

Global Environment Conservation

Relevant SDGs

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The SWS Group recognizes its significant impact on the environment and will continue working toward realizing a sustainable society in harmony with the environment by operating clean factories that contribute to a brighter future.



Water Recycling of Treated Wastewater through Sewerage Treatment Facilities to Conserve Natural Resources

We have constructed and operate three sewerage treatment facilities to ensure that the water we generate is properly collected, treated, and discharged in compliance with government-mandated regulations. Moreover, we reuse treated wastewater for gardening, toilet flushing, and fire hydrant systems on a daily basis as part of our corporate social responsibility. This also supports the SEI Group's theme of "Environmental 22VISION: Accomplis Action ECO-22V." We are committed to operating environmentally friendly production by creating programs that reduce the adverse effects of production activities.

Alvin M. Libnao / Supervisor/Pollution Control Officer / Human Resources & Admin. Department / Internationa Wiring Systems (Phils.) Corp. (IWSP) (Philippines)

Environmental Management

Environmental Preservation Principles

Basic Principles

The SWS Group shall implement business activities to create an affluent society with full consideration for environmental preservation.

Environmental Preservation Action Guidelines

- Make efforts to develop and improve eco-technology (also known as "green engineering") in every field of product planning, development, design, manufacturing methods, production, logistics, usage and disposal aiming at product manufacturing, with consideration given to influence on ecosystems and protection of resources.
- 2 Determine self-imposed restraints to reduce impact on the environment, in addition to observing environmental regulations by the government, local public bodies and other organizations.
- 3 Conduct an environmental audit to check the progress of environmental preservation plans and job performance levels in order to main- tain and improve the level of environmental management.
- 4 Improve environmental awareness in the SWS Group, including overseas sites, and promote environmental preservation activities through communication with local communities.

Environmenta Slogan

Clean Factory For The Future



Environmental Management System

In fiscal 2017, the Sumitomo Wiring Systems Group reviewed and reorganized its environmental management system (EMS), which had been centered on an environmental subcommittee, overseas companies, and four domestic areas, into a system led by business departments, with each assigning its own environmental management officer. In response to the revised ISO 14001:2015, we have encouraged certification at overseas bases that have yet to comply with certain global environmental standards. In fiscal 2018, we established international environmental standards and reviewed the status of compliance.

▶ Environmental Management System Chart



^{*}Hybrid Mobility

Environmental Audits

We conduct environmental audits to ensure that the environmental management systems of our domestic group companies are being appropriately operated and maintained in accordance with ISO 14001.

The fiscal 2018 audit found no instances of noncompliance throughout the company.

Legal Violations and Environmental Accidents

In fiscal 2018, no legal violations or environmental accidents (those for which administrative guidance, recommendations, or a fine are received) occurred across the Group. To ensure thorough legal compliance, we will continue to conduct onsite reviews in addition to compliance training at each site.

Environmental Education

Environmental management depends on developing the environmental awareness and knowledge of each and every employee. We provide a number of environmental education programs for each employee type and level, including new employees, transferees from other regions, and candidates for internal auditors.

Material Balance (in Japan) (FY2018)

INPUT							
GWh							
m³							
t							
kℓ							
kℓ							
m³							
m³							
m³							
m³							
t							
t							
t							

	Offices
	Offices
	R&D
	Product design
	Production
•	Shipment
	Resource circulation
	Raw materials
	Energy
	Water

	OUTPUT						
	Air						
	CO ₂ emissions	88,000	t-CO ₂				
	SF ₆ * emissions (CO ₂ equivalent)	100	t-CO ₂				
	PRTR-regulated substances	1.5	t				
	Effluents						
	Effluents	690,000	m³				
	PRTR-regulated substances	0.14	t				
	Disposal						
	Wastes (exclude valuable resources)	2,400	t				
	Material recycling	1,000	t				
	Thermal recovery	1,100	t				
	Landfill incineration	300	t				
	PRTR-regulated substances	2.8	t				
	Recycling						
	Valuable resources (including copper, copper alloys)	18,000	t				

*Sulfur hexafluoride

SWS Group Environmental Action Plan

The SWS Group has sought to cultivate stronger relationships with the global community toward reducing environmental impact at every stage of the product life cycle, from development to disposal. In fiscal 2018, we introduced the Action ECO-22V campaign of Sumitomo Electric Industries, Ltd. to implement environmentally sound activities through our business.

