

# 2023

## Safety & Environmental Report

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**TAIYO YUDEN**

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Editorial Policy	
<b>Why this Report was Published</b>	The Taiyo Yuden Group strives for perpetual growth while fulfilling its corporate social responsibilities. We regard endeavoring to improve safety and the environment as an important social responsibility, so promote such activities on a global scale. Every fiscal year, we publish a Safety and Environmental Report presenting our goals, our efforts, major results, and other details in a comprehensive yet easy to understand format.
<b>Intended Readership</b>	This publication assumes a target readership consisting not just of customers and clients, but also local communities in the vicinity of our sites, stockholders, investors, people involved in environmental activities or occupational health and safety, NPOs, NGOs, students, group employees, and a wide range of other stakeholders. We also publish this English version to make the contents available to readers overseas.
<b>Referenced Guidelines</b>	This report follows the Environmental Reporting Guidelines (2018 edition) issued by the Japanese Ministry of the Environment. We have listed the core indicators of environmental performance while referring to the GRI standard. Mixing in charts and figures, it outlines the Taiyo Yuden Group's environmental impact describes our management systems, spotlights current issues and reports on specific measures for improving that impact.
<b>Publication on our Website</b>	This report is published on the Taiyo Yuden website, in consideration of effective use of resources, etc. We hope that this report will help you gain a deeper understanding of our environmental, health, and safety activities, and be used as a reference for making an objective judgment of the Group.  Reference : The Taiyo Yuden website <a href="https://www.yuden.co.jp">https://www.yuden.co.jp</a>

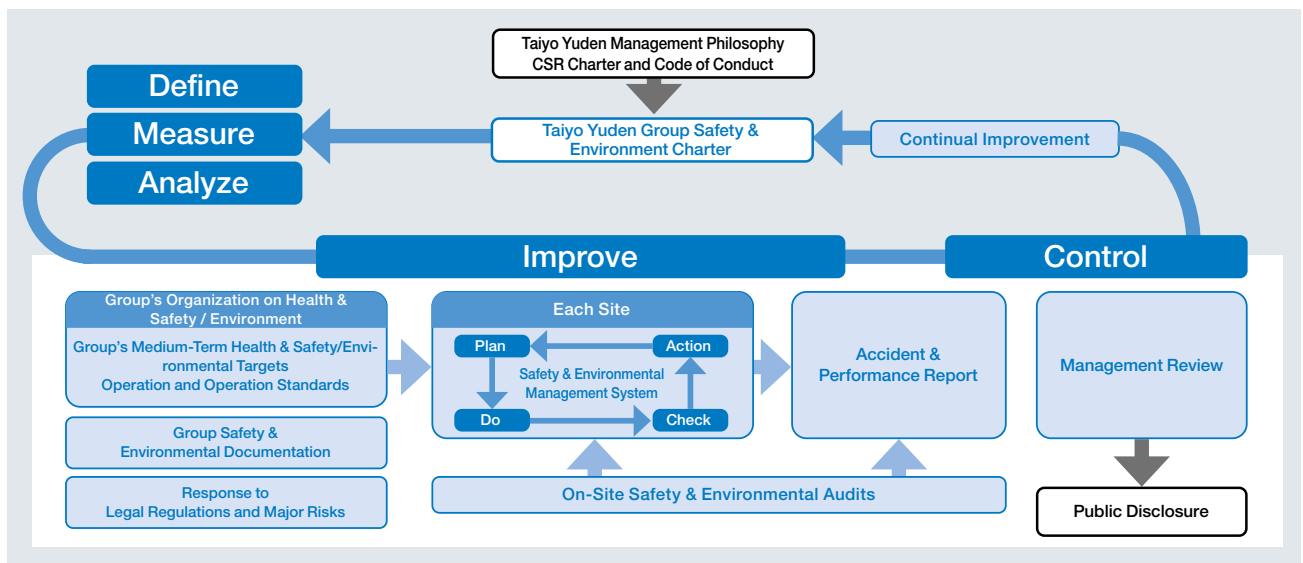
Scope of Disclosure	
<b>Organizations Covered by this Report</b>	This report covers TAIYO YUDEN CO., LTD. and its domestic and overseas subsidiaries. Safety and environment data covers the following Taiyo Yuden Group members: six domestic sites, ten domestic consolidated subsidiaries, and six overseas consolidated subsidiaries.  <b>[Within Japan]</b> <b>TAIYO YUDEN CO., LTD.</b> Takasaki Global Center / Haruna Plant / Nakanojo Plant / Tamamura Plant / Yawatabara Plant / R&D Center / (Hongo Photovoltaic Power Plant)  <b>Consolidated Subsidiaries</b> TAIYO YUDEN CHEMICAL TECHNOLOGY CO., LTD. / TAIYO YUDEN TECHNO SOLUTIONS CO., LTD. / FUKUSHIMA TAIYO YUDEN CO., LTD. / NIIGATA TAIYO YUDEN CO., LTD. / TAIYO YUDEN ENERGY DEVICE CO., LTD. / WAKAYAMA TAIYO YUDEN CO., LTD. / TAIYO YUDEN Mobile Technology Co., Ltd. / Kankyo Assist Co., Ltd. / ELNA CO.,LTD. / ELNA TOHOKU CO.,LTD. (Elna Shirakawa Photovoltaic Power Plant)  <b>[Outside Japan]</b> <b>Consolidated Subsidiaries</b> South Korea: KOREA KYONG NAM TAIYO YUDEN CO., LTD. China: TAIYO YUDEN (GUANGDONG) CO., LTD. Philippines: TAIYO YUDEN (PHILIPPINES), INC. Malaysia: TAIYO YUDEN (SARAWAK) SDN. BHD. Malaysia ELNA-SONIC SDN. BHD. Thailand: TANIN ELNA CO., LTD.
<b>Period Covered by this Report</b>	This Report focuses on our performance from April 1, 2022 to March 31, 2023. (Date of any activities which have taken place outside this period are specified).
<b>Date of Issue</b>	July 2023 (Previous issue: July 2022; Next issue scheduled for July 2024)

# Safety and Environmental Management System 2-1

Our group-wide Safety and Environmental Management System keeps individual activities proceeding toward common goals under a common philosophy.

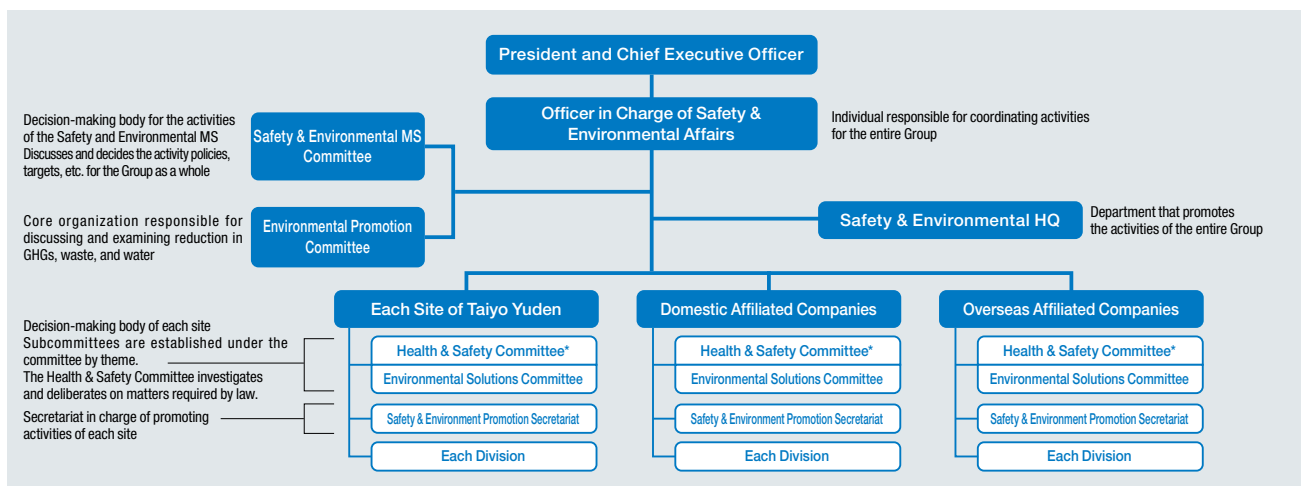
## System Overview

This management system consists of long- and short-cycle activities. In the long-cycle activities, which are designed for the entire group, we are making continuous improvements based on common goals and criteria by checking achievements based on reports about site audits and from sites and by reviewing the management system. For site-specific short-cycle activities, we have an ISO 14001-compliant management system and the Occupational Health and Safety Management System (OHSMS) in place.



## Promotion Structure

The officer in charge of safety and environmental affairs appointed by the President and Chief Executive Officer has overall responsibility for building and managing the promotion structure for Taiyo Yuden's Safety and Environmental Management System. Safety and Environmental MS Committee, the Environmental Promotion Committee debate and decide policies and issues to be addressed. Each manager of sites then converts his/her decisions into actual plans matching the characteristics of each site, and takes charge of publicizing, enforcing and promoting these concrete targets.



\* MS stands for the management system.  
 \* HQ stands for Headquarters.  
 \* The Health and Safety Committee elects company and worker representatives.

# Safety and Environmental Management System 2-2

## Certification Acquisition Status

The Taiyo Yuden Group is ISO 14001 certified for its production sites and development centers. In addition, we address corporate responsibility in the global supply chain, and the group undergoes the Validated Assessment Program (VAP) audits by the Responsible Business Alliance (RBA) on a continuous basis in line with the set plan.

