

## Global Environment

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.

Relevant SDGs



### GLOBAL MESSAGE



### Promoting the use of our continual improvement programs to advance EMS performance

I am responsible for coordinating the SEWS EMS program by ensuring ISO14001 compliance and providing corporate level guidance for the SEWS Continual Improvement programs. One environmental objective I am proud of is the reuse of material in our facilities. At our Edmonton Kentucky location, we installed an alcohol distillation machine and have reclaimed over 47,000 lbs. of flammable liquid since 2013.

Our SEWS EMS and Continual Improvement programs work hand in hand to encourage associates to provide ideas to improve our environmental performance and overall profitability.

| United States of America |

**Wendy Browder** Specialist III, Regulatory Affairs  
Sumitomo Electric Wiring Systems, Inc. (SEWS)

## 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

- 1 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 maintain 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.

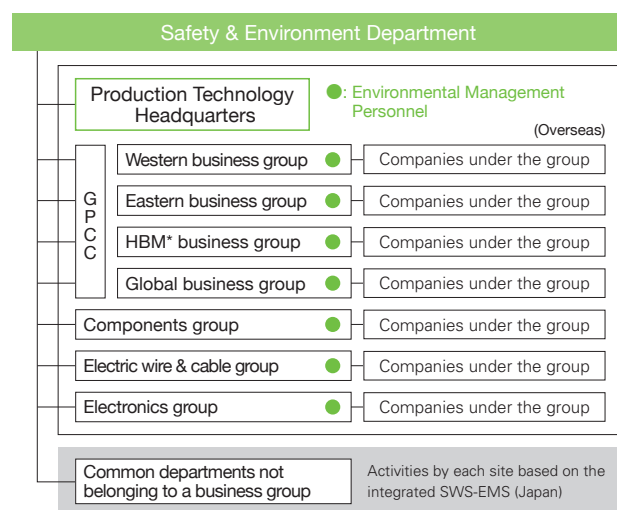
**Environmental Slogan**  
Clean Factory For The Future



### 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 addition, we have successfully made the transition, including at our overseas

Environmental Management System Chart



\*Hybrid Mobility

bases, to the revised ISO 14001:2015. In fiscal 2019, we created a global standard handbook in Japanese, English and Chinese and distributed it to all our sites to ensure compliance with international environmental standards and fully embed them across all levels of the Group.

Working in collaboration with overseas companies, we will continue to expand the scope of environmental assessment items for monitoring the status of compliance with these standards and strive Group-wide to establish an internal audit system that complies with international standards.

### 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 2019 audit found no instances of noncompliance throughout the company.

### Material Balance (in Japan) (FY2019)

INPUT			OUTPUT	
Energy		<div>Offices</div> <div>R&amp;D</div> <div>Product design</div> <div>Production</div> <div>Shipment</div> <div>Resource circulation</div> <div>Raw materials</div> <div>Energy</div> <div>Water</div>	Air	
Purchased electricity	171 GWh		CO <sub>2</sub> emissions	82,000 t-CO <sub>2</sub>
City gas	239,000 m <sup>3</sup>		SF <sub>6</sub> * (CO <sub>2</sub> equivalent)	20 t-CO <sub>2</sub>
LPG	370 t		PRTR-regulated substances	1.4 t
Heavy oil A	236 kℓ		Effluents	
Kerosene oil	265 kℓ		Effluents	655,000 m <sup>3</sup>
Water			PRTR-regulated substances	0.23 t
Water	655,000 m <sup>3</sup>		Disposal	
Water supply	259,000 m <sup>3</sup>		Wastes (exclude valuable resources)	2,600 t
Well water	238,000 m <sup>3</sup>		Material recycling	1,200 t
Industrial water	159,000 m <sup>3</sup>	Thermal recovery	1,200 t	
Raw materials		Landfill incineration	300 t	
Copper, aluminum	29,000 t	PRTR-regulated substances	2.4 t	
Resins	34,000 t	Recycling		
Chemicals		Valuable resources (including copper, copper alloys)	18,000 t	
PRTR-regulated substances	17.8 t			

\*Sulfur hexafluoride

\*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 Application	FY2019			FY2022 Targets
			Targets	Results	Evaluation	
Prevention of global warming (CO <sub>2</sub> reduction)	Reduce CO <sub>2</sub> emissions	Global	Reduce by 0%	Reduced by 15.9%	●	Reduce by 5%*2
	Reduce energy consumption per unit*1	Global	Reduce by 2%	Reduced by 12.0%	●	Reduce by 5%
Promotion of resource saving and recycling	Reduce waste per unit*1	Global	Reduce by 2%	Reduced by 6.5%	●	Reduce by 5%
	Reduce water consumption per unit*1	Global	Reduce by 2%	Reduced by 11.5%	●	Reduce by 5%
Expansion of environmentally sound product range	Increase ratio of environmentally sound products in sales	Japan	84%	83%	△	90%
Zero legal violations and environmental accidents		Global	0	0	●	0

