible Minerals Procurement Policy that has been made public by the company, and educated employees and informed suppliers.	0	Engage in approaches according to the Responsible Minerals Procurement Policy that has been made public by the company, and educate employees and inform suppliers.
	Enhance customer satisfaction	Continue analyzing the details of customer concerns or dissatisfactions and promote consideration and resolution of common issues. Cooperate with design and manufacturing to promote improvement activities for preventative measures.	Progress is being made on solutions to common issues. The number of situations in which customers feel concerned or dissatisfied is decreasing.	0	Continuously analyze and evaluate customer dissatisfaction and requests and strive for continuous improvement. Improve the organization's ability to provide information to customers so they can use products more correctly and comfortably.
2. Doggodi, ilkioo	Promote CSR procurement	Keep up efforts in asking suppliers and contractors for their input in our CSR activities so that the whole supply chain could work in progression together.	We reviewed the rules that require suppliers and production contractors to engage in CSR initiatives, but did not end up adopting the new rules.	0	Keep up efforts in asking suppliers and contractors for their input in our CSR activities so that the whole supply chain could work in progression together.
2.Responsibilities to suppliers	Request partner companies to adopt BCP	Confirm ways to correspond if production facilities do not function in suppliers' business continuation plan, and ask for measures to correspond.	Checked the status of business continuity promotion to suppliers.	0	Continue to check the status of business continuity promotion to suppliers and request that they maintain their systems.
3.Responsibilities	Share our core values	Continue the group' s activities for promoting understanding and implementation of our core values based on our philosophy.	Multiple departments conducted activities to improve understanding of different values in order to promote understanding of values in more diverse settings.	0	Continue the group's activities for promoting understanding and implementation of our core values based on our philosophy.
to employees	Foster globally adaptable human resources	Strengthen activities to foster globally adaptable human resources through personnel and language training.	We have conducted training to foster globally adaptable human resources and language training in accordance with our annual training schedule.	0	Continue the group's activities for promoting understanding and implementation of our core values based on our philosophy.

Item	Issue	Targets for fiscal year 2022	Results of fiscal year 2022	Evaluation	Targets for fiscal year 2023
		Continuously disseminate information on compliance to enhance awareness.	Five e-mail newsletters focusing on compliance have been sent per year.	0	Continuously disseminat information on compliance t enhance awareness.
	Promote compliance	Continue to execute self checks in order to identify and solve problems.	Annual self-check carried out during Corporate Ethics Month (December).	0	Continue to execute self-checks order to identify and solve problems.
		Continue to conduct training on harassment.	Conducted training on preventing information leaks and power harassment.	0	Continue to conduct training of harassment.
	Promote industrial safety and health	Continue industrial safety and health activities, including those at overseas plants.	Each business establishment, including each overseas plants, has formulated an annual plan on safety and health, and improved the plan by periodically checking its execution.	0	Continue industrial safety and health activities including overseas plants.
3.Responsibilities to employees	Promote health management	-	-	-	Promote health manageme measures so that employer can work vigorously and in goo mental and physical health.
	Adopt BCP in overseas plants	Study measures for resolving issues related to product supply in times of emergency, including those at overseas plants, and establish an organizational structure for supply.	Established an emergency product supply system that includes overseas factories.	0	-
	Maintain and improve BCM	-	-	-	To maintain the busine continuity system, inspect a improve efforts through simulatidrills, etc.
	Promotion of infection control measures	Review the current response manual for all infectious diseases in general and be prepared for forthcoming infections.	Reviewed the current response manual for all infectious diseases in general and made revisions. Implemented measures to address the novel coronavirus pandemic.	0	-
4.Responsibilities to stockholders and inbestors	Promote IR activities	In addition to conventional investor support, strengthen ability to broadcast non-financial information that takes ESGs and SDGs into account, and promote the broadcast of information internally and externally. Expand and improve the efficiency of IR business.	Opportunities to actively listen to feedback from shareholders and investors on the first edition of the FY2021 integrated report were provided, and this feedback was reflected in the FY2022 edition. This has enabled better dissemination of non-financial information and improved external evaluations.	0	Put even more effort than ever provide feedback to manageme regarding opinions ascertain through dialogues wi shareholders and investors, a work to enhance corporate value Do not stay limited to curre information at each closing, a strive to engage in dialogue gain a better understanding medium and long term grow strategies.
5.Responsibilities to the general public and local communities	Promote social action programs	Continuously carry out social action programs.	Each business establishment has continued to participate in activities involving local communities.	0	Continuously carry out soc action programs.

Basic Environmental Policy

Basic Environmental Policy

Having been incorporated into a myriad of electronics devices, connectors from Hirose have become an integral part of people's lives domestically and overseas. As we consider preservation of the global environment to be one of the primary responsibilities of a corporation that manufactures products that are distributed worldwide, the Hirose Electric Group formulated its Basic Environmental Policy in 2001. A revised version was released on April 1, 2011, adding our commitment to the preservation of biodiversity, as we also hold this to be an important facet of corporate responsibility.

The latest revisions were made on May 18, 2023 to reflect changes to our company's slogan in our environmental policy.

Our current environmental activities are based on this policy.

Basic Environmental Policy

May 18, 2023 President Hirose Electric Co., Ltd.

As is fitting for a company whose slogan is "A small company connecting wisdoms," the Hirose Electric Group recognizes the importance of preserving the global environment as one of the basic business challenges associated with its global ambitions. We will therefore promote corporate activities that give full consideration to conservation of the environment and biodiversity.

Connectors, which are our main products, help to save energy because their detachability enhances the users' productivity and facilitates transportation of their products. They are used in environmentally friendly products, such as electric vehicles and LED lights. Through the utilization of our connectors, we will contribute to the realization of a low-carbon society, preservation of the environment, and conservation of biodiversity.

Recognizing that in an endeavor to preserve the environment it is important to adopt environmental management that both is effective and conforms to the relevant environmental management system standards. Hirose Electric and its group companies are committed to conforming to the international standard ISO 14001 and are implementing the following environmental protection activities.

- We will ensure that we understand the conditions surrounding our company, the needs of our stakeholders, and the impact of our activities and products on the environment.
 Based on these findings, we will identify what we must do to protect the environment, ensure that we meet our conformance obligations, and determine the risks and opportunities associated with undertaking such activities. We will promote environmental protection and prevention of pollution by planning and implementing our activities accordingly.
- 2. We will comply with environment-related laws, regulations, ordinances, and external requirements that we subscribe to.
- 3. We will promote the following activities as priorities in our business activities:
 - · Design, production, and marketing of products those are environmentally friendly
 - Promotion of energy conservation through effective utilization of resources, streamlining of operations and reduction of waste
 - Promotion of reduction of industrial waste such as metal chips and waste plastic, and promotion of recycling and reuse through segregation
- 4. We will provide in-company training on preservation of the environment and conservation of biodiversity, and raise the awareness of, support, and ask for cooperation from our business partners and clients.
- 5. We will continuously improve our environment management system in order to enhance the results that our environmental preservation activities will deliver.

Contributions of connectors to environmental protection

Detachability of connectors

Connectors, which are the major product of the Hirose Electric Group, have the following functions. Thanks to these, connectors not only provide convenience to our customers and users but also help to save energy and resources and reduce waste, thereby contributing to the realization of a low-carbon society.