### List of Certifications Acquired

Location	Name of Sites	Acquired ISO14001 Certification	Certification authorities
Japan	TAIYO YUDEN CO., LTD. Takasaki Global Center, Haruna Plant, Nakanojo Plant, Tamamura Plant, Yawatabara Plant, R&D Center	4669324 (as of Oct. 1998) Collectively certified in Japan	BV
	TAIYO YUDEN CHEMICAL TECHNOLOGY CO., LTD.		
	TAIYO YUDEN TECHNO SOLUTIONS CO., LTD.		
	FUKUSHIMA TAIYO YUDEN CO., LTD.		
	NIIGATA TAIYO YUDEN CO., LTD.		
	TAIYO YUDEN ENERGY DEVICE CO., LTD.		
	WAKAYAMA TAIYO YUDEN CO., LTD.		
	TAIYO YUDEN Mobile Technology Co., Ltd. ELNA CO., LTD. ELNA TOHOKU CO., LTD.		
South Korea	KOREA KYONG NAM TAIYO YUDEN CO., LTD.	KR003545 (as of Mar. 2002)	BV
China	TAIYO YUDEN (GUANGDONG) CO., LTD.	CN042006 (as of Dec. 2001)	BV
Philippines	TAIYO YUDEN (PHILIPPINES), INC.	PH13/0920 (as of Nov. 2001)	SGS
Malaysia	TAIYO YUDEN (SARAWAK)SDN. BHD.	EMS00226 (as of Oct. 2002)	SIRIM
	ELNA-SONIC SDN. BHD.	17318-E (as of Dec. 2003)	Kiwa
Thailand	TANIN ELNA CO., LTD.	04 104 990506 (as of Mar. 2004)	TUV

# Safety and Environmental Audits

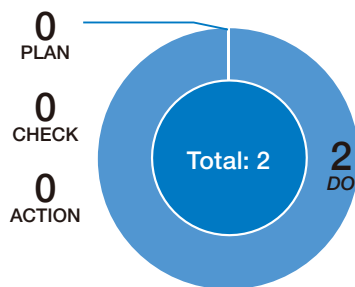
Triple audits evaluate each site's compliance, accident risk management, and the environmental impact situation aimed at producing continuous improvement.

## External Audits

ISO14001 certification audits by certification authorities

Sites with ISO14001 certification underwent the audits required to update or maintain such certification. These audits uncovered 2 nonconformities. The root causes were analyzed and corrective action was promptly taken in response to each issue. The nonconformities were minor issues relating to our management systems, and were not directly linked with environmental pollution or occupational accidents.

### Number of Nonconformity Instances Found with External Audits



### Nonconformity Examples

#### Nonconformity Examples and Details

Some of the labels on the chemical storage facilities were not sufficient.

Some waste containers installed in the process did not have labels.

#### Corrective/Improvement Measures

We clarified the requirements to be confirmed when installing labels, revised the work standard, and educated relevant parties.

We displayed labels on waste containers and conducted training to ensure that employees label waste containers in accordance with the regulations.

The RBA-VAP audits for FY2022 have been completed at seven domestic sites and one overseas sites.

## Internal Site Audits

Audits of site safety and environmental activities at regularly scheduled intervals allow us to compare sites.

Domestic sites: Once every two years  
Overseas sites: Once every three years

In FY2022, we performed site audits to examine the status of compliance with customer requirements, the RBA code of conduct's safety, health, and environmental requirements. In each audit, auditors checked documents and performed on-site audits on matters related to customer requirements/RBA requirements such as risk management against potential hazards, management of required protective equipment, emergency preparedness, and management of chemical substances, waste, and air/water quality. The audits revealed inadequacies in areas such as warning signs, emergency preparedness, and management of chemical substances. Countermeasures were implemented for validated inadequacies found during the site audits, and verified its effectiveness. We aim to improve the level of health, safety, and environmental protection activities for the whole group by globally incorporating societal requirements in a timely manner and sharing the results after benchmarking products from all sites.

### Issue Examples

Some hazard labels in a used fluorescent lamp storage area were not sufficient.

Some eye wash equipment for emergency use was not inspected.

Some chemical subdivision containers were not provided with secondary containment.

## Internal Audits

Audits targeting site departments on observance of safety and environment laws, target achievement, and performance.

Once or twice every year

All sites conducted internal audits of their departments in accordance with their management systems. Priority areas were determined for each site, and 42 nonconformities were uncovered as a result of conducting internal audits (at sites in Japan). Corrective action was completed in all cases without delay, and after a follow-up check, it was reported to the managers that the management system has been effective in complying with the Taiyo Yuden Group's policies and goals.

## Other Audits

### On-site inspection of waste disposal contractors (Sites in Japan)

During FY2022, we inspected and audited 12 companies (4 collection, delivery, and intermediate processing companies; and 8 intermediate processing companies). The travel restrictions due to the COVID-19 pandemic prevented us from auditing some contractors on site. We changed the audit procedures to self-audits for them using documents and photographs (for 7 contractors). The results showed that all inspected operators are processing and disposing of waste appropriately. The operators have also been classified into three ranks from the results of these inspections, with the frequency of future inspections varying depending on the rank of the operator.



# Safety and Environmental Risk Management

Various types of regularly scheduled training are implemented to respond to sudden accidents, disasters, and other risks, with the objectives of early discovery, rapid response, prevention and mitigation. The Taiyo Yuden Group reconfirms appropriate procedures and strives for continuous improvement.

## Firefighting Training



**FUKUSHIMA TAIYO YUDEN**  
We conducted initial firefighting training assuming a nighttime fire. (October 2022)



**TAIYO YUDEN (SARAWAK)**  
We conducted fire extinguisher handling training using a powder fire extinguisher. (May 2022)



**TANIN ELNA**  
We conducted water hose handling training under the guidance of the fire department. (June 2022)

## Emergency Training for Spillage of Chemical Substances



**Tamamura Plant**  
We conducted shielding and collection training for drainage ditch assuming that a chemical substance leaked into the drainage ditch. (August 2022)



**TAIYO YUDEN Mobile Technology**  
We conducted off-site leakage prevention training assuming that untreated wastewater leaked. (January 2023)



**TAIYO YUDEN (GUANGDONG)**  
We conducted collection training assuming that a chemical substance leaked during transportation. (December 2022)

## Evacuation and Medical Emergency Training



**Takasaki Global Center**  
We conducted transportation training assuming that injuries occurred during a fire. (October 2022)



**Yawatabara Plant/TAIYO YUDEN TECHNO SOLUTIONS**  
We conducted evacuation training assuming that a fire. (November 2022)



**KOREA KYONG NAM TAIYO YUDEN**  
Staff learned the measures to take if a person's airway becomes obstructed and cardiopulmonary resuscitation. (December 2022)

## Removing Soil Contamination

We conducted a survey based on the Soil Contamination Countermeasures Act at the R&D Center and confirmed that the results were within the standard values. The Takasaki Global Center and Tamamura Plant conduct surveys based on the Soil Contamination Countermeasures Act and systematically implement countermeasures.

## Environmental Accidents

No accidents that could affect the surrounding environment have occurred.

## Measures for Prevention of Fire and Explosion

We have established our own voluntary standard on the three elements of combustion (combustibles, oxygen, and heat sources) as prevention measures for fire and explosion, and we implement measures and conduct management accordingly. In addition, we conduct training on firefighting/evacuation every year in preparation for the breakout of a fire. No fire or explosion has occurred.

# Employee Enrichment through Safety and Environmental Training

We provide a variety of training programs covering both general and specialized knowledge to promote employees' awareness of preventing occupational injury and illness, as well as active participation in environmental conservation.

## Training Structure

Name	Category	Purpose	Main Subjects	
General Training	Awareness	Training for new recruits	Raising new recruits' awareness of occupational health and safety and environmental preservation, and ensuring they understand environmental problems pertinent to companies	General theory of Safety, Health, and Environment/ Status of Safety, Health, and Environment at the Taiyo Yuden Group
		General training	Deepening all employees' understanding of the Taiyo Yuden Group Safety, Health, and Environment Charter and Course of Action, and teaching them the skills to act accordingly	Management system (including the Safety, Health, and Environment Charter) / Mental health
		Workplace training	Understanding potential hazards and environmental impact with regard to divisional health and safety/environmental activities and work	Division activities / Matters for compliance in work
Health & Safety Training	Abilities	Training for managers, instructors and supervisors	Deepening understanding of the role of the duty for employee safety required by legal regulations and teaching foremen skills to instruct their subordinates regarding health and safety.	Role of the General Manager of Health and Safety / Role of management / Role of foreman / Chemical substance management / Hazardous material management
		Training for specialists	Teaching of specialized skills to operators of forklifts, cranes, and other heavy equipment, as well as managers of processes that handle organic solvents and the like, and employees involved in these tasks	Workplace restricted duties / Training for specific tasks / Prevention of static electricity accidents
		Training for risk assessors	Teaching the skills to recognize risks and creating a safe and sanitary workplace	Risk assessment / Health and Safety targets / Cases of Health and Safety accidents and their countermeasures
Environmental Training		Training for specialists	Teaching special skills to managers and relevant employees involved with equipment and facilities for which a legal notification is required	Management to prevent deterioration of water quality / Management to prevent air pollution / Waste management
		Specialized training	Training skills to integrate business activities with environmental activities in order to balance an improvement in our environmental impact with improved resource productivity	Chemical substances and their environmental impact / Environmental targets / Cases of environmental improvements / Causes of environmental accidents and their countermeasures

## Training Examples

### General Training

#### Holding events related to health and safety

We hold various events related to health and safety at all sites, providing employees with opportunities to raise their awareness and improve their skills. For example, we conducted exercise seminars aimed at preventing and improving stiff shoulders and lower back pain, and driving aptitude assessment using a driving simulator.