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

\*1: Production unit

\*2: Revised FY2022 targets

## Climate Change Mitigation

### Greenhouse Gas Emissions (Global)

FY2019 target 0% reduction from FY2017

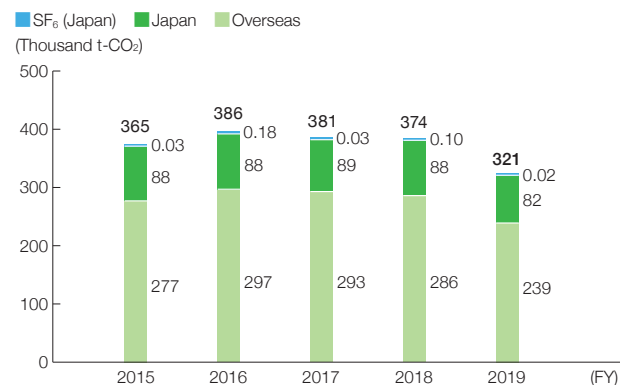
FY2019 result 15.9% reduction from FY2017

The SWS Group acknowledges the urgency of taking action to mitigate climate change and is moving forward in a concerted effort to establish clean factories.

In fiscal 2019, 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 15.9% (321 thousand tons).

In fiscal 2019, we promoted the purchase of renewable electricity in some areas as a measure for reducing emissions. In fiscal 2020, we will consider purchasing it for the entire Group.

### 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 (Global)

FY2019 target 2% reduction per production unit from FY2017

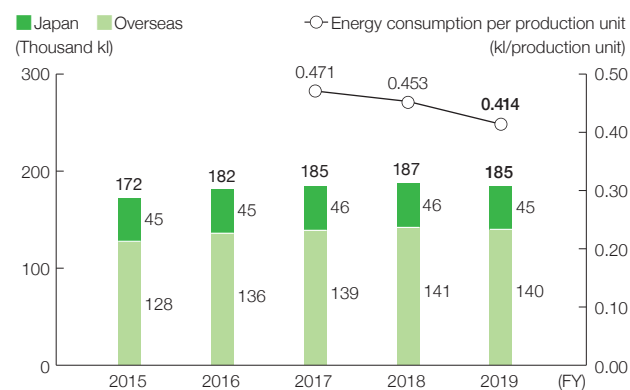
FY2019 result 12.0% reduction per production unit from FY2017

The energy consumption per production unit fell 12% 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

### Energy Consumption through Energy Saving (Global)



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 effective energy-saving efforts such as inspection methods for preventing energy loss due to plant air leaks.

To promote our energy saving efforts, we have trained environmental instructors at manufacturing sites. In fiscal 2019, 175 participants from both Japan and overseas sites learned how to review equipment, such as lighting, air conditioners and capacitors, based on their energy saving plans. They will provide environmental guidance at each site while applying the knowledge they gained from the training.

## Value Chain Initiatives

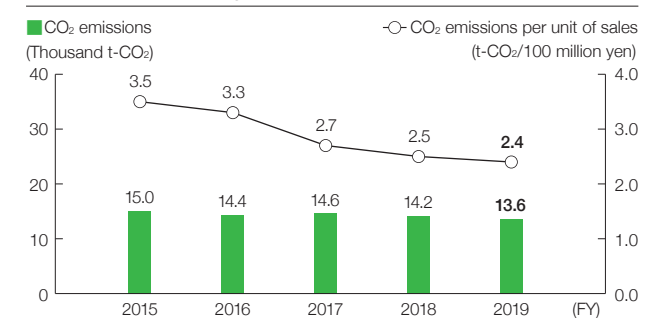
### Promotion of Green Procurement

We distribute Green Procurement Guidelines to our suppliers to promote environmental conservation efforts through business activities. In fiscal 2019, 85% of our domestic suppliers and 66% 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. We are also cooperating with the environmental activities of car manufacturers by understanding their environmental policies.

### Reduction of CO<sub>2</sub> Emissions from Logistics (in Japan)

Emissions of CO<sub>2</sub> from logistics in Japan were reduced by 4.2% from fiscal 2018, indicating the impact of activities to reduce CO<sub>2</sub> emissions in transportation. Moreover, we shortened the transportation distance and introduced full trailers and many additional modal shift\* initiatives such as ferry transportation in fiscal 2017 to further reduce CO<sub>2</sub> emissions.