Function	Current status	If connectors did not exist…	Impact on the environment
Maintain ability	It is possible to replace only the faulty parts.	It would be necessary to replace the entire unit rather than only the faulty parts.	Increase in waste Uneconomical replacement of the entire unit
Expandability	Devices can be added if and when necessary.	 All potentially needed devices should be installed at the outset. Since functions that may later be found to be necessary cannot be added, the entire unit would have to be replaced. 	 Increase in power consumption Increase in resources used Uneconomical installation of unnecessary devices Increase in waste Uneconomical replacement of the entire unit
Productivity	Difference devices can be produced in parallel.	Since devices cannot be produced separately, production would be inefficient.	 Drop in production efficiency Increase in power consumption
Transport ability	Parts of a large product can be transported separately.	Since a product cannot be disassembled into separate parts, transportation would be inefficient.	Increase in use of transportation energyIncrease in storage space

Application fields of connectors

Connectors are also used in environmentally friendly products such as the following.

- O Hybrid cars and electric vehicles (contribution to reduction in exhaust gas and prevention of global warming)
- O Mobile phones, smartphones, videoconferencing systems (contributing to the realization of a low-carbon society by reducing the need to travel)
- O Products for vehicles and industrial equipment (contribution to resource saving by extending product lifetime)
- O Products with high environmental performance, such as LEDs (contribution to energy saving)

Environmental Management

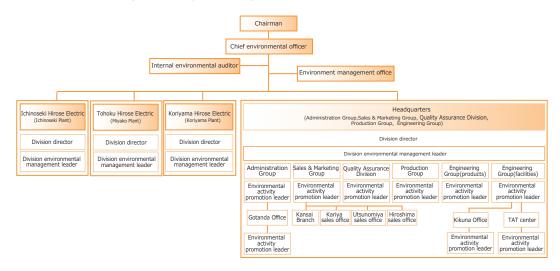
Environmental Management Structure

The Hirose Electric Group organized an environmental management committee, headed by the President and Representative Director of Hirose Electric, and built an environmental management system (EMS). The system spans four organizations: the groups within the Head Office of Hirose Electric and the three domestic plants: Ichinoseki Hirose Electric, Tohoku Hirose Electric, and Koriyama Hirose Electric.

In accordance with the Hirose Electric Group's overall targets, which conform to our environmental policy, individual plants, divisions, and departments set their own objectives and engage in their own environmental management activities. Each month, individual plants and divisions measure progress toward the achievement of their objectives, and share this information with other organizations. This information is reported to management each quarter, and individual organizations receive instructions from management on how to make improvements where this is deemed to be necessary.

The environmental management committee, which consists of management and division directors, is convened monthly to share information and perform a management review.

<Environmental management system organization>



ISO14001 Certifications

Ichinoseki Hirose Electric acquired ISO14001 certification in 1999. The certification was extended to cover Koriyama Hirose Electric and Tohoku Hirose Electric in 2000. In 2002, the Hirose Electric Group, including the three domestic plants, acquired an integrated certification. This demonstrates our commitment to environmental protection. We completed migration to the revised standard (ISO14001:2015) in 2016.

All of our overseas plants have acquired ISO14001 certification.







1999	Ichinoseki Hirose Electric Co., Ltd.
2000	Koriyama Hirose Electric Co., Ltd. Tohoku Hirose Electric Co., Ltd.
2002	The certification was extended to cover Hirose Electric Co., Ltd. (including the domestic three plant), and it was converted to an integrated certification.
2004	Hirose Electric Malaysia P.T. Hirose Electric Indonesia Hirose Electric (Dongguan, China)
2008	HIROSE KOREA Co., Ltd.
2009	Hirose Electric (Suzhou, China)

1000 Jahin analyi Hiyana Florenia Ca Had

Environmental activities linked to SDGs

The Hirose Electric Group will contribute to achieving the "Sustainable Development Goals (SDGs)" adopted by the UN, through business and environmental activities. The table below shows the relationship between the key environmental management activities of the Hirose Electric Group and the SDGs.

We have built a system to link our environmental targets with the SDGs, and are promoting the environmental targets that we set by focusing on the SDGs. We are also raising awareness of the SDGs by requesting cooperation by displaying explanatory text on water and power conservation to contribute to the SDGs.



Water and power conservation poster for SDGs (Ichinoseki Plant)

		Y						300	3 (1011)	noseki P	iai it)		
	SUSTAINABLE GOALS				Enviro	nment	al mar	ageme	ent act	ivities			
1 Noor 2 man 2 feet 1 1 Noor 1	3 CONTRANSFORM OUR WORLD 3 CONTRANSFORM OUR WORLD 5 CONTRANSFORM 6 CONTRANSFORM 6 CONTRANSFORM 6 CONTRANSFORM 7 CONTRANSFORM 10 CONTRAN	Promotion of an environmental management system	Compliance with environmental laws and regulations	Sale of environmentally friendly products	Energy-saving activities	Greenhouse gas reduction activities	Water usage reduction activities	Paper usage reduction activities	Waste management and recycling activities	Reducing the load on the environment through green ICT	Preservation of biodiversity	Renewable energy (Solar power generation)	Publicity using Environmental Reports
6 CLEAN WATER AND SANITATION	Clean, accessible water for all is an essential part of the world we want to live in.	0	0	0			0	0	0		0		
7 AFFORDABLE AND CLEAR ENERGY	Energy is central to nearly every major challenge and opportunity.	0										0	
8 DECENT WORK AND ECONOMIC GROWTH	Sustainable economic growth will require societies to create the conditions that allow people to have quality jobs.	0		0						0			
9 NOUSTRY INDIVIDUE AND INFRASTRICTURE	Investments in infrastructure are crucial to achieving sustainable development.	0		0	0	0				0		0	
11 SUSTAINABLE CITIES AND COMMUNITIES	There needs to be a future in which cities provide opportunities for all, with access to basic services, energy, housing, transportation and more.	0	0	0	0	0			0	0	0	0	
12 RESPONSIBLE CONSUMPTERN AND PRODUCTION	Responsible Production and Consumption	0	0	0					0				0
13 CLIMATE ACTION	Climate change is a global challenge that affects everyone, everywhere.	0	0		0	0				0		0	
14 LIFE BELOW WATER	Careful management of this essential global resource is a key feature of a sustainable future.	0	0	0	0	0							
15 DE LAND	Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss	0			0	0		0	0	0	0		

Compliance with Laws and Regulations

The Hirose Electric Group is ensuring compliance with the relevant laws and regulations through the following activities. We have created lists of all the environment-related laws, regulations and rules that apply to Hirose Electric and individual plant. We have also created lists (database) of documents that must be submitted to the relevant government offices to prevent any omissions when we submit such documents.

We periodically ascertain compliance with the relevant laws and regulations based on the assessment standards we are legally required to comply with, and also check compliance with any agreements we have concluded with municipalities.

In addition to the above, we are reinforcing our supervision through a monthly environmental patrol at each plant. The patrol team checks whether our daily activities comply with the relevant laws and regulations.







Confirmation of ambient noise

In addition, we have requested our suppliers to build environmental management systems and comply with relevant laws and regulations, and we have checked the progress they have made in the creation of these systems. Furthermore, we have visited their sites to verify legal compliance.

