# **Environmental Management**

We at Hirata establish environmental policies and promote environmental activities in line with those policies. We will contribute to protecting the global environment by reducing the environmental load in all aspects of our business activities, products, and services.

## **Particulars of Our Environmental Policy**

Hirata Corporation contributes to protecting the global environment by reducing the environmental load in all aspects of our business activities, products, and services in order to achieve a sustainable society.

- 1. We lower the environmental load of our products by considering each phase of a product's lifecycle throughout our supply chain, from raw material sourcing to design, production, transportation, use of the product, and its disposal after use.
- Making products that save more energy when in use
  Designing and manufacturing products to be recyclable at
- Reducing the amounts of harmful materials used in our products and using substitutes
- 2. We abide by environmental laws, treaties, requirements, and voluntary standards set as needed. We also develop coordination and cooperative relations with relevant government agencies and contribute to local communities

## **Environmental Management Promotion Framework**

Having put in place an Environmental Management System (EMS) promotion framework led by top management and environmental management managers, we obtained international standard ISO 14001 certification at our Kumamoto, Kanto, and Kansai region production bases.

#### 3. We strive to improve productivity and conserve the environment throughout all our business activities and production processes, including sales, design, manufacturing, installation, and after-sales service. • Reducing energy usage and emissions of greenhouse gases

- Reducing waste and promoting recycling
  Reducing harmful materials and using substitute articles
- Preventing environmental problems and pollution Preserving biological diversity
- 4. We increase environmental awareness by implementing education and publicity programs.
- 5. We review our EMS regularly to enhance environmental performance while striving for continuous improvement



## **Environmental Accounting**

The environmental preservation costs for FY2021 were as follows

(Unit: Thousands of yer						
ltem		Major Activities	Investment	Cost		
	Cost for preventing pollution	Maintenance of septic tanks	_	16,381		
Business area cost	Global environmental protection cost	<ul> <li>Installing energy-saving equipment</li> </ul>	14,921	101,386		
	Cost of resource recycling <ul> <li>Leakage control construction</li> <li>Disposal of general and industrial waste</li> </ul>		_	45,417		
Upstream and downstream costs		• Investigation of chemical substances contained in products	-	6,596		
Administration cost		<ul> <li>Maintenance of environmental management system</li> <li>Environmental measurement</li> <li>Environmental education</li> </ul>	-	30,604		
Research & development cost		Waste generation reduction tests	-	30		
Social activity cost		<ul> <li>Environmental preservation and improvement</li> <li>Donations to environmental protection groups</li> </ul>	_	6,973		
		Total	14,921	207,387		

## **Status of Business Activities and Environmental Impact**



2. CO2 emissions associated with power consumption calculated based on basic emission factors from electric power companies (Note) Hirata Corporation non-consolidated data

## **Environmental Goals**

	○: Achieved △: Nearly achieved ×: Under					
No.	lte	em	Goals	FY2021 Accomplishments	Evaluation	FY2022 Plans
1	Prevention of global warming	Reducing energy usage	By the end of FY2023, we will have reduced the amount of energy used by 3% or more compared with that of FY2020 when measured based on the actual production amounts.	Energy usage decreased by 1.9% in comparison with actual production Reduced due to the installation of energy- saving equipment such as high-efficiency air conditioners and the increase in production output.	0	To promote the reduction of energy consumption by the introduction of energy- saving equipment such as electric forklifts.
1		Reducing CO <sub>2</sub> emissions	By the end of FY2023, we will have reduced the amount of $CO_2$ emissions by 3% or more compared with that of FY2020 when measured based on the actual production amounts (reducing $CO_2$ emissions by reduction of energy usage)	CO <sub>2</sub> emissions increased by 3.8% in comparison with actual production Increased due to the effect of the greenhouse gas emission factor of electric power companies being more than the reduction from energy consumption.	$\bigtriangleup$	To strive to reduce CO <sub>2</sub> emissions by reducing energy consumption.
2	Effective use of	Reducing water usage	By the end of FY2023, we will have reduced the amount of water used by 3% or more compared with that of FY2020 when measured based on the actual production amounts.	Water usage decreased by 18% in comparison with actual production Reduction due to a review of the settings of the water circulation system at the Kumamoto Plant and the increase in production output.	0	To work to reduce water usage by reviewing equipment that uses water.
3	resources	Reduction of industrial waste generation	By the end of FY2023, we will have reduced the amount of industrial waste generated by 3% or more compared with that of FY2020 when measured based on the actual production amounts.	Industrial waste generation decreased by 11% in comparison with actual production Reduced due to a review of packaging materials and the increase in production output.	0	To work to reduce the amount of industrial waste generated by reviewing packaging and other measures.