▶ Action ECO-22V Campaign (FY2018–FY2022 Targets)

Action ECO-22V FY2018–FY2022, Base Year: FY2017		Scope of		FY2018		FY2022
		Application	Targets	Results	Evaluation	Targets
Prevention of global	Reduce CO ₂ emissions	Global	Reduce by 0%	Reduced by 1.4%	•	Reduce by 0%
warming (CO ₂ reduction)	Reduce energy consumption per unit*	Global	Reduce by 1%	Reduced by 4.0%	•	Reduce by 5%
Promotion of resource	Reduce waste per unit*	Global	Reduce by 1%	Reduced by 2.4%	•	Reduce by 5%
saving and recycling	Reduce water use per unit*	Global	Reduce by 1%	Reduced by 5.3%	•	Reduce by 5%
Expansion of environmentally sound product range	Increase ratio of environmentally sound products in sales	Japan	90%	83%	Δ	95%
Zero legal violations and environmental accidents			0	0	•	0

^{●:} Target met △: Target unmet (improved from previous year) ×: Target unmet (declined from previous year)

Prevention of Global Warming

SWS Group Global Greenhouse Gas Emissions

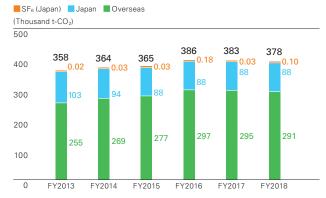
FY2018 target 0% reduction from FY2017

FY2018 result 1.4% reduction from FY2017

The SWS Group acknowledges the urgency of taking action to prevent global warming and is moving forward in a concerted effort to establish clean factories.

In fiscal 2018, we set a target to prevent GHG emissions across the entire Group from increasing compared to the fiscal 2017 level, and the target was achieved by reducing emissions by 1.4% (3.78 million tons).

▶ Greenhouse Gas Emissions (Global)



^{*}For improved accuracy, the values of the previous fiscal year have been revised.

Reduction in Per Unit Energy through Energy Saving (Manufacturing Companies in Japan and Overseas)

FY2018 target 1% reduction per production unit from FY2017
FY2018 result 4% reduction per production unit from FY2017

The energy consumption per production unit at both our domestic and overseas manufacturing companies fell 4% from fiscal 2017 as a result of energy saving efforts such as the installation of solar panels and updating equipment, thereby meeting the target.

In fiscal 2018, we set up a system that requires each site to formulate an annual energy saving plan and report monthly progress to the headquarters. We improved and instilled energy-saving habits through what we refer to as "upgrading activity," in which we collected the data reported, provided feedback, and visualized progress once every three months against data from the same period in the previous year.

Moreover, we proactively share information by compiling excellent examples of both energy saving and waste reduction into examples of improvement cases and posting them on the intranet along with a video on how to make improvements. The video highlights in multiple languages various effective efforts for saving more energy such as inspection methods for preventing energy loss due to plant air leaks.

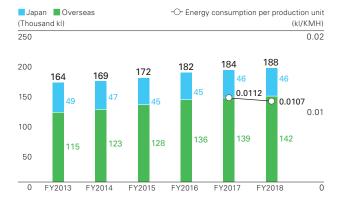


Examples of SWS Group environmental activities

^{*}Production unit

^{*}We switched to absolute value evaluation.

Energy Consumption through Energy Saving (Manufacturing Companies in Japan and Overseas)





Achieving the Goals of Action ECO-22V by Using Clean Energy

Tang Qing

General Manager, Administration Department SEWS-Components Changshu, Ltd. (SEWS-CCS) (China)

To fulfill our social responsibility beyond ensuring legal compliance, we plan and implement environmental protection activities. For example, we installed solar power systems on the roof of the plant and cafeteria, and these have supplied electricity to the plant during the day since the end of April 2019.

Moreover, they have allowed us to turn 17% of the electricity we consume annually into clean energy and reduce our electricity consumption due to the decreased use of air conditioners, as the panels themselves keep the temperature from rising in the plant. We installed a monitor at the entrance of the company to display the power generation status so it can be seen by visitors and remind employees of company efforts to protect the environment.

Value Chain Initiatives

Promotion of Green Procurement

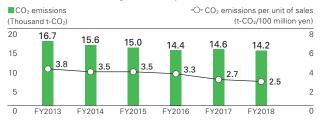
We distribute Green Procurement Guidelines to our suppliers to promote environmental conservation efforts through business activities. In fiscal 2018, all of our domestic suppliers and 85% of our overseas suppliers agreed to follow the guidelines.

In addition, we have established rules concerning the practices of green purchasing of stationery and office supplies as well as equipment used for business to ensure that green products such as Eco Mark and Energy Star Mark products are given preference in purchasing.