Exercise seminar



Driving aptitude assessment

### Occupational Health and Safety Training

#### Aerial work safety measures training

In order to prevent falls during aerial work, we conducted training for aerial workers on the correct way to wear and inspect a full harness safety belt.



Aerial work safety measures training

#### Training on forklift driving safety

We invited an external instructor to provide practical guidance on forklift operation and inspection to improve skills.



Training on forklift driving safety

### Environmental Training

#### Fluorocarbon management training

We conducted training for staff that handle fluorocarbons on equipment maintenance and inspection, and on how to collect fluorocarbons in order to ensure that equipment that uses a fluorocarbon as a refrigerant is properly managed.



Fluorocarbon management training

#### Training for wastewater treatment facility managers

We conducted training for wastewater treatment facility managers, on the control system of wastewater treatment facilities and emergency response procedures including on-site training.



Training for wastewater treatment facility managers

# Environmental Accounting

The Taiyo Yuden Group promotes an effective environmental management by adopting environmental accounting to make clear what resources our domestic sites apply to their environmental preservation activities.

## Environment Maintenance Costs

Type of cost	Expenses (million yen)	Investment (million yen)	Main items	
<b>Business unit area costs</b>	<b>2,117</b>	<b>809</b>		
<b>Breakdown</b>	<b>Pollution prevention</b>	<b>861</b>	<b>379</b>	Monitoring and measurement of atmosphere, water quality, noise, vibration, and soil; preparations for and responses to emergencies
	<b>Conservation of global environment</b>	<b>64</b>	<b>124</b>	Ozone depleting substance emission reduction, water quality improvement, exhaust gas purification, resource conservation
	<b>Cost for global warming prevention</b>	<b>729</b>	<b>306</b>	Greenhouse gas emission reduction, energy conservation
	<b>Resource recycling costs</b>	<b>463</b>	<b>0</b>	Waste management, and outsourcing of waste treatment; reduction of waste; recycling
<b>Upstream / downstream business activities</b>	<b>10</b>	<b>-</b>	Activities to improve the environmental impact of products, green procurement	
<b>Management activity costs</b>	<b>602</b>	<b>-</b>	Building and operating an EMS; surveillance audits; environmental training; costs for operating secretariat; department operations costs	
<b>R&amp;D</b>	<b>260</b>	<b>-</b>	R&D costs to improve the environmental impact of product processes etc.	
<b>Social activities</b>	<b>19</b>	<b>-</b>	Donations to environmental groups; participation in communities' global environmental preservation events	
<b>Response to environmental damage</b>	<b>1</b>	<b>-</b>		
<b>Total</b>	<b>3,009</b>	<b>809</b>		

## Environment Maintenance Effectiveness

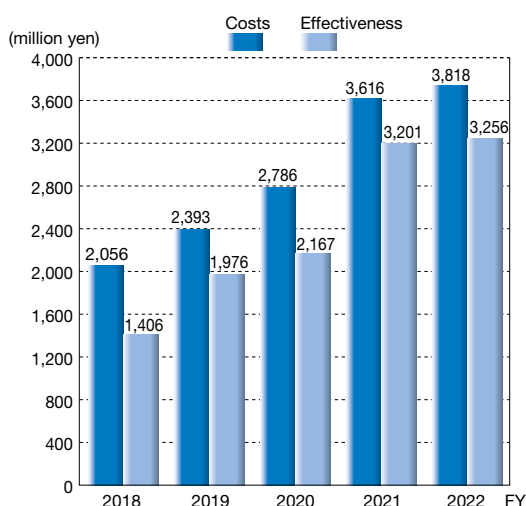
We calculate the economic effects only for those activities clearly improving our environmental impact.

Type of effectiveness	Economic effect (million yen)	Effects on amounts*	Main items
<b>Energy saving</b>	<b>318</b>	<b>4,992kL</b>	Improvement in productivity; improvement in energy management method
<b>Conservation of resources</b>	<b>2</b>	<b>819t</b>	Reduction in amount of chemical substances used through improvement in process yield etc.
<b>Reduction in waste, and recycling</b>	<b>2,936</b>	<b>3,953t</b>	Improvement in recycling rate
<b>Total</b>	<b>3,256</b>		

\*"Effects on amounts" indicate the calculated difference with the case where no activities are conducted to improve our environmental impact.

\* No penalties related to the environment have been paid.

## Trends in Environmental Accounting



### Environmental Accounting Standards

1. The sum total of the costs for complying with environment-related laws and regulations, the costs incurred purely for the purpose of improving our environmental impact, and the EMS operation costs are calculated. However, in cases where environmental preservation costs partially overlap the costs for other purposes, the latter shall be deducted and the balance shall be applied.
2. Depreciation costs shall be the current fiscal year's depreciation expenses at the environmental conservation facilities.
3. If a clear-cut distinction cannot be made between the environmental cost and that for other purposes, if 50% or more of the content is environment-related, the full amount can be counted as the environmental preservation cost.
4. The cost-effectiveness by saving energy is yielded from the reduction of either the rated dissipation or the operating time or both.
5. The cost-effectiveness by reducing and recycling waste is calculated as follows:

**Lowered costs through reducing waste and recycling =**  
**[Unit cost of waste treatment in the prior fiscal year (JP¥/ton) – Unit cost of waste treatment in this fiscal year (JP¥/ton)] × Amount of waste generated (tons)**

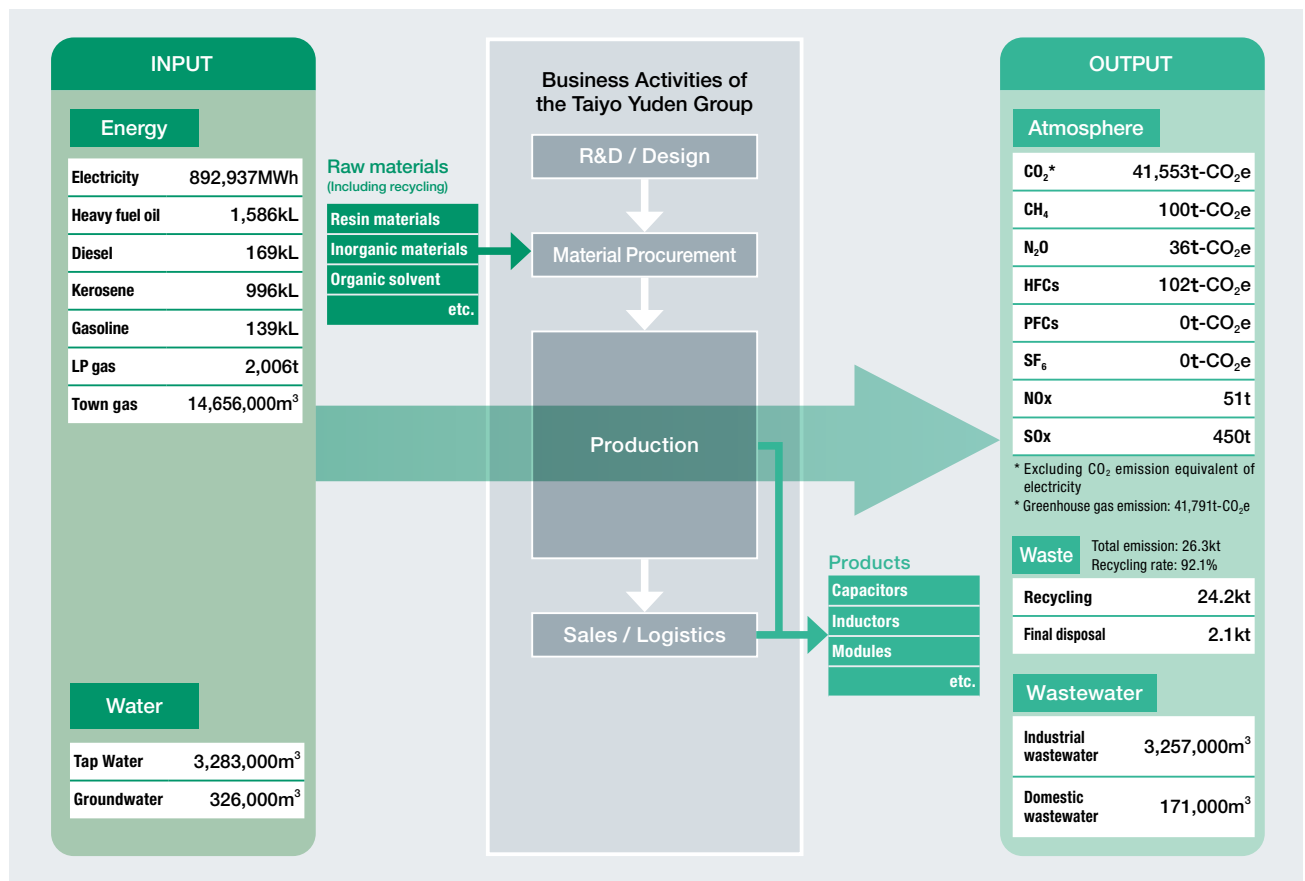


# Determining Environmental Impact of Corporate Activities

Detailed understanding and analysis of the environmental impact of corporate activities is a prerequisite to devising various measures to improve this.