## Response to Climate Change

Using the adoption of the Paris Agreement in 2015 as an opportunity, the Company–its stated mission in summary being to "contribute to the development of society"—revised its environmental policy in 2016 amid the rapidly growing global interest relating to climate change. We are aiming to achieve both the development of society through the proliferation of products that contribute to reducing  $CO_2$  emissions and environmental impact, and the resolution of environmental issues such as climate change.

In November 2022, the Company announced its endorsement of the final report of the Task Force on Climate-related Financial Disclosure (TCFD). In addition to identifying, analyzing, and evaluating the risks and

opportunities that climate change poses to management, we are working to enhance the quality and quantity of information disclosure that contributes to engagement (constructive dialogue) with all stakeholders, including shareholders and investors.



The Committee will also be subject to regular oversight by

The Board of Directors gives consideration to climate-

related issues when reviewing medium-term management

Note: Please refer to page 31 for details of the sustainability promotion

Going forward, we will report the results of risk

assessments in scenario analyses to the department in

charge of risk management and link them with company-

plans and making investment decisions.

the Board of Directors.

framework.

impact of each risk.

wide risk management.

### Governance

At a Board of Directors' meeting held in October 2022, a resolution was passed to establish a Sustainability Promotion Committee, and full-scale operations are scheduled to begin in April 2023. The Sustainability Promotion Committee will submit proposals, reports, and provide information on matters related to ESG management, including responses to climate change.

## **Risk Management**

The Sustainability Promotion Committee identifies, assesses, and manages risks related to climate change.

In scenario analyses, the Committee extracts the relevant parameters to identify risks and conducts assessments on a regular basis. The Committee also manages risks by quantitatively evaluating the financial

## **Strategies (Scenario Analysis Overviews)**

### Scenario Analysis Overviews

Through scenario analyses, the Group ascertained the changes in the Group and its customers' industries in 2030 and 2050—under the 1.5°C/4°C scenarios, based on scientific information such as from the International Energy Agency (IEA)—and analyzed climate change risks and opportunities. In all of the scenarios used in these analyses, we confirmed that resilient management is possible in the businesses targeted for analysis.

Under the 1.5°C scenario, a major change in policy toward decarbonization is assumed. In addition to the introduction of a carbon tax, soaring raw material and energy costs will require a shift to a more decarbonized business model. In contrast, in the 4°C scenario, the impact of physical risks will increase, and it will be necessary to respond to risks such as plant shutdowns and supply chain disruptions.

### Scenario Analysis Results

Based on the previous section's vision of future society with a 1.5°C rise, the Group recognizes that while business opportunities will increase due to increased demand for energy-saving products, the impact of physical risks will increase at 4°C.

Based on the results of these analyses, the Group will sequentially verify initiatives for maximizing opportunities while addressing recognized risks, starting with those with the highest feasibility, and promote reflecting and integrating those initiatives into management strategies.