As a result, no significant violation of the relevant environmental laws and regulations was found during fiscal year 2022, as had been the case in previous years.

VOICE

Legal compliance activities (environmental patrols and on-site inspections of waste disposal sites)

The Ichinoseki Plant conducts environmental patrols and on-site inspections of waste disposal sites from the perspective of responsibility for emissions of environmentally hazardous substances generated during production activities, in compliance with laws and regulations.

Examples include the daily inspections of cutting machines to check for cutting oil leaks arising from the cutting process at the components processing department, and off-site monthly confirmations of oil-water separator tanks to prevent such leaks in advance.

Subcontractors are also being asked to have collection partner companies collect waste oil, and onsite inspections are conducted once a year at these subcontractors to see if this collection is being conducted appropriately, which are all part of efforts to work with partner companies to prevent environmental impact.



Makoto Kindaichi Ichinoseki Plant Parts Manufacturing Section



Status of parties accepting waste oil



Panoramic view of oil-water separation tank

Environmental Audit

The Hirose Electric Group carries out an internal environmental audit to make sure that its environmental management system is working effectively and being properly maintained in accordance with ISO14001.

To maintain and renew ISO14001 certification, we undergo periodic external reviews.

In fiscal year 2022, the audit was conducted from August 1 to August 31. This internal audit identified four problems but none of these were major such as significant deviations from the plan or problems affecting the entire system. All the identified problems have since been rectified.

For fiscal year 2022 external review, regular reviews were conducted between November 29 and December 2. The reviewers confirmed that our environmental management system is being properly maintained.



Internal audit



External audit

Environmental Education

The Hirose Electric Group provides environmental education for all staff so that every employee understands the importance of environmental protection activities, and has a clear understanding of his or her responsibilities when engaging in these activities. Also, necessary competence at each base of operations is decided, and training is planned and carried out to acquire those capacities.

In addition, we provide specialized education for those personnel who are involved in any work that could potentially cause an emergency or a significant environmental impact. Moreover, we raise awareness among employees of the importance of biodiversity by providing e-learning on the subject and explanations through new employee induction training.



Education for designers



Training to prevent oil leaks during equipment maintenance



Environmental Education(Koriyama Plant)



Emergency response training for reflow equipment



The Hirose Electric Group undertakes environmental protection activities by setting annual environmental objectives.

The overall objectives of the Hirose Electric Group are to contribute to realization of a low-carbon society, environmental protection and biodiversity conservation through sales of connectors, to reduce waste, and to operate efficiently. Based on these objectives, individual plant and divisions have set specific activity objectives and are working to reduce the environmental impacts of their operations.

Since fiscal year 2020, we have been linking each goal to SDGs and conducting environmental activities with an awareness of SDGs.

In addition to these environmental objectives, the Group is reducing its usage of resources and generation of industrial waste through adoption of a long-term target of "reducing our usage of various items per unit of sales by 1% on average for each year up to 2030."

We will continue to promote the achievement of targets for future environmental protection activities.

Hirose group's objectives	Targets for fiscal year 2022	Achievement in fiscal year 2022	Evaluation
	Complete the planned activities for strengthening control over the use of prohibited materials%	100%	0
Contribute to realization	Check 97% of our business partners to find out if their green procurement guidelines are being kept up-to-date	100%	0
Contribute to realization of a low-carbon society, environmental protection,	Improving the in-process defect rate	Cleared the achievement standard	0
and conservation of biodiversity through sales of connectors	Reduce spoilage cost	Cleared the achievement standard	0
or connectors	Hold regular quality improvement meetings	Completed as planned	0
	Reduce inventory waste of individual items and products	Cleared the achievement standard	0
	Enhance productivity by improving machine takt time (rate of progress: 80% or more)	Cleared the achievement standard	0
	Compliance with the Act on the Rational Use of Energy (average reductions of 1% per year)	Cleared the achievement standard	0
	Reduce waste in testing center work	Cleared the achievement standard	0
	Reduce the cost of surface treatment work (reduced use of gold, site improvements, waste reduction)	Cleared the achievement standard	0
Reduce waste and operate efficiently	Promote improvement proposal activities	Cleared the achievement standard	0
,	Receive order data via internet connection	Completed as planned	0
	Implement an environment patrol	Completed as planned	0
	Design DR at the time of mold production	Cleared the achievement standard	0
	Streamline distribution routes	Cleared the achievement standard	0

Environmental Impacts due to Business Activitie

We are making sure that our business activities are eco-friendly by ascertaining what impacts these activities have on the environment.

Activities with the potential to cause environmental impacts during fiscal year 2022 are listed below.

Item	unit	fiscal year 2022	fiscal year 2021	fiscal year 2020
Energy consumption	1000GJ	194	204	194
Greenhouse Gas Emissions	t-CO ₂	114,000	128,000	123,000
Water usage	1000 m	31.8	31.7	34.3
Paper usage	t	16.1	17.5	19.5
Disposal of specially controlled industrial waste	t	389	321	322
Disposal of general industrial waste	t	560	563	577

Activities to Reduce Environmental Impacts

Reduction of Energy Consumption

[Long-term target] Reducing our usage per unit of sales by 1% on average for each year up to 2030 (improvement by 16.55% or more by the end of fiscal year 2030 compared to the reference year 2012)

Based on the Hirose Electric Group's long-term vision*¹ of reducing energy consumption by 7.73% or more by the end of fiscal year 2020 compared to the reference fiscal year 2012, we are doing business with a target of reducing energy consumption by 1% annually, on average. We have put up posters in offices and plant to encourage everyday activities for energy saving, such as turning lights off during lunchtime recess, refraining from using elevators for going up or down two floors, and reducing power consumption in rest rooms.

Tohoku Hirose Electric and Ichinoseki Hirose Electric have been designated as "specified business operators" as defined by the Act on the Rational Use of Energy. It is saving energy in accordance with its medium-and-long term plan. Solar power generation facilities were installed at Tohoku Hirose Electric in 2017, and at Ichinoseki Hirose Electric in 2018. In addition, the lighting at the plant was changed to LED lights, and the boilers were replaced with air conditioners, so Heavy Oil A was no longer used.

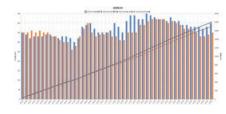
* 1 Our targets are inconformity with the JEITA(Japan Electronics and Information Technology Industries Association) targets.



Solar power generating station (roof top)(Tohoku Hirose Electric)



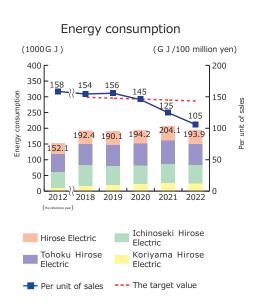
Solar panel

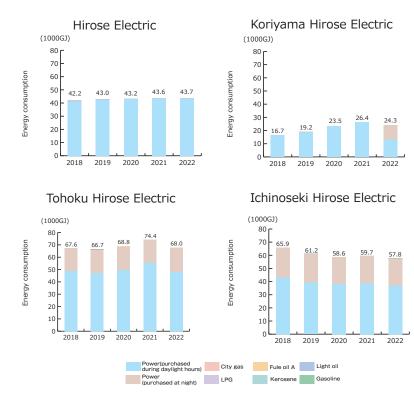


Confirmation of power generation levels (comparison with previous day)

Solar power generating station (Ichinoseki Hirose Electric)

We reduced use by 33.26% for our fiscal year 2022 goal of 9.56% reduction and thus achieved our goal. In addition, the details of the energy used are as follows.







