Environment

Environmental Initiatives

Environmental Policy

Basic Policy

Recognizing that environmental issues are a challenge common to all mankind, Nippon Pillar Packing is aware of its social responsibility as a corporation, and as a good corporate citizen, we are actively working to preserve the global environment. We will also contribute to the development of local communities, aiming for the sustainable development of society and the Company.

(1) Compliance with laws and regulations
In addition to complying with domestic and international environmental laws and regulations, we pledge to establish and adhere to our own voluntary standards that take into account the needs of society.

(2) Development of products that contribute to environmental protection
As a manufacturer of fluid control equipment, we develop technologies and products that contribute not only to improved performance but also to the emergence of a society committed to sustainability through environmental protection initiatives.

(3) Controlling environmental pollution in our business operations
We strive to prevent pollution and protect the environment by reducing the amount of waste generated, recycling the waste generated, reducing the use of environmentally hazardous substances, while complying with pollution control regulations intended to protect the environment.

(4) Continuous improvement activities
Recognizing the environmental impact of our business operations, we continuously improve our environmental management system.

(5) Collaboration and cooperation with stakeholders
We develop environmental conservation initiatives in cooperation with stakeholders in an effort to meet the expectations of society.

March 1, 2023

Structure for Promoting Environmental Conservation Measures

Our Sanda Factory obtained ISO14001 certification in September 1999, and our Fukuchiyama Factory was also certified in September 2002, and we have been promoting an ongoing environmental improvement program. In terms of environmental management, we have established an environmental management system headed by the executive officer in charge of the environment, and the Decarbonization and Global Environment Committee oversees the management system, and through an Environmental Management Committee established at both sites, we are working to reduce the environmental impact of our business activities and develop environmentally conscious products. These initiatives are reported to the ESG/SDGs Promotion Committee to enhance the effectiveness of each committee, and management reviews are conducted at the Management Meeting and meetings of other bodies to ensure continuous improvement.

Additionally, in order to respond to situations in which environmental risks could significantly affect lives, property, and the living environment, we regularly conduct emergency response drills, organized by the Disaster Prevention and Pollution Prevention Subcommittee.

Every year, we conduct large-scale earthquake evacuation drills for all employees at our head office, Sanda Factory, Fukuchiyama Factory, and other factories. We have also introduced a safety confirmation system as a means of communicating between employees and the Company in the event of a large-scale earthquake or other wide-area disaster. We will continue to review and improve our business continuity plan (BCP) through periodic drills.

Environmental Audit

We have undergone an external ISO14001: 2015 audit to verify that the environmental management system is operating properly and that continuous improvements are being implemented. No non-conformities were noted in the assessment results for fiscal 2022, and we were recognized for our efforts related to energy conservation in our clean rooms, paperless operations, and multi-functional operations. In addition, the Sanda Factory and Fukuchiyama Factory conduct internal environmental audits every year for all departments to confirm their environmental initiatives and to continuously improve their environmental management systems.

Information Disclosure Based on the TCFD Recommendations

As the role of companies in mitigating and adapting to climate change becomes increasingly important, and as demand for decarbonization and carbon neutrality increases in the marketplace, we intend to further increase our contribution to the decarbonization of markets and society through our technologies and products. Based on this recognition and conviction, we are disclosing our systems, initiatives, etc. based on the TCFD recommendations regarding the impact of climate change-related risks and opportunities on our business, strategy, and finances.

Governance and Risk Management

Basic policies and important matters related to climate change are discussed and decided by the ESG/SDGs Promotion Committee and reported to the Board of Directors on a regular basis, and a governance system is in place to ensure appropriate oversight by the Board of Directors.

For more information on other governance structures and risk management, please visit our website.

Related website
https://www.pillar.co.jp/en/sustainability/tcfd/

Strategy

We identified climate-change risks and opportunities, and evaluated their degree of the impact, timing of occurrence and realization, and likelihood of occurrence and realization of climate-change risks and opportunities under each scenario, based on ① a 1.5–2°C temperature-rise worldview in which decarbonization progresses and ② a 3–4°C temperature-rise worldview in which global warming progresses.