## Material Balance

The Taiyo Yuden Group primarily produces electronic components for delivery to our customers, set manufacturers. These electronic components have a life cycle with only a small environmental impact during use. The bulk is during production, with the main environmental impact arising from energy and water consumption, emissions (including CO<sub>2</sub>) in the course of manufacture, waste and wastewater. The Taiyo Yuden Group is striving to improve our environmental impact by first identifying and analyzing in detail this environmental impact and then taking such measures as minimizing the resources applied and conserving other energy and resources by improving production processes. The Taiyo Yuden Group products are used in electrical and electronic equipment, automobiles, and other products which become waste once their product lifetime is over. We are therefore also striving to remove hazardous substances from these products.



### Reasons for Changes from FY2021

In FY2022, we decreased our use of heavy oil and increased our use of LP gas as a result of infrastructure equipment upgrades.

# Achievement Levels for Medium-Term Environmental Targets

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We set medium-term environmental targets for the Group, and all sites pursue environment impact improvement.

## Taiyo Yuden Group Environmental Targets and Results

“Strengthening responses to climate change” and “efficiently using resources and helping to build a recycling-based society” have been set as the materialities of environmental efforts. Especially for climate change, a global issue, we have formulated targets to achieve carbon neutrality by 2050. To achieve these targets, we will be diligent at saving, generating, and re-using the energy that drives our manufacturing based on the principle of decarbonization.

To reduce the absolute value of GHG emissions, we set target values in accordance with the SBTs (Science-Based Targets).

Medium-Term Environmental Targets			Performance
Prevention of global warming	Global	GHG absolute emissions Reduction by 42% in FY2030 * compared to FY2020	Reduction of 18.3% in FY2022
Biodiversity conservation Effective use of resources by reducing consumption	Global	Intensity waste generation (Production output) Reduction by 10% in FY2025 * compared to FY2020	Increase of 12.6% in FY2022
		Intensity water use (Production output) Reduction by 10% in FY2025 * compared to FY2020	Reduction of 4.5% in FY2022
Biodiversity conservation Cyclic use of resources by reuse and recycling	Japan	Waste final disposal volume rate 0.1% annually	0.5% in FY2022
	Outside Japan	Waste final disposal volume rate 12% annually	14% in FY2022
Biodiversity conservation Nature conservation activities in local areas	Global	Continue nature conservation activities in local areas (such as forests)	Continued afforestation, forest maintenance, extermination of non-native species, etc.
Environmental risk management	Global	Compliance with applicable environmental laws and regulations	Complied with all applicable laws and regulations
		Maintain zero accidents that affect the ecosystem and carry out ongoing training	Maintained zero accidents that affect the ecosystem and conducted periodic emergency training
Contribution through environmentally friendly products	Global	Development of smart products	Continued development of smart products, which reduce environmental impact through downsizing, etc.
		Regulatory compliance for chemicals contained in products (RoHS, ELV, REACH)	Complied with regulations for chemicals contained in products

\* Intensity is based on production output.

# Curbing Global Warming

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There are three categories for greenhouse gases (GHG) emitted during the course of business activities: Direct emissions from use of energy (SCOPE 1), Indirect emissions from energy use (SCOPE 2) and Indirect emissions other than from energy use (SCOPE 3). GHG emissions cannot be easily measured, so we concentrate on energy use and reducing energy consumption.

## Results of Efforts to Reduce Greenhouse Gases and Energy Consumption

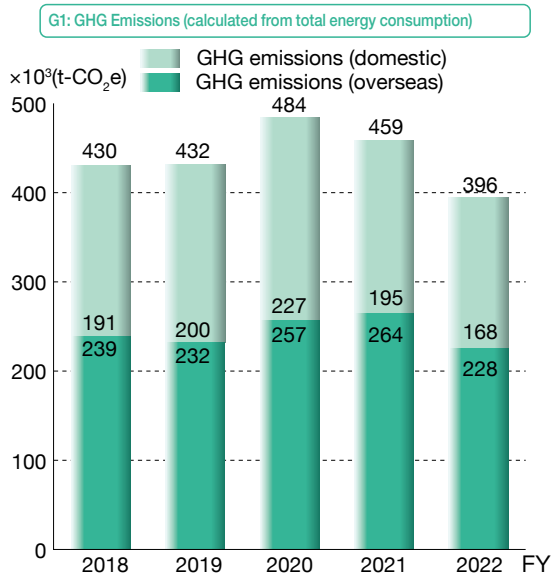
In FY2022, the amount of GHGs emitted by the entire group decreased by 63,000 t-CO<sub>2</sub>e compared to FY2021. Specifically, the domestic sites reduced their emissions from 195,000 t-CO<sub>2</sub>e in FY2021 to 168,000 t-CO<sub>2</sub>e, and overseas sites reduced theirs from 264,000 t-CO<sub>2</sub>e in FY2021 to 228,000 t-CO<sub>2</sub>e (see G1).

The amount of energy used by the entire group was 252,000 kL (crude oil equivalent).

We will continue to review production processes, with a focus on core products, to further improve production efficiency and reduce energy use.

Furthermore, we have been promoting the incorporation of renewable energy in our efforts to combat global warming. The renewable energy used in FY2022 was 123,212 MWh.

\* The following conversion factors were used for these calculations. [Electric power] Japan: factors released by the Ministry of the Environment; overseas: factors provided by the International Energy Agency (IEA); [Fuel] Japan/overseas: factors released by the GHG Protocol.



	GHG Emissions (x10 <sup>3</sup> t-CO <sub>2</sub> e)
SCOPE1	42
SCOPE2	354

## Efforts on Indirect Emissions Other than from Energy Use (SCOPE 3)

In recent years, there has been an increasing demand from our stakeholders to disclose information on SCOPE3 emissions, in addition to information on SCOPE1 and SCOPE2 emissions. In order to respond to such a demand, we are striving to keep track of our SCOPE3 emissions.

Category	emissions	Remarks
category1 Purchased Goods and Services	482,072 t-CO <sub>2</sub> e	
category2 Capital goods	122,350 t-CO <sub>2</sub> e	
category3 Fuel- and energyrelated activities (not included in scope 1 or scope 2)	70,983 t-CO <sub>2</sub> e	
category4 Upstream transportation and distribution	37,239 t-CO <sub>2</sub> e	
category5 Waste generated in operations	12,379 t-CO <sub>2</sub> e	
category6 Business travel	792 t-CO <sub>2</sub> e	domestic sites
category7 Employee commuting	8,833 t-CO <sub>2</sub> e	domestic sites
category8 Upstream leased assets	0 t-CO <sub>2</sub> e	Included in SCOPE2

Category	emissions	Remarks
category9 Transportation and delivery (downstream)	Not applicable	
category10 Processing of sold products	8 t-CO <sub>2</sub> e	
category11 Use of sold products	Not applicable	
category12 End-of-life treatment of sold products	121 t-CO <sub>2</sub> e	
category13 Leased assets (downstream)	Not applicable	
category14 Franchise	Not applicable	
category15 Investments	Not applicable	
Total	734,777 t-CO <sub>2</sub> e	

## Efforts to Address Climate Change 4-1

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In response to the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD), we are proceeding with a scenario analysis of the risks and opportunities that climate change issues pose to society and business, and consider business strategies based on the results.

### Efforts to Address TCFD

As the impact on society of climate-related physical risks, such as frequent storms and floods is increasing, the role of companies in achieving a carbon-free society is becoming more important. We consider that strengthening the implementation of climate adaptation measures is one of the most important business challenges.

To tackle the global issue of climate change, we thoroughly promote planning and working on energy efficiency & conservation, energy creation, and the utilization of renewable energy through manufacturing based on the decarbonization concept to achieve carbon neutrality by 2050. We have set a reduction target of absolute GHG emissions based on the SBT. We aim to contribute to the achievement of the international goals set forth in the SDGs and the Paris Agreement through collaboration with a wide range of stakeholders. We also recognize the importance of climate-related financial information disclosure, endorse the TCFD, and are expanding information disclosure in line with the TCFD.

### Governance

We recognize climate change as one of the important management issues and aim to promote activities for sustainability issues through business activities throughout the company, and since FY2021, we have held the Sustainability Committee (four times a year) chaired by the President and Chief Executive Officer.

The Committee deliberates on setting materialities sharing of issues, and measures to resolve issues, and reports to the Board of Directors.

The Environmental Promotion Committee, a sub-committee of the Sustainability Committee sets quantitative targets for climate change and monitors the status of achievement.

If the targets are not achieved or may not be achieved, the Environmental Promotion Committee needs to investigate the cause and take corrective measures for improvement. The deliberations and decisions by the Environmental Promotion Committee are reported to the Sustainability Committee, which is its superior committee.

### Strategy

#### 1 Identification of risks and opportunities

In order to identify climate-related risks and opportunities that affect our business, we used climate scenarios such as the IEA and the IPCC to identify them, qualitatively evaluated their characteristics, and conducted scenario analysis.