[Long-term target] Reducing our usage per unit of sales by 1% on average for each year up to 2030 (improvement by 16.55% or more by the end of fiscal year 2030 compared to the reference year 2012)

The Hirose Electric Group manages energy use levels and CO_2 emissions at our overseas bases of operation, and at our domestic and overseas cooperative companies.

Most greenhouse gas emissions from the Hirose Electric Group arise out of our use of electric power, fuel oil A, and gasoline. Most are indirect CO_2 emissions produced through electricity generation using fossil fuels.

By reducing the aforementioned forms of energy consumption, we are promoting CO₂ reduction activities.

As a separate approach to CO_2 reductions, we are promoting CO_2 reductions in logistics (reviews of logistics routes, local procurement, reviews of transportation vehicles) and purchase of green electricity with zero CO_2 emissions (the Ichinoseki Plant will switch to green electricity starting in fiscal year 2022).

We will continue to promote CO_2 reduction activities by considering all options to reduce CO_2 emissions, including carbon offsets.

Reduction of Greenhouse Gas Emissions from Transportation

To reduce greenhouse gas emissions from transportation, the Hirose Electric Group are taking the following measures:

- O Use returnable trays for packaging when shipping products
- O Locally procure trays that are used in overseas plant.
- O Select efficient distribution routes.
- Change shuttle trucks between Hirose plant from 2-ton trucks to lightweight trucks.







Electricity forklift

100% Renewable Energy Initiatives

The Ichinoseki Plant has switched all electricity consumption to "100% renewable electricity" as a carbon-neutrality initiative.

By switching to a contract to receive electricity from renewable energy sources such as hydroelectric and geothermal power generation, the Plant will achieve zero CO_2 emissions associated with electricity use.

Compared to CO_2 emissions from electricity consumption of [3,173 t- CO_2] in fiscal year 2021, starting in fiscal year 2022, the Plant will achieve 100% renewable energy to realize zero CO_2 emissions.

Although the contract change will result in an increase in costs, energy conservation efforts in fiscal year 2018 and beyond have resulted in cost savings that exceed the cost increase.

- < Energy Saving Measures from Fiscal Year 2018 Onward>
- -Installed solar power generation facilities and considered adding new ones
- -Conversion to LED lighting and sensor-based activation
- -Visualization of electricity
- -Conducted energy conservation tours
- -Air-leak checks, etc.

We will continue to enhance our energy-saving efforts going forward.



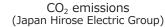
Tatsuya Chiba Ichinoseki Plant General Affairs Sectionn

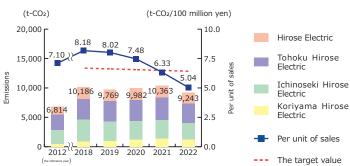


We reduced CO_2 emissions by 28.97% for our fiscal year 2022 goal of 9.56% reduction and thus achieved our goal. In addition, the details of CO_2 emissions are as follows.

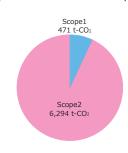
CO_2 emissions per 100 million yen in sales (t- CO_2 /100 million yen)					
Scope1 0.92					
Scope2	23.98				
Scope3	37.36				
Total	62.27				

[Japan]



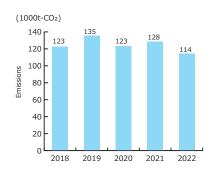


CO₂ emissionsin (fiscal year 2022) (Japan Hirose Electric Group)



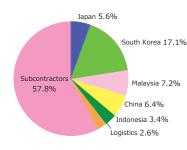
[Worldwide]

CO₂ emissions (includes overseas sites, subcontractors at home and overseas, logistics)*1

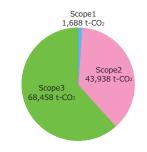


 $*\,1\,$ We have calculated the overall amount by sampling primary subcontractors's CO2 emissions caused by our purchase taking into account the yearly coverage rate (52% - 85%). The scope of CO2 emissions in logistics : our domestic dedicated truck, export flight, import flight.

Percentage of CO₂ emissions (fiscal year 2022)



CO₂ emissions by the entire supply chain (fiscal year 2022)



SCOPE 1: ${\rm CO_2}$ emissions by the Hirose Electric Group SCOPE 2: ${\rm CO_2}$ emissions by power companies used by

companies used by subcontractors, etc.)

the Hirose Electric Group SCOPE 3: CO₂ emissions by others (logistics,subcontractors, and power

Reduction of Water Usage

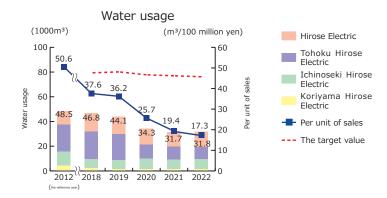
[Long-term target] Reducing our usage per unit of sales by 1% on average for each year up to 2030 (improvement by 16.55% or more by the end of fiscal year 2030 compared to the reference year 2012)

To reduce water consumption, the Hirose Electric Group is working to conserve water used for day-to-day necessities by using less water in toilets and switching to automatic faucets, among other activities.

We also work to reduce water consumption used in production; for example, by recycling some of the water used in the plating process and by recycling and reusing water used for cross-sectional polishing to confirm prototypes.

We reduced use by 65.70% for our fiscal year 2022 goal of 9.56% reduction and thus achieved our goal.

In addition, the details of the water used are as follows.





Poster encouraging conservation of water used in day-to-day activities



Water Recirculation System (Water to be used in prototype cross section cut)

Reduction of Paper Usage

[Long-term target] Reducing our usage per unit of sales by 1% on average for each year up to 2030 (improvement by 16.55% or more by the end of fiscal year 2030 compared to the reference year 2012)

As part of its commitment to saving resources, the Hirose Electric Group is working to reduce paper usage.

We are reducing paper use by printing on both sides of sheets, condensing two or more pages into a single page, printing on the back of previously used paper, using electronic documents, reducing paper document distribution in meetings by bringing laptop PCs or using projectors, and substituting electronic files for internally circulated paper documents. We also preferentially purchase paper that has an environmental label.

We reduced use by 76.81% for our fiscal year 2022 goal of 9.56% reduction and thus achieved our goal.

0.00

2022

In addition, the details of the paper usage are as follows.

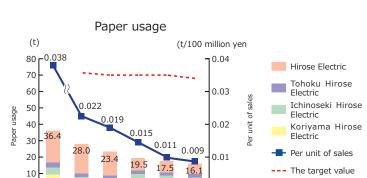
2012

2018

2019

2020

2021





Using the reverse sides of paper



Reduction of distributed paper documents by using a projector



[Long-term target] Reducing our usage per unit of sales by 1% on average for each year up to 2030 (improvement by 16.55% or more by the end of fiscal year 2030 compared to the reference year 2012)

The Hirose Electric Group is handling waste produced from its business operations responsibly. Waste is properly classified and managed.

Specially controlled industrial waste is stored and processed at specified storage facilities under strict conditions.