### CO<sub>2</sub> Emissions from Logistics (in Japan)



### Glossary

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

## VOICE

### Utilizing Solar Power Technology to Save Energy and Reduce CO<sub>2</sub>

In July 2019, we introduced a 3MW solar power system, which generates a monthly average of 300 MWh solar energy, covering about 40% of the total electricity used by the company. This is equivalent to a reduction of 1,113 tonnes of standard carbon, 2,775 tonnes of CO<sub>2</sub> emissions and planting 150,000 trees annually. The solar panel system also allowed us to reduce the electricity required for air conditioners because the solar panels themselves blocked direct sunlight. We have an exhibit of a model solar power system and real-time data to raise environmental awareness and help all our visitors and employees understand the impact of the project.

As a member of the SWS Group, we will consistently explore new projects and promote the rational use of natural energy sources to achieve our environmental goals.



**Zhang Tao**  
Manager, Human Resources and  
General Affairs Department  
Sumidenso Mediatech Suzhou Co.,  
Ltd. (SDM-S)

## Resource Recycling and Control and Reduction of Substances of Concern

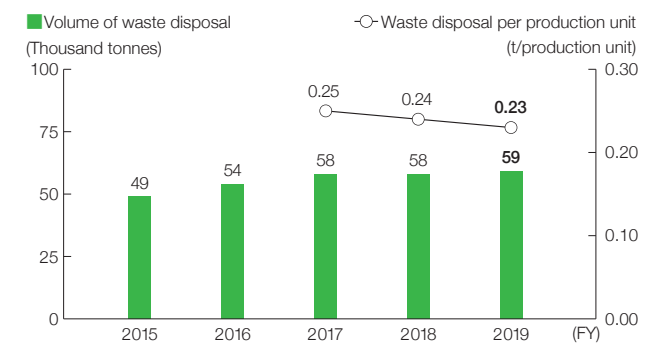
### Waste Reduction (Global)

FY2019 target 2% reduction per production unit from FY2017

FY2019 result 6.5% reduction per production unit from FY2017

In fiscal 2019, the waste reduction rate per production unit decreased by 6.5% 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. We will incorporate these examples into the plan for the next year.

### Volume of Waste Disposed (Global)



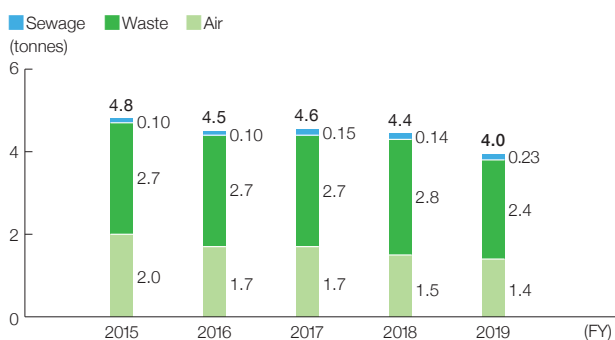
\*For improved accuracy, the values of the previous fiscal year have been revised.

## 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 9.1% from fiscal 2018. 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 (Global)

**FY2019 target** 2% reduction per production unit from FY2017

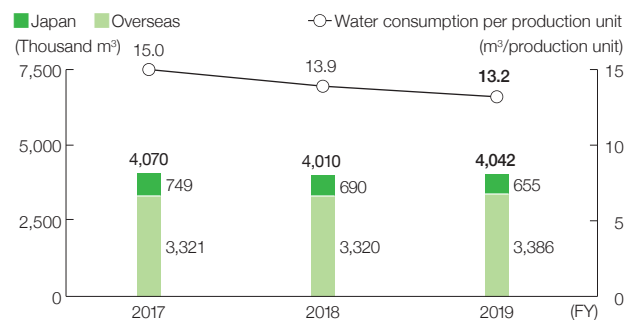
**FY2019 result** 11.5% reduction per production unit from FY2017

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 of each company, the Group's water consumption rate decreased by 11.5% in fiscal 2019 compared to fiscal 2017.

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 (Global)



\*For improved accuracy, the values of the previous fiscal year have been revised.

## 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, contributing to the conservation of the ecosystem.

### 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 80 products have been certified to date, including 6 in fiscal 2019. Nevertheless, the ratio of certified products to sales in fiscal 2019 was 83%, which fell short of our target of at least 84%.

When developing new products or undertaking major design changes, we conduct environmental assessments and register the products as Eco Mind Products. Currently, the registration rate is at 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 2019