Division	Assumed event	Climate-related risks and opportunities	Degree of financial impact (Profit basis)	Division	Assumed event	Climate-related risks and opportunities	Degree of financial impact (Profit basis)
Transition risks	Introducing and raising carbon prices	Increasing of operation costs due to introducing of carbon prices	Major	Opportunities	Acceleration of EV shift	Increasing in sales of electronic components for the electric vehicle market due to the global shift to EVs	Major
	Strengthening environment-related regulations	Increasing of costs for measures due to strengthening of GHG emission reduction targets and energy efficiency improvement targets	Medium		Increased demand for high-efficiency products	Increased sales of electronic components for the industrial equipment market due to increased demand for power supplies with energy management functions to reduce GHG emissions	Major
		Increasing of costs due to compliance with domestic and overseas environmental regulations	Medium		Increased production efficiency	Secure profits by promoting low-carbon production activities including the development of energy-saving measures and the introduction of renewable energy	Major
Physical risks	Intensifying extreme wind and flood damages	Intensified wind and flood damages to sites	Minor - Medium		Promotion of climate change-related measures	Enhance customer trust by advancing climate change-related measures	-

Degree of financial impact: Minor=JPY 1.5 billion or less; Medium=JPY 1.5 to 6 billion; Major=JPY 6 billion or more

# Efforts to Address Climate Change 4-2

## 2 Setting the scenario analysis theme

We carried out a scenario analysis on the following themes evaluated as “highly important risks and opportunities” based on the degree of impact on our business, the relevance to our business strategies, and the degree of stakeholder interest.

### Transition risks / Opportunities

Target business / Analysis theme

Common to all businesses	Financial impact of introducing carbon prices on operating costs
--------------------------	--

External information referred to in the analysis

	1.5°C scenario	4°C scenario
Key reference scenarios <sup>*1</sup>	NZE (Net Zero Emissions by 2050 Scenario)	STEPS (Stated Policies Scenario)
View of the world	<ul style="list-style-type: none"> <li>● A world of rapid increases in clean energy policies and investment, where developed countries achieve their net-zero pledges ahead of other countries, and the world average temperature rise around 2100 is below 1.5°C compared to before the industrial revolution.</li> </ul>	<ul style="list-style-type: none"> <li>● A world where policies and implementation measures that affect the energy market adopted by countries as of the end of September 2022, as well as related policy proposals, are partially implemented, and the average global temperature rise around 2100 is about 2.6°C to 4° C compared to before the industrial revolution.</li> </ul>
	<ul style="list-style-type: none"> <li>● As each country shifts to renewable energy, prices of fossil resources tend to decrease.</li> </ul>	<ul style="list-style-type: none"> <li>● As each country depends on fossil resources, prices of fossil resources tends to rise.</li> </ul>

\*1 The analysis is based on the scenarios published in the World Energy Outlook 2022, the annual report by the IEA (International Energy Agency).

### Physical risks

Target business / Analysis theme

Common to all businesses	Impact of intensified extreme weather disasters on sites (floods and storm surges)
--------------------------	--

This data covers the 18 sites in Japan and 8 sites outside Japan. We assessed physical impacts at the baseline (current), and at the middle and end of this century.

External information referred to in the analysis

Information provider	Reference
Ministry of Land, Infrastructure, Transport and Tourism	Flood simulation search by location (Flood navigation), overlapping hazard map
WRI (World Resources Institute)	Aqueduct Floods Hazard Maps, Inundation depth in meters for coastal and riverine floods
IPCC (Intergovernmental Panel on Climate Change) <sup>*2,3</sup>	AR6 Climate Change 2021: The Physical Science Basis, Working Group 1 Interactive Atlas
Others	Yukiko Hirabayashi et al. (2013). Global flood risk under climate change. Nature Climate Change, 3(9), 816-821.

\*2 We assessed physical impacts based on the climate scenarios SSP1-2.6 and SSP5-8.5 used in the IPCC AR6.

\*3 The SSP1-2.6 and SSP5-8.5 scenarios correspond to the RCP2.6 and RCP8.5 climate scenarios used in AR5.



# Efforts to Address Climate Change 4-3

## 3 Scenario analysis results

### Transition risks: Financial impact of introducing carbon prices on operating costs

Risk	Impact of carbon prices on operating costs in 2030 and 2050																								
Our climate scenario analysis prerequisites	Assuming that a carbon price of 18,340 yen will be imposed on each ton of GHG emissions in 2030 and 32,750 yen in 2050, we forecast the effects on carbon prices. Carbon prices are set based on (IEA World Energy Outlook 2022 (Net Zero Emissions by 2050 Scenario, Stated Policies Scenario).																								
Analysis result	<p>We forecast future GHG emissions trends and the financial impact on operating costs if carbon prices were introduced. Under the 1.5°C scenario, if GHG emissions reduction measures were implemented, costs would have been reduced by about 900 million yen as of 2030 and by 2.4 billion yen as of 2050 compared with the scenario where no measures are taken (see G1). In addition, although we are promoting the introduction of renewable energy, even if the power is 100% renewable energy, the remaining SCOPE1 emissions in the 1.5°C scenario will be 260,000 t-CO<sub>2</sub> (see G2), and the impact of the carbon price will be about 7.4 billion yen.</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid #00a651; padding: 5px; width: 45%;"> <p><b>G1 : Carbon price effect</b></p> <table border="1"> <caption>G1: Carbon price effect (million yen)</caption> <thead> <tr> <th>Year</th> <th>4°C scenario</th> <th>1.5°C scenario</th> <th>1.5°C scenario (after emission reduction measures)</th> </tr> </thead> <tbody> <tr> <td>2030</td> <td>~9,000</td> <td>~5,000</td> <td>~4,000</td> </tr> <tr> <td>2050</td> <td>~23,000</td> <td>~10,000</td> <td>~7,000</td> </tr> </tbody> </table> </div> <div style="border: 1px solid #00a651; padding: 5px; width: 45%;"> <p><b>G2 : GHG emissions trends</b></p> <table border="1"> <caption>G2: GHG emissions trends (x10<sup>6</sup> t-CO<sub>2</sub>e)</caption> <thead> <tr> <th>Year</th> <th>4°C scenario</th> <th>1.5°C scenario</th> <th>1.5°C scenario (after emission reduction measures)</th> </tr> </thead> <tbody> <tr> <td>2030</td> <td>~1,300</td> <td>~400</td> <td>~300</td> </tr> <tr> <td>2050</td> <td>~3,100</td> <td>~400</td> <td>~300</td> </tr> </tbody> </table> </div> </div>	Year	4°C scenario	1.5°C scenario	1.5°C scenario (after emission reduction measures)	2030	~9,000	~5,000	~4,000	2050	~23,000	~10,000	~7,000	Year	4°C scenario	1.5°C scenario	1.5°C scenario (after emission reduction measures)	2030	~1,300	~400	~300	2050	~3,100	~400	~300
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2030	~1,300	~400	~300																						
2050	~3,100	~400	~300																						
Strategy	In order to reduce energy consumption, we believe that it is necessary to improve production efficiency by reviewing our production processes, focusing on our core products, along with promoting the introduction of renewable energy. In addition, we plan to consider measures to reduce the remaining Scope 1 emissions toward the achievement of carbon neutrality in 2050.																								

### Physical risks: Impact of intensified extreme weather disasters on sites (Floods and Storm Surges)

Risk	Impact of increased weather disasters associated with climate change on our manufacturing sites at the middle and end of this century																																																								
Our climate scenario analysis prerequisites	We assessed 26 sites inside and outside Japan based on public hazard information and various information obtained for climate change impact assessment.																																																								
Analysis result	<p>We assessed the potential for manufacturing site damage due to intensifying extreme floods and storm surges, and screened sites that require priority investigation of the impact of physical risks. We independently graded baseline (current) flood and storm surge risks and assessed the changes in the current to mid-century or end-of-century grades based on the RCP2.6 and RCP8.5 climate scenarios. Regarding floodings, there is one site in Japan that seemed to be at high risk at present, but there was no change in the grade in the future. On the other hand, there were no sites overseas that were currently considered to be at high risk, but for one site, the risk was assessed to increase compared to the baseline by 2050 and 2085. Regarding storm surges, there are currently no sites that are considered to be high risk, and there was no change in the grade in the future.</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th rowspan="3">Flood risk</th> <th colspan="5">Number of Sites Rated as Major Hazard (Grade A)</th> <th rowspan="3">Storm Surges risk</th> <th colspan="5">Number of Sites Rated as Major Hazard (Grade A)</th> </tr> <tr> <th>2005</th> <th colspan="2">2050</th> <th colspan="2">2085</th> <th>2010</th> <th colspan="2">2050</th> <th colspan="2">2090</th> </tr> <tr> <th>-</th> <th>RCP2.6</th> <th>RCP8.5</th> <th>RCP2.6</th> <th>RCP8.5</th> <th>-</th> <th>RCP2.6</th> <th>RCP8.5</th> <th>RCP2.6</th> <th>RCP8.5</th> </tr> </thead> <tbody> <tr> <td>Japan (18 sites)</td> <td>1 site</td> <td>1 site</td> <td>1 site</td> <td>1 site</td> <td>1 site</td> <td>Japan (18 sites)</td> <td>0 site</td> <td>0 site</td> <td>0 site</td> <td>0 site</td> <td>0 site</td> </tr> <tr> <td>Outside Japan (8 sites)</td> <td>0 site</td> <td>1 site</td> <td>1 site</td> <td>1 site</td> <td>1 site</td> <td>Outside Japan (8 sites)</td> <td>0 site</td> <td>0 site</td> <td>0 site</td> <td>0 site</td> <td>0 site</td> </tr> </tbody> </table>	Flood risk	Number of Sites Rated as Major Hazard (Grade A)					Storm Surges risk	Number of Sites Rated as Major Hazard (Grade A)					2005	2050		2085		2010	2050		2090		-	RCP2.6	RCP8.5	RCP2.6	RCP8.5	-	RCP2.6	RCP8.5	RCP2.6	RCP8.5	Japan (18 sites)	1 site	1 site	1 site	1 site	1 site	Japan (18 sites)	0 site	0 site	0 site	0 site	0 site	Outside Japan (8 sites)	0 site	1 site	1 site	1 site	1 site	Outside Japan (8 sites)	0 site	0 site	0 site	0 site	0 site
Flood risk	Number of Sites Rated as Major Hazard (Grade A)					Storm Surges risk	Number of Sites Rated as Major Hazard (Grade A)																																																		
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Japan (18 sites)	1 site	1 site	1 site	1 site	1 site	Japan (18 sites)	0 site	0 site	0 site	0 site	0 site																																														
Outside Japan (8 sites)	0 site	1 site	1 site	1 site	1 site	Outside Japan (8 sites)	0 site	0 site	0 site	0 site	0 site																																														
Strategy	In the future, we will investigate in detail the sites that have been assessed as being at high risk based on the results of this analysis and take preventive measures such as installing equipment to minimize flooding on site and ensuring the installation height of the power supply system if deemed necessary. In addition, we will establish a stable product supply system based on our Business Continuity Plan (BCP), which will enable us to resume business activities as soon as possible in the event of a business continuity problem such as a shutdown.																																																								