We are making sure that general industrial waste is carefully separated into the proper categories by putting up signs that explain how to separate waste into plastic, metal, paper, etc. Furthermore, to generate revenue from waste, we are extracting parts of waste materials for sale as valuable substances or recyclable products.

Ichinoseki Hirose Electric has endeavored to reduce waste disposal by neutralizing acid and alkaline wastes. However, the levels of these wastes have increased significantly as a result of the temporary breakdown of the neutralization facilities in fiscal year 2015. Later, operation of the neutralization facilities was resumed, and emissions were normalized.



Recycled materials area



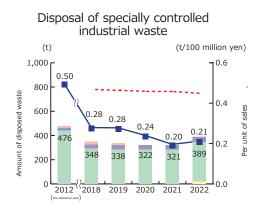
Collection of scrap metal

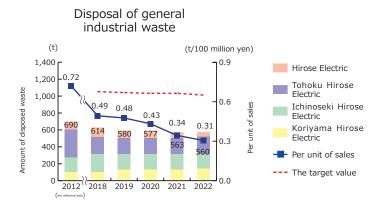


Checking on sorting for recycling

We reduced disposal of specially controlled industrial waste by 59.4% for our fiscal year 2022 goal of 9.56% reduction and thus achieved our goal. We reduced disposal of general industrial waste by 57.52% for our fiscal year 2022 goal of 9.56% reduction and thus achieved our goal.

In addition, the details of the disposal are as follows.





Activities for recycling sold products

Since connectors, which are Hirose Electric Group's main products, are incorporated into end user products, it is difficult for us to recover them on our own when recovery of such end user products is required.

Therefore, at the design stage, we make our products easy to disassemble under the assumption that they will be recycled. Furthermore, to make our products easy to sort, we try to display material names in the resin material, as long as there is space to do.



The Hirose Electric Group uses green ICT to collect, analyze, visualize, and share information in real time to improve the efficiency of paperwork and production, and decrease the movement of people and goods, thereby contributing to a reduction in environmental impact.

We are also striving to reduce our environmental impact through power-saving and green ICT (centralization and virtualization technologies).

During fiscal year 2022, we engaged in the following initiatives.

Encouraging Remote Work Through Remote Tools

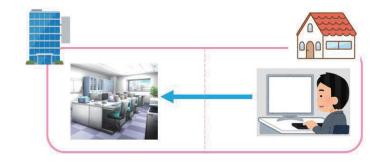
The Hirose Electric Group provides remote tools that allow employees to work from home in the same environment they enjoy at the office.

These tools are primarily used by employees who use core systems that cannot be used without connecting to the company's internal network when they work remotely from the office. By installing these tools, systems that previously could not be used from outside the company can now be used from home computers while still maintaining security.

It is said that over 90% of the work-related CO_2 emissions produced by a company employee comes from their commute. Encouraging remote work not only reduces CO_2 emissions, but also reduces congestion on trains and the use

of energy resources at companies, such as electricity, gas, and water. In addition, when people work from home they tend to eat lunch using their own tableware rather than buying lunch from a store, which helps cut down on the use of plastics like packaging and spoons.

We will continue to promote remote work and thereby further reduce burdens on the environment.



Going Paperless by Digitizing Invoices

The Hirose Electric Group has implemented a business improvement platform meant to digitize various operations, thereby reducing man-hours spent on tasks and increasing efficiency.

This system is used to facilitate payment by forwarding invoices from suppliers to accounting. Until now, systems were always designed for paper invoices and did not support digital invoicing. In the future, we plan to modify the system so that digital invoices will be sent to accounting digitally, eliminating the need to print the invoices.

We will continue our efforts to optimize our work operations and further reduce our impact on the environment.



Reduction of Environmental Impacts on Living Environment

The Hirose Electric Group is making sure that their operations comply with the relevant laws and regulations of the national and regional governments with regard to prevention of ozone layer damage, inappropriate processing of waste, water contamination, noise and vibration.

For air conditioners, freezers, refrigerators and other equipment that use chlorofluorocarbons installed at each office, to comply with the Act on Rational Use and Proper Management of Fluorocarbons, we conduct simple inspections, periodic inspections, and chlorofluorocarbon leakage management. In accordance with the laws and regulations including waste management according to the Waste Management and Public Cleansing Act, we regularly conduct inspection and measurement to prevent pollution and contamination in the atmosphere, water quality, noise and vibration.

Preparedness for Emergencies

The Hirose Electric Group has compiled response manuals for a wide range of possible emergencies that could potentially have impacts on the environment. We conduct regular drills to confirm that the manuals are effective and to raise the awareness of those concerned.

We also carry out regular fire drills to maintain workplace safety. So far, there have been no emergencies or accidents. We are determined to prevent and expend all possible means to make this happen.

- Examples of emergencies
- gas leakage
- O gas leakage due to defective ventilation
- broken plating machine

- $\ensuremath{\bigcirc}$ lead contamination in discharged water
- O theft of toxic materials
- O broken vessel containing discharged plating solution
- O leakage from a container used to store plating materials



Training for responding to kerosene tank leaks



Training for responding to waste plating liquid leaks



Emergency response training for reflow equipment



Fire drills

Biodiversity Conservation

The Hirose Electric Group is conserving biodiversity by developing, producing and selling environmentally friendly products.

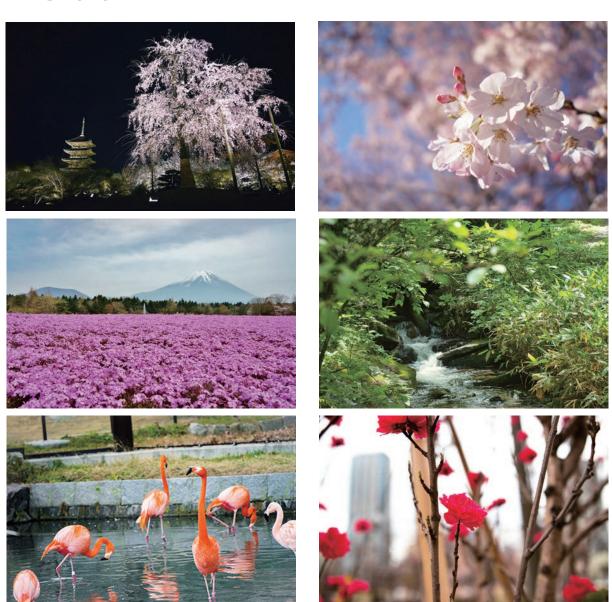
We are also working to conserve biodiversity through our environmental target activities.

In addition, in club activities for employees to become better acquainted, there is a club that offers opportunities to "feel" and "communicate" through biodiversity activities, and it has helped raise awareness and dissemination of biodiversity.

Raising awareness of biodiversity — Club activities —

The Photography Club carries out activities to enhance biodiversity by taking pictures of beautiful nature scenes as well as aspects of living things.

Photography Club





Social Action Programs

Cleanup Activities in Local Communities

Since their establishment, Tohoku Hirose Electric and Ichinoseki Hirose Electric have been cleaning up their respective neighborhoods on a regular basis, and will continue to do so. By doing so, they are contributing to the local communities.







Picking up litter around the company (Tohoku Hirose Electric)



Picking up litter around the company (Ichinoseki Hirose Electric)



Picking up litter around the company (Koriyama Hirose Electric)

Blood Donation (Made at Each Business Site)

All the business sites of the Hirose Electric Group annually participate in a blood donation drive organized by the Japan Red Cross Society.