■ Risks and opportunities expected to be significant in the following scenarios
□ 1.5–2°C scenario □ 3–4°C scenario
■ Time horizon (timing of occurrence/realization)
Short term: within 3 years, Medium term: over 3 years to 10 years,
Long term: over 10 years

	Risks	Time horizon	Risk reduction
Policies/ Regulations	Carbon pricing based on the Company's own GHG emissions	Medium term	Reduce GHG emissions by promoting energy conservation and energy creation initiatives
Markets	Decrease in demand for fluid control equipment in the power and energy markets due to the shift away from fossil fuels	Medium to long term	Keep a close eye on the trends of energy shift and EV shift, and strategically respond to them
	Decrease in demand for fluid control equipment for vehicles with internal combustion engines	Short to medium term	
Technology	Intensify competition in the development of technologies and products for a decarbonized society	Medium term	Accelerate R&D of technologies and products that reduce environmental impact, such as energy saving, resource saving, and space saving
Weather, climate and environmental changes	Flooding in and around the Company's main locations	Short term	Promote disaster prevention measures at high-risk sites, strengthen coordination among sites, and review and strengthen BCPs

	Opportunity	Time horizon	Opportunity capture measures
Markets	Increase in demand for semiconductor-related products due to digital transformation (DX) and other developments aimed at increasing the efficiency of socioeconomic activities	Short term	Keep a close eye on technological innovations and market trends in the information, communication, and control markets, and launching new products in a timely manner
	Increase in demand for fluid control equipment in the clean energy market, including hydrogen, ammonia, and biomass fuels	Medium to long term	Identify needs and promoting market development in the clean energy fluid handling market
	Increase in demand for semiconductor-related products due to the increase in solar power generation and the spread of distributed power sources	Short term	Stably supply semiconductor and LCD related products for the electric power market based on the expansion of the renewable energy market and the transition to a distributed energy society
	Increase in demand for semiconductor-related products due to the increase in onboard semiconductors and devices for EVs and self-driving cars	Short term	Identify needs and promote market development associated with the shift to mobility
Technology	Increase in demand for fluid control equipment that contributes to CO_2 transport/transfer and fluid control	Medium term	Accelerate research and development of CCUS up to the commercial stage and participate in demonstration tests, etc.
Weather, climate and environmental changes	Increase in demand for drainage equipment and pump-related products	Short term	Expand businesses that solve social issues
	Demand for products related to seawater desalination and purification	Long term	

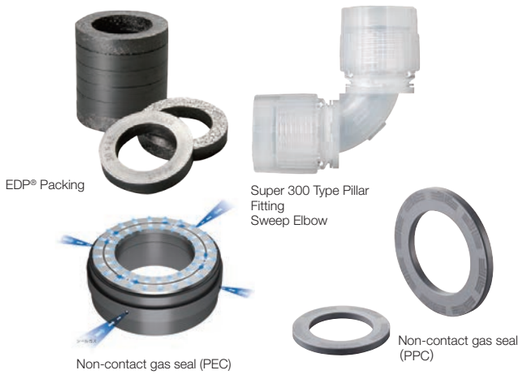
Indicators and Targets

Greenhouse gas	Sales of products that help create a decarbonized society	In-house carbon pricing
CO_2 Emission Reduction Targets (Consolidated/Scope 1+2) (compared to FY2013) FY2025 Reduced by 25% FY2030 Reduced by 50% FY2050 Virtually zero	**Sales Targets for FY2030** Energy-saving products Approx. 4 billion yen Carbon neutral products Approx. 2 billion yen	Introduced an internal carbon price system and operated it as one of the investment indices related to energy conservation and energy creation, etc. 9,200 yen/t-CO_2 (as of October 2021)

Decarbonization and Energy Saving

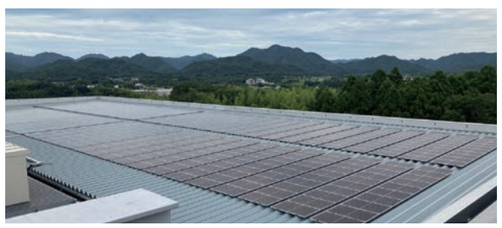
Development of Products with Reduced Environmental Impact

Based on our mission of contributing to the safety and security of people's lives and the environment by controlling all kinds of fluids, we are contributing to the creation of a decarbonized society by controlling the flow of greenhouse gases and a wide range of energy resources. In order to meet the future needs of the market for energy-saving business activities and the utilization of clean energy, we have selected ① energy-saving products (e.g., new type of fitting, Sweep Elbow, for semiconductor manufacturing equipment) and ② products contributing to carbon neutrality (e.g., seals for hydrogen power generation and plastic fittings for EVs), and we aim to expand the scale of sales by using the sales amount of these products as an indicator.



Reduction of CO_2 Emissions

We are promoting efforts to reduce CO_2 emissions to virtually zero by fiscal 2050. As a result of energy-saving measures including the use of LED lighting, the introduction of solar power generation equipment for internal consumption, and the adoption of CO_2-free plans, our consolidated Scope 1+2 results for fiscal 2022 were 10,899 t-CO_2, a 9.8% decrease from the base year of fiscal 2013.