## Efforts to Address Climate Change 4-4

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## Risk management

Regarding climate-related risks, we assign Executive Vice President who is a responsible director of safety and environment, reports and deliberates these issues at the the Internal Control Committee through the Compliance Subcommittee and the Risk Management Subcommittee in accordance with the group management system.

We refer to social analysis, interviews with customers and suppliers, and ESG engagement with investors as tools for identifying climate-related risks. The impact of these risks has been assessed in relation to their financial impact and management strategy.

## Indicators and targets

### GHG emissions

The Taiyo Yuden Group has set targets for GHG emissions; a 42% reduction by FY2030 compared to FY2020 to achieve carbon neutrality by 2050. In order to achieve these targets, we will steadily promote efforts to reduce GHG emissions through measures such as the use of renewable energy and the improvement of production efficiency. As part of our measures, we will convert 100% of the electricity used at our R&D center to renewable energy in FY2024.

Target and Result regarding GHG emissions

	FY2020 Achievement	FY2022 Achievement	FY2030 Targets
GHG emissions* [10 <sup>3</sup> t-CO <sub>2</sub> e]	484 (Reference year)	396 (Compared to FY2020▲ 18.3%)	281 (Compared to FY2020▲ 42%)

\*SCOPE1+SCOPE2

Please refer to page 10 for changes in GHG emissions.

## External Assessment of Climate Change Information Disclosure

In 2022, for the first time, the Taiyo Yuden Group was selected by CDP \*, an international environmental non-profit organization, to be included in the highest rank A List as a company with excellent climate change measures, strategies, and information disclosure.

\* CDP is a non-governmental organization (NGO) managed by a British charitable organization, established in 2000. It operates a global information disclosure system for investors, companies, countries, regions, and cities to manage environmental impacts including reducing their own greenhouse gas emissions, protecting water resources, and protecting forests.



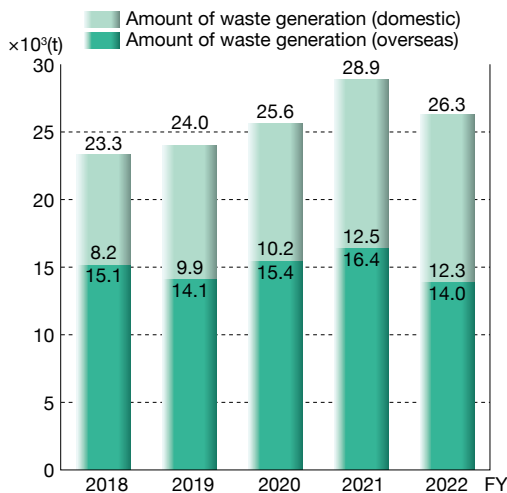
# Reducing Waste / Preserving Water Resources 2-1

We strive to reduce environmental effect on biodiversity while coexisting with nature, and we use the 3Rs (reduce, reuse, recycle) to reduce waste and make effective use of water resources.

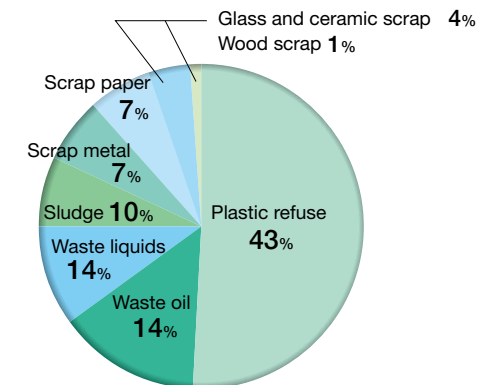
## Results of Reducing Waste

The amount of waste generated in FY2022 by the entire group decreased to 26,300 tons from 28,900 tons in FY2021(see G1). The waste (including valuables) mainly consists of waste plastic, waste oil, and sludge (see G2). The domestic final disposal volume increased to 56 tons from 54 tons in FY2021. The waste recycling rate reached 99.5% (see G3). The overseas final disposal volume decreased to 2,000 tons from 2,300 tons in FY2021 (see G4). We will continue working to reduce waste volumes, boost in-house recycling rates, and recycle waste into resources at our overseas sites.

G1: Amount of Waste Generation

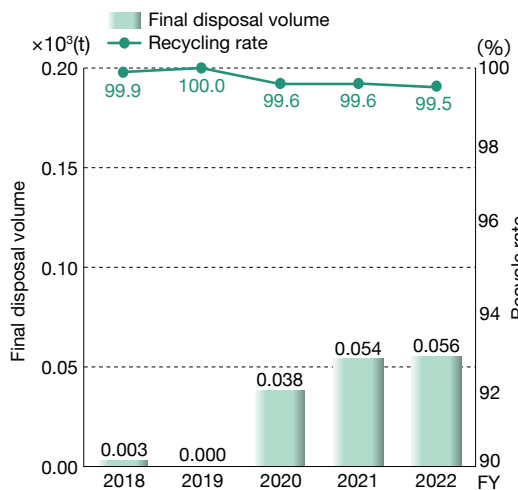


G2: Breakdown of Waste

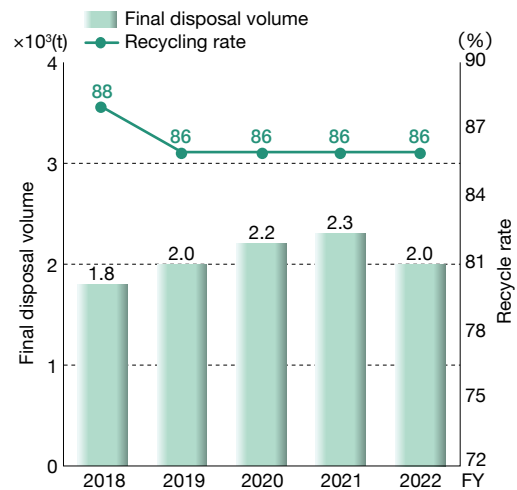


Definition of waste: general waste, industrial waste, and items having resale value.

G3: Domestic Final Disposal Volumes and Recycling Rates



G4: Overseas Final Disposal Volumes and Recycling Rates



# Reducing Waste / Preserving Water Resources 2-2

## Resource Recycling Efforts

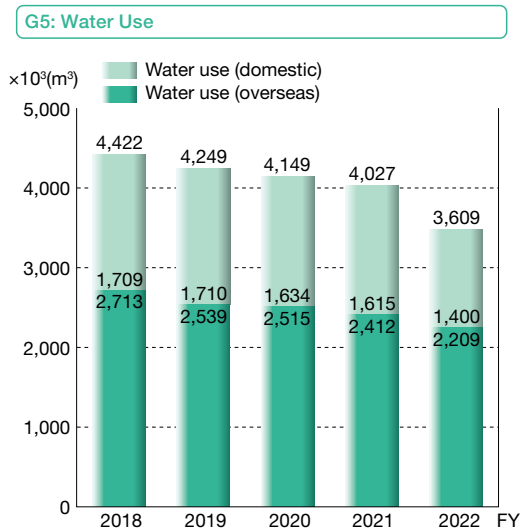
92% of the waste generated through our business activities is recycled and reused as resources in society. However, we are also promoting efforts to reuse waste for the Taiyo Yuden Group's own business activities. For solvent A, which is the most frequently used solvent in our business, 42% of the amount used is recycled waste solvent. In addition, for reels that are used in packaging electronic parts, strict quality checks are performed and 17% of all the reels are recycled reels.

## Results of Water Resource Efforts

The entire Group's water usage fell from 4,027,000 m<sup>3</sup> in FY2021 to 3,609,000 m<sup>3</sup> in FY2022. Specifically, sites in Japan reduced their usage to 1,400,000 m<sup>3</sup> from 1,615,000 m<sup>3</sup> in FY2021, while sites outside Japan reduced theirs to 2,412,000 m<sup>3</sup> from 2,209,000 m<sup>3</sup> in FY2021 (see G5).

The quantity of water intake was 3,283,000 m<sup>3</sup> from municipal water supplies (or other water supply facilities), and 326,000 m<sup>3</sup> from freshwater and underground water.

The quantity of water recycled was 556,000 m<sup>3</sup>.