Participation in a blood donation drive (Headquaters))

The "Silver Medal for Merit" awarded by the Japanese Red Cross Society

On October 4, 2017, our blood donation activities over the years have won admiration, and the Japanese Red Cross Society awarded us with the "Silver Medal for Merit".

We will make positive approaches in blood donation activities as a social contribution activity from now on.

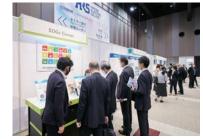


Communication with Stakeholders

Hirose Technology Exhibitions

The Hirose Electric Group typically holds a technology exhibition in Tokyo and Osaka once every three years. The exhibition will feature a wide range of connectors, cutting-edge connection technologies and solutions that meet next-generation needs, as well as high-performance, high-reliability product variations, attracting many visitors, including many from overseas.







Scene of the Hirose Technology Exhibition

Communication with Suppliers

The Hirose Electric Group holds a regular TOP training workshop (workshop on quality) and a meeting to exchange New Year's greetings with its suppliers in order to forge a closer partnership. In addition, with a view to incentivizing suppliers to implement environmentally friendly practices, we make a list that ranks suppliers based on a range of evidence submitted by the suppliers themselves, and make the list public.







TOP training workshop

Meeting to exchange New Year's greetings

*In fiscal year 2022, the TOP training workshop and New Year's greeting meeting have been cancelled due to the novel coronavirus pandemic.

Formulation of Green Procurement Guidelines

As part of its activities to preserve the environment and protect biodiversity, the Hirose Electric Group has formulated the Hirose Electric Group Green Procurement Guidelines in order to preferentially procure parts and materials that have a low impact on the environment, taking the lifecycle of each product into consideration. The guidelines apply to components that make up products, materials used during the manufacturing process, and the packaging materials used in the shipping of products. They also apply to the machinery and tools used at manufacturing sites. We are making concerted efforts to implement green procurement. We have distributed the guidelines to our suppliers and asked them to establish their own environmental management systems, reinforce quality control of chemicals contained in products, and submit information about such chemicals.



Complaints on Environment from the Neighborhood and/or Stakeholders

Nothing in particular.

Activities at Group Sites to Reduce Environmental Impacts

Activities of Domestic Plant to Reduce Environmental Impacts

Koriyama Hirose Electric (Koriyama Plant)

Address: 87-3, Ogawara, Koriyama, Fukushima, 963-8828, Japan

Business: Production of ribbon-cable connectors,

interface connectors,

nylon connectors and connectors for automobiles

Koriyama City is located in central Fukushima Prefecture and has a population of approximately 330,000. Koriyama Station on the Tohoku Shinkansen Line is located in the city, providing easy access from Tokyo and Sendai.



Koriyama Hirose Electric

The city has many commercial establishments and restaurants where visitors can enjoy delicious cooking made with local ingredients. Koriyama City is also rich in nature, bordered by Lake Inawashiro to the west, the Abukuma Mountains to the east, and Mount Adatara to the north, with the Abukuma River flowing from south to north through the center of the city.

The Koriyama area offers a wealth of cultural experiences, with sightseeing spots such as Okuaizu and Mount Bandai, where visitors can get in touch with nature, as well as art galleries and museums.

We have worked to reduce its environmental impact in fiscal year 2022through the following initiatives.



Ryouya Sato Quality Control Section

(1) Separation and collection of scrap metal

We have engaged in the separation and collection of scrap metal since fiscal year 2012. By sorting and collecting by metal type and plating process, we are contributing to the reduction of industrial waste through efficient recycling. We also conduct regular patrols to ensure that separations and collections are being performed correctly.

(2) Environmentally friendly manufacturing

The Koriyama Plant produces some of the components required for connector assembly. The Plant engages in high-quality, environmentally friendly manufacturing by conducting on-site production, which reduces the Plant's environmental impact from things like exhaust gases emitted and packaging materials used during transportation, and enables reduction in waste through the prompt provision of feedback even when production problems occur.

We will continue to promote sustainable and environmentally friendly manufacturing.

[Koriyama Plant] Contributing to the Environment by Improving Quality

We believe that efforts to improve quality can also function as efforts to reduce the burden on the environment, as improved quality can reduce waste from failures, and eliminate waste of materials and man-hours required to remake products.

We conduct QC circle activities twice a year as part of our quality improvement efforts. 31 circles participated in the previous QC circle activity presentation, and their activities focused on various themes like improving defects in the production line and making work less difficult.

By calculating the effects of improvements as financial amounts, we have made these effects more visible, giving them a greater sense of reality.

Additionally, we are working to improve quality through other improvement proposals.

We will continue our efforts to reduce our impact on the environment.



A look at the QC circles

Ryouya Sato Quality Control Section

Tohoku Hirose Electric (Miyako Plant)

Address: 21-2, 2nd Chiwari, Akamae, Miyako, Iwate, 027-0202, Japan

Business: Production of nylon connectors

(primary processing and assembly),

and development and production of advanced metal molds

and automated machinery

Miyako Plant is located in Miyako City of Iwate Prefecture in the Sanriku Reconstruction National Park, which is blessed with the mountains, rivers and the sea. It is located in the easternmost region of Honshu, where the sun rises earliest in mainland Japan. Facing the Pacific Ocean, the fishing industry is prosperous. In order to protect this rich natural environment, Miyako Plant is working hard to reduce environmentally hazardous substances.

We view "Reducing environmental impact=Improving quality=Reducing costs". Defective products are directly linked to waste of energy and resources (people, goods, and money). In addition to daily operations, we are promoting quality improvement through QC circle activities and improvement proposals and promoting effective use of energy and resources, and reduction of waste.

Furthermore, since 2014, the Miyako Plant has been a Type 2 Designated Energy Management Factory under the Act on the Rational Use of Energy. The plant naturally submits periodical reports as well as medium- to long-term plans in accordance with this Act, and has achieved, or exceeded, its annual goals for reducing energy usage costs per unit of sales through the implementation of energy use reduction plans and on-going productivity improvement activities in line with these plans. As a result, the plant has maintained an S Rank in the business classification evaluation system .

To protect abundant mountain, river, and ocean natural environments, we will continue to engage in activities that reduce our environmental impact.



Tohoku Hirose Electric



Shinichi Kawamura Quality Control Section

[Miyako Plant] Introduction of energy-saving equipment into new building construction

Introduction of energy saving features into the precision metal mold building where construction was begun in July 2017 and completed in May 2018.

- Energy saving by solar power generation
 We installed a 144-panel 40kW photovoltaic power generating system on the roof.
 The 20kWh storage battery can store a portion of photovoltaic power and nighttime electric power, and it can be used not only for the installed precision metal mold building but also throughout the plant in case of emergencies.
- Energy saving built in for air conditioning
 By using a double layer folded structure in the roof and a high-performance heat insulating material on the walls*, we realized an energy savings of about 49% compared to the conventional air conditioned building.

(Construction company simulation)

*Measuring 35mm, there is about a 10 fold improvement in insulation effect compared with the (100mm concrete + 45mm urethane foam) structure.