Main Category         Middle Category         Details of opportunity         s           Development of energy- saving products         Products that save more energy         In accordance with energy-saving policies and rising temperatures, electrification and automation at customer factories will advance, demand for products that raise productivity and improve energy- saving performance in factories and at facilities will increase           Demand to save         Demand to save         In accordance with declining labor productivity due to rising temperatures, demand for labor saving and efficiency	1.5 °C scenario Large Small	S
Development of energy- saving products         In accordance with energy-saving policies and rising temperatures, electrification and automation at customer factories will advance, demand for products that raise productivity and improve energy- saving performance in factories and at facilities will increase           Demand to save         Demand to save         In accordance with energy-saving products	Large Small	
Demand productivity due to rising temperatures, demand for labor saving and efficiency	Small	
manpower improvement at production sites will increase		
Risk         Details of risks           Main         Middle         Details of risks           Category         Category         S	Degree o 1.5 °C scenario	f
Transition risks		
Carbon price Scope 1, 2 Increase in manufacturing costs due to introduction of carbon taxes in each country, emissions trading, and border carbon adjustment measures	Medium	
Scarce         Increased procurement costs due to restrictions placed on raw materials and purchases due to emission regulations	Small	
cost         Increased costs for materials containing plastic due to regulatory restrictions placed on their use and requirements that recycled plastic be used	Medium	
Electricity costs are increasing due to decarbonization of the Company's cost plants and offices as well as popularization of renewable energy	Medium	N
Energy cost Air- conditioning cost Due to rising temperatures, operating rate of air conditioning in plants, etc. rises, and thus air-conditioning costs increase	Small	
Distribution Distribution cost rises due to shift to EVs for large vehicles	Medium	M
Physical risk		
Physical costRestoration/ operating costsIncreasing costs from expenses for restoring equipment following the effects of abnormal weather, etc.	Small	

## **Indicators and Targets**

Curbing global warming by reducing  $CO_2$  emissions is becoming an essential activity for realizing a sustainable society. To fulfill its responsibility, the Hirata Group is promoting measures to reduce  $CO_2$  emissions in its business activities. As a goal for reducing the environmental impact of our business activities, we are also considering more in-depth global, medium- to long-

impact 4°C cenario	Countermeasures
Small	<ul> <li>Expand local production for local consumption business models, such as local manufacturing and sales of parts and repair parts that have already started in some regions, and consolidation of production bases.</li> <li>Introduction of eco-friendly electrification products, design and development of products for which lightness and longevity have been taken into account, etc.</li> </ul>
Small	Development of products for automated warehouses, automated guided vehicles, etc.
impact 4°C cenario	Countermeasures
	Catting of carbon optication reduction to the state of a sector a sector
Small	<ul> <li>Setting of carbon emission reduction targets such as carbon neutral declarations</li> <li>Ascertaining of Scope structure for carbon emissions, building a monitoring system, etc.</li> </ul>
Small	<ul> <li>Renewal of aging robots, etc., promoting the reuse and recycling of equipment and parts through remodeling and repair services, etc.</li> </ul>
Small	<ul> <li>In addition to reviewing excessive packaging in product packaging, reducing the amount of plastic used by switching to recycled paper and returnable boxes, etc.</li> </ul>
/ledium	<ul> <li>Promotion of energy saving by installation of LED lighting, etc.</li> <li>Examining installation of in-house power generation equipment (solar power generation equipment) and the utilization of leasing services</li> <li>Introduction of optimal operation by means of Energy Management System from buildings and plants where already being installed or considered, gradual expansion to locations places where not yet introduced</li> </ul>
Small	<ul> <li>Operational improvements, including ventilation reviews, measures against air leaks, and measures to shade external air-conditioning units</li> <li>Installation of energy-saving air-conditioning equipment, etc.</li> </ul>
/ledium	<ul> <li>Consolidate production bases and expand initiatives with customers (OEMs) for joint transportation in some businesses to streamline inter- factory transportation</li> <li>Examine expanding distribution by multidrop (milk run) shipments of goods to suppliers in the region, etc.</li> </ul>
	<ul> <li>Involvementation of the baseling the start in the 10 Matrix 1 and 10</li> </ul>
Large	<ul> <li>Implementation of risk reduction through multiple purchasing</li> <li>Advance arrangements in line with business content so that a certain level of production activity can be carried out even if supply is interrupted, appropriate inventory management and thorough operation, etc.</li> </ul>

term goals while referring to the greenhouse gas reduction target announced by the Japanese government in April 2021. In the years to come, we will carefully examine the indicators that are important to the Group from the risk and opportunity items in the scenario analyses, while continuing to monitor  $CO_2$  emissions (Scope 1, 2, 3).