Breakdown of water intake

	Quantity of water intake (x10 <sup>3</sup> m <sup>3</sup> )
Municipal water supply (or other water supply facilities)	3,283
Freshwater/underground water	326

## Our Efforts

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### Reducing Greenhouse Gas Emissions

#### Energy reduction by upgrading of air supply system and introduction of heat pump [KOREA KYONG NAM TAIYO YUDEN]

We conduct various measures at each plant to improve energy efficiency in the production process.

At Korea Kyong Nam Taiyo Yuden Co., Ltd., we upgraded the air supply system for the air conditioning system used in the production process, and by introducing a heat pump, we were able to reduce the power used.

We reduced GHG emissions by 580 t-CO<sub>2</sub>e per year.



Heat Pump

#### Improving operating efficiency of chillers [TAIYO YUDEN (GUANGDONG)]

At Taiyo Yuden (Guangdong) Co., Ltd., we introduced chillers whose operation is controlled by an inverter, and by seeking the optimal operation control according to the operation situation of the factory, we mitigated the operating load of the chillers and reduced the power used.

We reduced GHG emissions by 187 t-CO<sub>2</sub>e per year.



Inverter Chiller

#### Use of renewable energy

#### [Hongo Photovoltaic Power Plant / FUKUSHIMA TAIYO YUDEN / WAKAYAMA TAIYO YUDEN / TAIYO YUDEN YUDEN Mobile Technology / Elna Shirakawa Photovoltaic Power Plant / KOREA KYONG NAM TAIYO YUDEN / TAIYO YUDEN (PHILIPPINES) / ELNA-SONIC]

The Taiyo Yuden Group has been installing solar panels as part of our efforts to combat global warming. After establishing the group's first power-generating site, Hongo Photovoltaic Power Plant in 2013, others have been built as well, and there are currently 8 powergenerating sites in Japan and overseas.



Hongo Photovoltaic Power Plant



FUKUSHIMA TAIYO YUDEN



WAKAYAMA TAIYO YUDEN



TAIYO YUDEN Mobile Technology



Elna Shirakawa Photovoltaic Power Plant



KOREA KYONG NAM TAIYO YUDEN



TAIYO YUDEN (PHILIPPINES)



ELNA-SONIC

### Reduction in Waste Generation

#### Reduction of waste liquid by changing production method [NIIGATA TAIYO YUDEN / KOREA KYONG NAM TAIYO YUDEN / TAIYO YUDEN (SARAWAK)]

In some part of the production process for electronic components, solvents are used to clean the production equipment, and the solvents are properly disposed of as waste liquid after use for cleaning. By reviewing the production method and reducing the amount of solvent used for cleaning, we reduced the amount of waste liquid generated.

We reduced waste liquid by 384 tons per year.

### Reducing Water Use

#### Water conservation by wastewater recycling [NIIGATA TAIYO YUDEN]

In the process of manufacturing electronic components, water is used in various steps. By collecting and treating the equipment cooling water and reusing it in the manufacturing process, we reduced the water used.

We reduced water use by 11,331 tons per year.



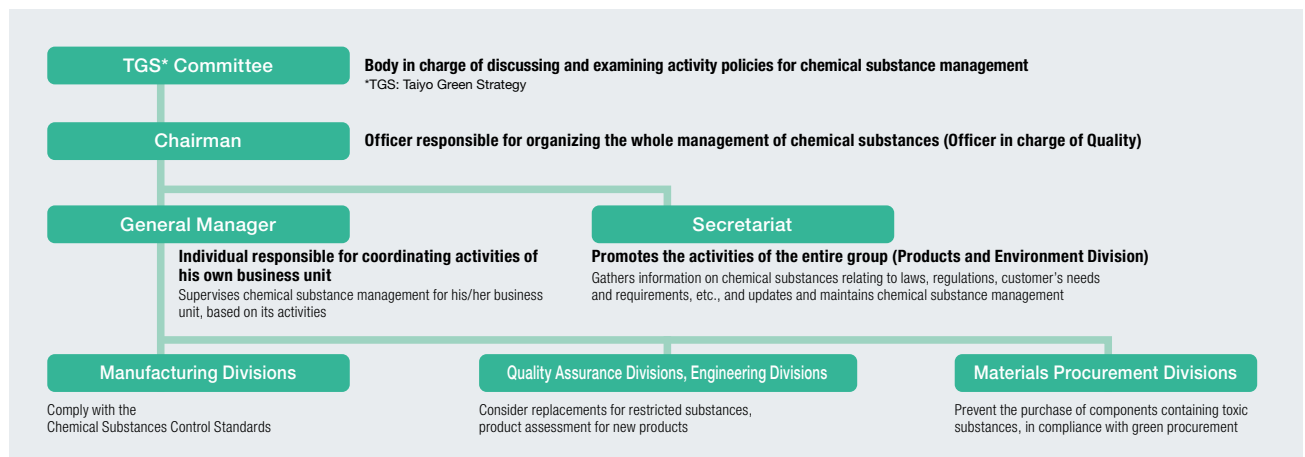
# Appropriate Management of Chemical Substances

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To ward off environment contamination with chemicals and adverse effects on human health, we have banned the use of forbidden substances, implemented a chemical management framework, and are working on reducing emission volumes.

## Chemical Management Framework

The Taiyo Yuden Group has its own standards in place for chemical substance management, which define chemical substances that must not be used, must only be used in limited situations, and must be managed.



### Target Chemicals

Prohibited substances	Cadmium, compounds containing cadmium, mercury, compounds containing mercury, hexavalent chromium compounds, etc.
Substances to be restricted	Lead in ceramic/glass frit and piezoelectric bodies, tetrabromobisphenol A (TBBPA), polycyclic aromatic hydrocarbons (PAHs), and so on.
Substances to be managed	Toluene, REACH SVHC (substance of very high concern), xylene, etc.

## PRTR Law Compliance

In order to reduce the risks that chemicals impose on the environment, the Taiyo Yuden Group reports to the government the amounts of chemicals released to the environment (air, water, and soil), and waste chemicals transported and recycled under the Japanese Law for Pollutant Release and Transfer Register (PRTR). The government publishes the records and a database of these quantities making them widely available to members of the general public.

### PRTR Restricted Substances

Substance Number	Chemical Substance Name	Emission (ton/year)	Amount Transferred (ton/year)	Amount Recycled (ton/year)	Substance Number	Chemical Substance Name	Emission (ton/year)	Amount Transferred (ton/year)	Amount Recycled (ton/year)
71	Ferric chloride	0.0	7.6	0.0	308	Nickel	0.2	2.6	90.8
82	Silver and its water-soluble compounds	0.0	4.4	4.0	309	Nickel compounds	0.8	5.8	11.1
87	Chromium and trivalent chromium compounds	0.0	1.0	0.0	405	Boron compound	0.6	0.8	0.0
272	Water-soluble copper salt	0.0	0.2	0.1	438	Methylnaphthalene	0.1	0.0	0.0
300	Toluene	27.7	20.1	22.1					

Note: Target chemical substances and their incoming amount shown refer to substances for which their incoming amount exceeds 1 ton in compliance with the PRTR Law.

Emission: This refers to the total emission into the atmosphere, water, and soil.

Amount Transferred: This refers to the amount whose disposal is outsourced to an industrial waste contractor outside the business facility concerned.

## Ozone-depleting Substances

We do not use ozone-depleting substances in our production processes. Although we use HCFC as a coolant in air conditioners and other equipment, we carry out appropriate collection and disposal.

# Achievement Levels for Medium-Term Occupational Health and Safety Targets

All employees participate in health and safety efforts based on the Fundamental Principle of Health and Safety outlined in the Taiyo Yuden Group Safety and Environment Charter and implemented according to the Occupational Health and Safety Management System (OHSMS).

## Fundamental Principle of Health and Safety, and Targets

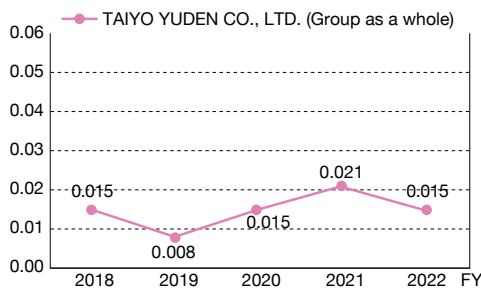
In order to realize our health and safety philosophy of “creating a workplace where employees can work without anxiety,” the Taiyo Yuden Group has drawn up group-wide medium-term plans. The medium-term plan is set to prevent industrial accidents by clarifying action targets for each 5Ms (Man, Machine, Method, Material, Measurement) and by setting a target incidence rate of injuries and illness for numerically evaluating the result of such efforts.