Comparison of thermal insulation effect

	Roof structure	External walls	Annual power consumption (%)
Conventional structure	Single folded plate	Conventional material	100
New building structure	Double folded plate	High performance material	51



Yosuke Ohmura Production Equipment Section



Precision metal mold building

Ichinoseki Hirose Electric (Ichinoseki Plant)

Address: 14-36, Todai, Ichinoseki, Iwate, 021-0822, Japan Business: Production of coaxial connectors, high-frequency/

optical devices, optical connectors, interface connectors,

and processed components

The Ichinoseki Plant is located in an environmentally rich location, adjacent to the Kitakami River, the largest river in the Tohoku region, and Mount Kurikoma, the so-called "queen" of the Ou Mountains, in the distance to the west.

In order to protect this rich natural environment, we practice corporate activities that take into consideration the impact on the local living ecosystem.

In FY2022, the Ichinoseki Plant implemented initiatives to expand the scope of use of the Product Data Management (PDM) system in order to digitize paper documents and reduce the man-hours required for management work.

After identifying the management documents that are generated in daily production, product evaluation, and process change operations, and organizing the flow of paper-based document delivery, storage, and management for each document, we designed a digital workflow equivalent and steadily shifted to management within the PDM system, thereby gradually expanding the scope of paperless operations.

Since a diverse range of work operations are conducted within a plant and the operating rules and flows differ from operation to operation, transitioning to a totally PDM-based management of documents is not a simple task. However, by tackling each operation one by one, steadily expanding the scope of digitization, and decrease the use of paper, we will engage in efforts to reduce the impact on the environment caused by deforestation and CO_2 emissions.

In addition to the continuation of these activities, we will reduce our impact on the global environment and promote activities to protect biodiversity by ensuring that we maintain manufacturing that does not use environmentally hazardous substances.



Ichinoseki Hirose Electric



Akihiro Fujita ROC Connector Production Section

(Ichinoseki Plant) Management of Hazardous Substances in Products

The Ichinoseki Plant has long been working to prevent harmful substances contained in its products from escaping in post-processing.

In addition to the six substances previously regulated by the EU RoHS Directive, we introduced new analytical equipment in 2018, allowing us to evaluate the four additional regulated phthalate esters in-house.

Phthalate esters (phthalates) are difficult to determine if they are mixed with plastic, so we had to commission an organization that does analysis to evaluate them, but it took a very long time (about 5 days for the shortest delivery time)

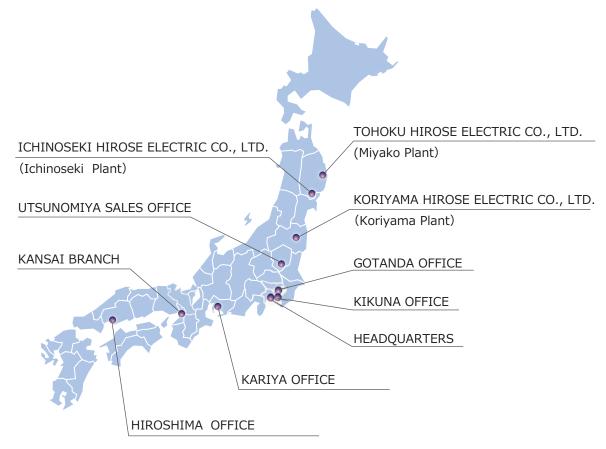


Phthalate Esters Analyzer



Tomohiro Sakai Quality Control Section

Therefore, in order to speed up the evaluation of new materials in new product development and the evaluation of alternatives to conventional products, we have established in-house phthalate ester analysis technology, which enables us to evaluate products in a short period of time.



<Hirose Electric Co., Ltd.>

1) HEADQUARTERS

2-6-3 Nakagawa Chuoh, Tsuzuki-ku, Yokohama 224-8540, Japan

2) GOTANDA OFFICE

5-5-23 Osaki, Shinagawa-ku, Tokyo 141-8587, Japan

3) KIKUNA OFFICE

7-3-13 Kikuna, Kohoku-ku, Yokohama 222-8566, Japan

4) KANSAI BRANCH

Shinosakaiida Bldg. 7F, 1-5-33 Nishimiyahara, Yodogawa-ku, Osaka 532-0004, Japan

5) KARIYA SALES OFFICE

Nomura Bldg. 4F, 2-7-12 Saiwaicho, Kariya, Aichi 448-0025, Japan

6) UTSUNOMIYA SALES OFFICE

Chuoh-Utsunomiya Bldg. 5F, 3-1-1 Higashisyukugo, Utsunomiya, Tochigi 321-0953, Japan

7) HIROSHIMA SALES OFFICE

Momiji-Hiroshima-Hikarimachi Bldg. 4F, 1-12-20 Hikarimachi,Higashi-ku,Hiroshima 732-0052, Japan

<SUBSIDIARIES>

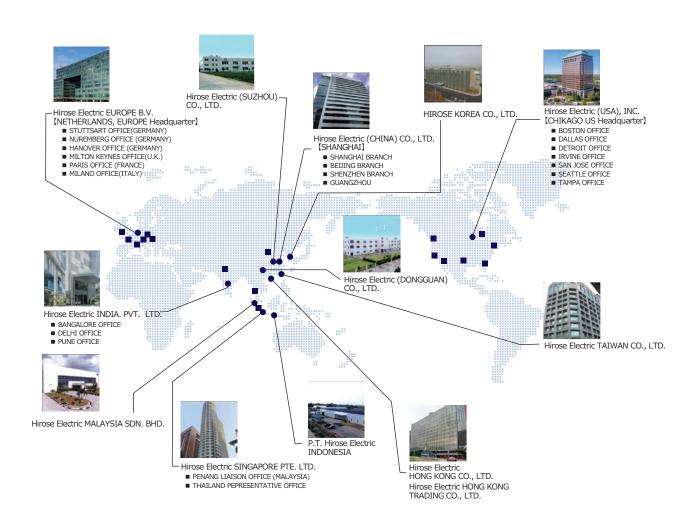
- 1) TOHOKU HIROSE ELECTRIC CO., LTD. Miyako, Iwate prefecture, Japan
- 2) ICHINOSEKI HIROSE ELECTRIC CO., LTD. Ichinoseki, Iwate prefecture, Japan
- 3) KORIYAMA HIROSE ELECTRIC CO., LTD. Koriyama, Fukushima prefecture, Japan

Activities of Overseas Sites to Reduce Environmental Impacts

Since the first signing of an overseas agency agreement in 1967, the Hirose Electric Group has steadily expanded its overseas business operations. In addition to putting in place a sales network that interconnects Japan, Asia, America and Europe, we have established overseas production sites to meet worldwide demand. We intend to press ahead with globalization of our design and development capabilities in order to enhance our international brand and global market share

As we become more globally oriented and active, we are promoting activities to reduce environmental impacts in ways that are appropriate for individual sites. In particular, the production sites that generate relatively large environmental loads have obtained ISO14001 and ISO9001 certifications and established systems for ensuring ongoing improvement in their endeavors to protect the environment, comply with relevant laws and regulations, and prevent contamination.

We have also established a watertight quality control system with regard to hazardous materials contained in products, as part of our efforts to promote product recycling and green procurement. For example, we have installed X-ray fluorescence spectrometers to implement our slogans of "Do not allow entry of, " "Do not mix" and "Do not produce" hazardous materials in our products.