Reduction of CO₂ Emissions from Logistics (in Japan)

Emissions of CO_2 from logistics in Japan were reduced by 2.3% from fiscal 2017, indicating the impact of activities to reduce CO_2 emissions in transportation. Also, we shortened the transportation distance and introduced full trailers and numerous modal shift* initiatives, such as ferry transportation, in fiscal 2017 to reduce CO_2 emissions even further.

▶ CO₂ Emissions from Logistics (in Japan)



Glossar

*Switching freight transportation using trucks and other automobiles to railroads and ships with lower environmental impact

Resource Recycling and Control and Reduction of Substances of Concern

Waste Reduction (Global)

FY2018 target

1% reduction per production unit from FY2017

FY2018 result

2.4% reduction per production unit from FY2017

In fiscal 2018, the waste reduction rate per production unit decreased by 2.4% from fiscal 2017 as a result of efforts such as progress management by formulating waste reduction plans and information sharing through examples of waste reduction examples.

▶ Volume of Waste Disposed (Includes Valuable Resources)

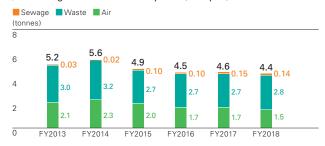


Control and Reduction of Substances of Concern

Toward strengthening the management of substances of concern, we adopted the system of the Sumitomo Electric Industries Group. For our Group companies in Japan, the amount of PRTR*-regulated substances released decreased by 4.3% from the previous year. Substances subject to mandatory reporting included antimony and its compounds, methylnaphthalene, and nickel compounds.

Moreover, in compliance with the Law Concerning Special Measures against PCB Waste, the SWS Group stores PCB-containing devices, provides the required notifications, and follows through with disposal.

▶ PRTR-regulated Substances by Year (in Japan)



Conservation of Water Resources

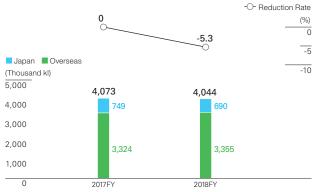
FY2018 target 1% reduction in water use from FY2017

FY2018 result 5.3% reduction in water use from FY2017

Recognizing the importance of water resources as natural capital, the SWS Group conducts a wide range of initiatives to reduce water use at each site, for example by inspecting water pipes once a month and using toilet drainage for flowers on the premises. Through these efforts our water consumption rate decreased by 5.3% in fiscal 2018.

We also conduct a water risk assessment at all SWS Group companies. Using the results, we are working to identify water risks that could affect the continuity of our business

Water Consumption and Reduction Rate



Conservation of Biodiversity

Under the environmental conservation philosophy of the SWS Group, global efforts are being made for conserving biodiversity. SUMI PHILIPPINES WIRING SYSTEMS CORPORATION (SPWS) is working with the environmental group ENRO Bataan to promote the importance of marine conservation through a mangrove reforestation project.

The project, which got started in 2012, celebrated its seventh year in 2018 under the theme of "live for today and plant for tomorrow." About 50 SPWS employees participated in the project and planted roughly 1,500 trees. The local government of Bataan Province, where SPWS operates, also participated and thereby contributed to the ecosystem's conservation.



Glossary

*A mechanism for assessing, collecting, and publicly releasing data about various types of harmful chemicals released into the environment, including source and quantity, and details as to whether or not they have been transferred off-site for treatment with other waste

Environmentally Sound Products

The SWS Group launched the Eco Symbol Mark Certification System (environmentally sound product certification system) in compliance with ISO 14021 in May 2005 as a means for contributing to global environmental preservation through its products. The Eco Symbol Mark Certification Committee, chaired by the Corporate Environmental Management Officer, is responsible for certification, and 74 products have been certified to date, including 10 in fiscal 2018. Nevertheless, the ratio of certified products to sales in fiscal 2018 was 83%, falling short of our target of 90% or higher.

When developing new products or undertaking major design changes, we conduct environmental assessments and register the products as Eco Mind Products. While the registration rate is currently at 97%, our goal is to raise the coverage to 100%. To boost the sales ratio of environmentally sound products as well as the registration rate of Eco Mind Products, we will continue to focus our efforts on environmental protection through our products.

▶ Products Certified as Environmentally Sound in Fiscal 2018



No. 65 Compact and lightweight BCM



No. 67 High-voltage semiconductor relay



No. 69 Motor terminal block



No. 70 Thin copper alloy wire