<b>Principle of Health &amp; Safety</b>	In order to ensure the well-being of our workers, who are an important resource of the company, we shall pursue workplaces which always maintain safety and where employees can work in confidence while maintaining the health of our workers.		
↓			
<b>Medium-term Plan      Taiyo Yuden Group Occupational Health and Safety Management Plan</b>			
<b>5Ms for Medium-term Targets</b>		<b>FY2025 Targets</b>	<b>FY2022 Performance</b>
<b>Man</b>	• Intensive basic training and fostering “Awareness of safe behavior”	Incidence rate of injuries and illness less than <b>0.016</b>  Accident Frequency Rate less than <b>0.08</b>	Incidence rate of injuries and illness <b>0.015</b>  Accident Frequency Rate <b>0.07</b>
<b>Machine</b>	• Enhancing the level of facility safety design for designers		
<b>Method</b>	• Safe work without inconsistencies		
<b>Material</b>	• Minimization of toxicity and danger of chemical substances		
<b>Measurement</b>	• Strengthening of checking system		

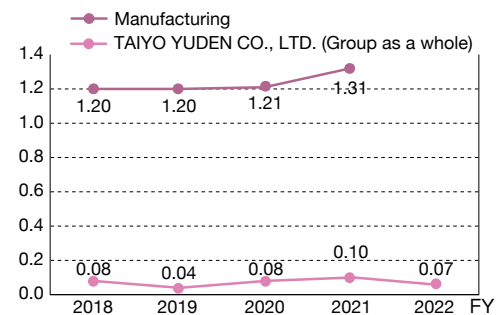
## FY2022 Work-related Accidents and Safety Indicators

In FY2022, the incidence rate of injuries and illness for the entire group was 0.015 (see G1), the accident frequency rate was 0.07(see G2), and the danger rate was 0.0032. Note: No fatal accident has occurred.

G1: Trends in incidence rate of injuries and illness



G2: Trends in Accident Frequency Rate



$$\text{Incidence rate of injuries and illness} = \frac{\left( \frac{\text{Number of the absentees due to occupational injury (at least one workday lost)}}{\text{Total actual number of hours worked by registered workers}} \right) + \left( \frac{\text{Number of the absentees due to occupational illness (at least one workday lost)}}{\text{Total actual number of hours worked by registered workers}} \right)}{\text{Total actual number of hours worked by registered workers}} \times 200,000$$

$$\text{Accident Frequency Rate} = \frac{\text{Number of the victims of occupational injury (at least one workday lost)}}{\text{Total actual number of hours worked by registered workers}} \times 1,000,000$$

We are promoting countermeasures against occupational injury and illness by conducting risk assessments in all workplaces. We found no workplace with high risks. Going forward, we will continue to conduct activities geared toward achieving zero work-related accidents from the perspective of the 5Ms, based on our medium-term health and safety plan.

## Efforts and Status 2-1

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### Man

#### Intensive basic training and fostering “Awareness of safe behavior”

To create a safe workplace culture, we are conducting activities to help employees increase their knowledge of health and safety so that they can perform their work with such knowledge in mind.

In FY2022, based on the results of analysis of the 4th Safety Awareness Survey in FY2021, which is carried out continuously to visualize employees’ awareness of health and safety, we continued to promote efforts to make work safer by verifying and reviewing risk measures in non-routine work. We have also strengthened education based on basic education materials that have systematically organized items to be followed when performing relatively high-risk work. In the 5th Safety Awareness Survey conducted in FY2022, we confirmed that most of items were improved as the result.

We will continue to conduct the Safety Awareness Survey and improve safety awareness of each employee to promote a culture of workplace safety.



Basic Education

### Machine

#### Enhancing the level of facility safety design for designers

With the objective of ensuring our machine safety activities conform to global standards (ISO and IEC), we are reviewing the Safety Standards for Group Machines, which define measures against risks common to production machines to enhance safety measures for them.

In FY2022, we carried out appropriate equipment safety assessments and measures for next-generation industrial robots that are advancing in sophistication and complexity. In addition, in order to build a safe work environment in which people and robots can cooperate, we promoted the training of equipment safety experts (R-SA: Robot Safety Assessors) with safety knowledge about industrial robots, and promoted the standardization of equipment safety measures for the introduction of industrial robots. We also regularly held workshops aimed at upgrading the skills of equipment safety experts (SA: Safety Assessors and SSA: Safety Sub-Assessors).

We will continue our efforts to reduce occupational injuries associated with machines.



Equipment safety expert skill improvement workshop

### Method

#### Safe work without inconsistencies

We are upgrading and reviewing procedures to standardize them and make them safe and consistent so that employees can work more safely.

In FY2022, we verified and reviewed the risks of all heavy object handling work and the measures for these works, and took measures to strengthen measures. Regarding heavy object handling work, we promoted conversion from management measures to mechanization, and took measures to reduce heavy manual work and reduce human intervention as much as possible. For heavy lifting that is difficult to mechanize, we verified various types of back pain prevention equipment, selected the most effective protective equipment, and trained employees on correct wearing methods and work methods.

We will continue to strive toward promoting a safe working environment from a common perspective.



Strengthening measures for heavy object handling work

### Material

#### Minimization of toxicity and danger of chemical substances

To minimize the hazards and dangers of chemical substances, we are continuously taking measures against risks associated with tasks that require workers to handle chemical substances.

In FY2022, as a measure for the risk of cleaning jigs using organic solvents, we promoted switching to less harmful substances and mechanization of the work to minimize the risk of handling chemical substances.

We will continue to work toward minimizing the hazards and dangers of chemical substances.

### Measurement

#### Strengthening of checking system

To provide safe and hygienic workplaces, we are working to raise check levels by upgrading and improving the methods for identifying invisible hazards (or those that have gone unnoticed).

In FY2022, we standardized workplace patrol procedures (checklists) to reduce and minimize the variation in checks during workplace patrols. In addition, on-site staff had performed the role of checkers to conduct regular workplace patrols until then, but we started a system whereby health and safety specialists from other sites conduct workplace patrols of each other’s sites. This has led to the identification of new issues and improvement measures referring to best-practices.

Going forward, we will continue our efforts to deepen the level of checks to create safe and hygienic workplaces.

# Efforts and Status 2-2

## Health

### 1 Reducing incidences of mental health problems

The Taiyo Yuden Group has developed a system<sup>\*1</sup> for reducing incidences of mental health problems and is conducting preventive activities.

In addition to conducting statutory stress checks using the Occupational Stress Simple Questionnaire, we also conduct surveys on work engagement<sup>\*2</sup> and the harassment rate in the organization.

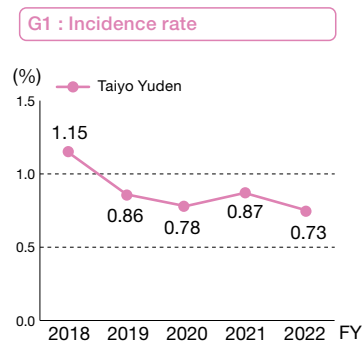
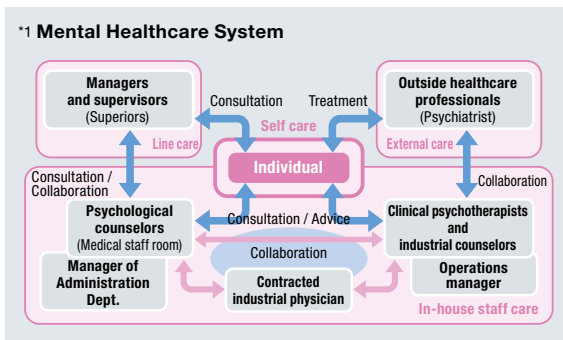
In the approach to individuals, the industrial nursing staff conducted individual interviews with employees who were concerned about the risk of mental disorders, and made efforts to prevent mental disorders. We conducted self-care training to teach stress relief methods and avoidance methods for individuals identified as suffering from high stress by the stress checks.

In the approach to the organization, we shared the results of the group analysis with the management of the organization, and each department judged the necessity of training leaders to care about the mental health of their employees and anti-harassment training to enhance psychological safety<sup>\*3</sup>.

These activities reduced the incidence to 0.73% (see G1). We will continue to enhance training, work closely with industrial doctors, psychiatrists, and industrial counselors, and work on mental health care so that all employees can work with peace of mind and motivation.



Harassment prevention training



\*2 Work engagement is the condition in which employees gain energy from their work and are proud of the work they do, and so are able to work with vigor.

\*3 Refers to the state where you can speak your thoughts and feelings to anyone in the organization with confidence.

### 2 Establishing a healthy lifestyle

Under the management philosophy, “Employee Well-being,” Taiyo Yuden sees employee health management as a management issue, and is committed to health management in order to create a foundation for safe and secure work, create an organization where employees are motivated, and contribute to productivity and creativity. Within this, to advance these activities both strategically and systematically, we have set health indicators (Focus5: Food, non-smoking, exercise, sleep, and stress) and established targets, and have been endeavoring to implement specific health measures to achieve these targets.

In FY2022, we prioritized Exercise and Sleep in the Focus5 indicators as key items and promoted efforts.

As for Exercise measures, we carried out efforts to foster employees’ motivation for daily exercise, such as distributing stretch videos produced in-house, holding stretching and yoga classes by external instructors, and visualizing the physical condition of employees using a wearable device app.

For Sleep measures, we conducted e-learning for desk workers to correctly understand sleep, and held seminars for shift workers and new employees on the topic of sleep disorders. For other measures, we implemented initiatives to quit smoking, enhanced employee canteens, and implemented health promotion measures health insurance union and labor union by (walking events, RIZAP seminars).

As a result, in terms of external recognition, we were selected for the Ministry of Economy, Trade and Industry’s system Health and Productivity Management Organization 2023 -White 500<sup>\*4</sup> for the three consecutive years. In addition, as a company that actively works to promote sports activities to promote the health of employees, we were certified by the Japan Sports Agency as a Sports Encouragement Company 2023<sup>\*5</sup> for the three consecutive years. We will continue to pursue both mentally and physically healthier work environments that enable our employees to work with vigor.

\*4: A program that certifies only the most significant 500 companies in the results of the Survey on Health and Productivity Management.  
 \*5: A program which certifies companies actively promoting measures to improve employees’ health through sports.



Health & Productivity Management Outstanding Organization 2023 (White 500)



Sports Yell Company 2023