## Changes in Energy Consumption/CO<sub>2</sub> Emissions

The Company is working to rationalize its energy use based on the Act on the Rational Use of Energy (Energy Efficiency Act). In fiscal 2020, operations started in the new headquarters factory area in the Kumamoto Plant, so both energy consumption and energy consumption per unit of output increased significantly. In terms of environmental targets, having set fiscal 2020 as the base year, we adopted a 3% reduction in our energy consumption per unit of output by fiscal 2023. In fiscal 2021, energy consumption per unit of output was reduced by 2% compared with fiscal 2020 following the installation of energy-saving equipment, such as the renewal of air

Environment

#### **Energy usage**



\* Calculated using the fuel and electricity conversion factors from the Act on the Rational Use of Energy

Efforts to Conserve Water Resources

To conserve water resources, the Company is reducing water usage and monitoring factory wastewater. As an initiative to reduce water usage in fiscal 2021, we reviewed the settings of the cooling water circulation system to reduce the amount of cooling water used at the Kumamoto Plant and were thereby able to further reduce the amount used. We conduct analyses of the wastewater from all our plants every year to confirm that it satisfies legal requirements and voluntary management standards.

conditioners, and due the increase in production output.

In terms of environmental targets concerning CO<sub>2</sub> emissions, for which we also deem fiscal 2020 as the base year, we adopted a 3% reduction in CO<sub>2</sub> emissions per unit of production by fiscal 2023. Despite having been able to achieve a reduction in energy consumption, CO<sub>2</sub> emissions per unit of production increased by 4% in fiscal 2021 due to an increase in the electric power company CO<sub>2</sub> emissions factor (basic emissions factor). In the years to come, we will contribute to the reduction of CO<sub>2</sub> emissions by installing and updating energy-saving equipment as well as by reducing our energy consumption.





CO2 emissions (t-CO2): Fuel CO2 emissions (t-CO2): Electricity -CO2 emissions per basic unit (t-CO2/million yen)

\* Based on power usage, CO2 emissions are calculated using basic emission factors published by electric power companies

#### Water usage



Groundwater usage (m<sup>3</sup>) Clean water usage (m<sup>3</sup>) - Amount of water usage per ¥100 million of actual production (m<sup>3</sup>/¥100 million)

## Approach to Resource Recycling

To help in the realization of a sustainable society, we are working to create products that show we have given consideration to resource recycling at each stage of the life cycle (the procurement of materials and parts, design, production, and disposal after use). Through eco-friendly design, we are promoting the reduction of raw materials



## **Efforts to Reduce Industrial Waste Outputs**

The industrial waste generated by the Company mainly comprises wood chips, waste plastics, and waste oil. Used to package deliveries to the Company, wood chips and waste plastics are disposed of as waste after unpacking. For this reason, we are working to reduce the amount of waste generated by reviewing and simplifying the packaging methods for some equipment imported from overseas suppliers.

## **Managing Chemical Substances**

To respond to chemical substance-related laws and regulations in Japan and overseas, including the European RoHS Directive<sup>1</sup> and the REACH Regulations<sup>2</sup>, we will strengthen the management of the chemical substances contained in our products.

We ask our suppliers to submit information through chemSHERPA<sup>3</sup> and cooperate with our surveys of the chemical substances contained in our products. We will continue to work on managing the chemical substances used in product manufacturing and the provision of products that can be recycled at the time of disposal. We are also working to reduce the packaging materials, reduce waste in production activities, and promote recycling for some equipment imported from overseas suppliers.





contained in our products.

The chemical substances used in-house are evaluated before use and, based on the evaluation results, we undertake management necessary to comply with laws and regulations.

- 1. Regulations on chemical substances in EU
- 2. Chemical substance management regulations in EU
- 3. Format for providing data on chemical substances contained in products in a supply chain