Solar power generation for internal use (Sanda Factory)

Response to CDP

For the first time in 2022, we disclosed information through the CDP questionnaire and received a B- (management level) rating in the Climate Change Report 2022.

The CDP is a non-governmental organization (NGO), established in 2000 and controlled by a British charity, which works to promote corporate environmental disclosure at the request of institutional investors and purchasing companies around the world. In 2022, more than 18,700 companies, representing half of the world's market capitalization, disclosed information through CDP.

Scope 3 Calculation

In order to ascertain greenhouse gas emissions not only from our own operations but also from our supply chain as a whole, we have begun calculating emissions from our suppliers, customers, and other activities (Scope 3) in addition to emissions from our corporate activities (Scope 1+2).

We will continue to perform Scope 3 calculations and work to expand the scope of calculations and improve the accuracy of calculated values, leading to more efficient and effective emissions reductions.

FY2022 Scope 3 Breakdown

(t-CO_2)

Category 1	66,314
Category 2	3,259
Category 3	2,250
Category 4	1,164
Category 5	252
Category 6	245
Category 7	1,211
Category 8	0
Category 9	1,996
Category 10	3
Category 11	71
Category 12	7,665
Category 13	156
Category 14	0
Category 15	0
Total	**84,586**

Circular Economy and Resource Conservation

Product Repair

We contribute to the circular economy by providing aftersales service even after the delivery of our products. Mechanical seals used in the industrial equipment-related market and bellows pumps employed in the electronic equipment-related market can be used just like new products by repairing or replacing only key parts. By repairing products and allowing customers to use them longer, we contribute to the effective use of resources.

Waste Reduction and Recycling

In addition to reducing the amount of general and industrial waste generated in our business operations, we are working to promote recycling through ongoing communication with vendors. In fiscal 2022, although the amount generated increased due to an increase in orders, efforts to reduce the defect rate, eliminate paper cups, and recycle corrugated cardboard resulted in generally stable results. We will continue to promote waste reduction and recycling initiatives to make effective use of limited resources.

Compliance with Measures for Laws, Regulations, and Other Obligations

We always obtain the most up-to-date information to ensure we comply with environmental laws, agreed values of municipalities, etc., clearly setting out all compliance requirements in the "Environmental laws, regulations, and other requirements list." We also conduct regular surveillance and measurement to ensure scheduled reporting and record-keeping to prevent violations of laws and regulations and contamination of the local environment, as well as to improve matters of concern and to maintain and preserve the environment.

Prevention of Chemical Pollution and Conservation of Water Resources

Water Consumption Reduction Activities

In response to the growing risk of water shortages worldwide, we are working to reduce our water consumption. In fiscal 2022, we focused on water conservation activities, but the volume of water withdrawal increased by 4.2% from the previous fiscal year to 122,000 m^3 due to an increase in orders. In fiscal 2023, we will continue our efforts with a reduction target of 19,000 m^3.

Response to Toxic Substances (PRTR Law)

Under the provisions of the Pollutant Release and Transfer Register (PRTR), which requires companies to manage specified chemical substances that have an environmental impact, we notify the competent authorities every year regarding these substances. We also have an ongoing program of considering switching to non-specified alternatives and cutting usage, emission, and transfer of specified substances. In our new medium-term management plan One2025, we have set the goal of completely eliminating the use of the three substances.

Substances Subject to Notification under the PRTR Law (nonconsolidated)

(kg)

Name of substance	Decree number	FY2018			FY2019			FY2020			FY2021			FY2022		
		Amount used	Atmospheric emissions	Waste transfer	Amount used	Atmospheric emissions	Waste transfer	Amount used	Atmospheric emissions	Waste transfer	Amount used	Atmospheric emissions	Waste transfer	Amount used	Atmospheric emissions	Waste transfer
Xylene*1	80	1,980	11	110	1,801	11	56	1,432	7	12	983	5	17	1,211	6	18
Chromium and trivalent chromium compounds	87	4,067	0	4,100	3,630	11	2,500	2,650	0	1,700	2,895	0	2,001	3,583	0	2,388
Methylene chloride	186	29,300	24,800	4,500	34,800	30,800	4,000	57,700	53,000	4,700	109,100	104,000	5,100	114,200	109,200	5,000
1,2,4-Trimethylbenzene*1	296	2,282	11	130	2,050	11	40	1,651	8	13	1,002	5	19	1,598	8	23

Xylene, chromium and trivalent chromium compounds, methylene chloride, and 1,2,4-trimethylbenzene are subject to notification under the PRTR Law.
*1 Kerosene fuel consumed by combustion is not included in the amounts of emissions and transfer.
(Note) Listed here are substances used 1,000 kg or more annually.