History of social and environmental activities

History of social and environmental activitiesImpacts

	Activities	Certifications and participation in relevant organizations
1970s 1980s 1990s	Ceases cadmium plating Stops the use of asbestos and specified bromine fire retardants Eliminating the use of CFCs in manufacturing processes.	
1999~ 2000		Ichinoseki Hirose Electric Co., Ltd., Koriyama Hirose Electric Co., Ltd. and Tohoku Hirose Electric Co., Ltd. acquires ISO14001 certification
2002		Hirose Electric (including the above domestic plant) expands the certification area and switches to an integrated ISO14001 certification.
2003	Promotes lead-free products	
2004	Stops the use of chlorine organic solvents (dichloromethane) Formulates the Hirose Electric Group Code of Conduct	Hirose Electric Malaysia , P.T.Hirose Electric Indonesia and Hirose Electric (Dongguan, China) acquires ISO14001 certification Participates in Japan Green Procurement Survey Standardization Initiative (JGPSSI)
2005	Complies with the RoHS directive (begins to supply substitute products not containing RoHS prohibited substances) Installs X-ray fluorescence spectrometers in all production sites both in Japan and abroad	Survey Standardization Initiative (3GF 331)
2006	Complies with the RoHS directive (All major products no longer contain RoHS prohibited substances)	
2007	Stops the manufacture of products that do not comply with the RoHS directive (except for some customized products)	Joins the Joint Article Management Promotion Consortium (JAMP)
	Increases the number of X-ray fluorescence spectrometers (at Koriyama and Ichinoseki Plant) Begins preparations to comply with the REACH directive	
	Complies with the EuP directive (directive on eco-design of energy-using products)	
	PFOS survey (compliance with the Stockholm Convention on Persistent Organic Pollutants (POPs Convention))	
	Revises the Hirose Electric Group Code of Conduct	
2008	Formulates the information security policy	
2009	Formulates the business continuity plan (BCP)	Hirose Electric (Suzhou, China) acquires ISO14001 certification
2010	Begins to increase halogen-free products Establishes the CSR Committee	
2011	Promotes reduction in use of resources and CO ₂ emissions	
	Begins preparations to comply with the revised RoHS Begins activities to preserve biodiversity	Participates in the LIN Clobal Compact
2012	Revises the Hirose Electric Group Code of Conduct	Participates in the UN Global Compact Participates in domestic subcommittee, VT62474, of IEC/TC111
2013	Ceases manufacture of products that contain dibutyltin compounds	
2014	Begins preparations for revision of ISO14001	
2015	Begins preparation for the expected revision to the RoHS directive (banning of phthalate-containing products)	
2016	Completes migration to ISO14001:2015	With duping from deposition of the continuous inter-
2017	Responds to the revision to the RoHS directive (banning of phthalate-containing products and guidance on alternative products)	Withdraws from domestic subcommittee, VT62474, of IEC/TC111
2018	Completes responses to the revision to the RoHS directive (Discontinuation manufacture of products containing phthalates and guidance on alternative products)	
2020	Setting environmental targets linked to SDGs	
2022	Ichinoseki Plant Switches to Green Power	

Third-party Opinion



Chiharu Tokoro
Professor,
Faculty of Science and Engineering
Waseda University

I read the Social and Environmental Report 2023 with great interest. Each item felt compactly organized and the report was overall very easy to understand and read. The section regarding CSRs was particularly exceptional: the fact that the section started by clarifying the responsibilities companies should fulfill, and then compiled the targets and results for FY2022 and the targets for FY2023 in a list made it very easy to understand the direction that should be targeted by the Company. I also felt that the addition of "health management promotion" and "BCM maintenance and improvement" as additional goals for CSR activities was particularly important in light of the fact that increasingly greater levels of attention are being paid to employee wellbeing. The section regarding environmental management was also a standout: not only had targets for Scopes 1, 2, and 3 been fulfilled through energy conservation, resource conservation, and the introduction of renewable energy, the clear indication of data that thoroughly denoted the overall environmental load of business activities over the past three years left a very favorable impression.

With that said, I believe the following two points had room for improvement, and I am hopeful that they will be improved in the future.

The first point is that, in light of the fact that the concept of SDGs has spread quite broadly, and corporate activities are now expected as a matter of course to devote significant attention to improvement of wellbeing through the harmonization of the economy, society, and the environment, it is no longer enough for a company to simply adequately fulfill its internal and external corporate responsibilities: rather, it must also indicate the details of its activities in more specific and quantitative ways. Take the carbon neutrality initiative of CO2 emission reduction targets; both the targets and the road to achieving them should be quantitatively indicated for both the medium and the long term. Additionally, since climate change is not the only type of environmental load at issue, the report should more quantitatively indicate how the various forms of environmental load should be balanced as they are reduced, and how those loads will be evaluated.

Second, as the world is beginning to consider various concrete initiatives to achieve the SDGs, such as carbon neutrality and the circular economy, the Company should take a more proactive and strategic approach to achieving SDGs that leverages the Company's strengths. The report discusses the environmental contributions of connectors, a primary product of your company, but despite the fact that this is a fantastic technological treasure trove that is directly related to our ability to realize carbon neutrality and a circular economy, the fact that your report did not specifically explain how the technology will contribute to the environment, and otherwise actively promote the technology's merits felt like a missed opportunity.

Going forward, companies are likely to be expected to engage in more active corporate activities that are harmonious with the economy, society, and the environment, so I hope that your future Social and Environmental Reports will go into those elements more clearly.



Thank you very much for your invaluable feedback on our Social and Environmental Report. On behalf of the members involved in the publication of this document, I would like to express our deepest gratitude. As for CSRs, which you identified as a positive element of this report, we have strengthened our efforts to more clearly provide information on our activities to all of our stakeholders. Going forward we will continue to maintain high aspirations and our pride, keeping in mind the need to maintain Hirose's unique character, "connecting wisdom" and "the principle of 'being small'."

We would also like to thank you for identifying the two areas where we could improve with respect to our activities. The first is the need to present a wider range of activities in a more quantitative manner from the perspective of harmonizing the economy, society, and the environment. At present, our company is working to reduce paper, waste, and electricity, but we recognize that this may no longer be enough now that the concept of SDGs has become so widespread. Since EMS members are participating in activities to promote SDGs, we will improve our approach in this area to make it more comprehensive. The second point identified is that the relationship between environmental contribution initiatives and our main business is not being reported as a strategic activity. Corporate activities cannot continue simply because they make contributions to society, they must also have some relationship to the growth of the company. We deeply regret that we were not able to strategically promote the fact that connector technology is very worthwhile in terms of its contributions to the environment. As many members of our marketing team are involved in SDG activities, we will work with them to improve in this area.

We will use this feedback to help us more actively engage with environmental issues on an ongoing basis. Additionally, we would like to more specifically report on these activities in our next Social and Environmental Report. We would like to express our gratitude for your valuable feedback.

Daisuke Yamakoshi Manager Engineering Administration Department Environment Management Office

Contact Information

Environment Management Office Hirose Electric Co., Ltd.

6-3, Nakagawachuo 2-chome, Tsuzuki-ku, Yokohama, Kanagawa, 224-8540, Japan TEL: +81-45-620-3563; FAX: +81-45-591-3727