

Eco-friendly Business Activities

Environmental Management

Why SUMCO Addresses Environmental Issues

From energy-saving initiatives to curbing greenhouse gas emissions and reducing waste, lowering the environmental impact by the business activities of companies is a pressing task to ensure that the global environment is maintained and protected.

To ensure that the irreplaceable global environment is passed on to future generations, the SUMCO Group has established an environmental management system. We have obtained ISO14001 certification for all of our plants, and pursue initiatives aimed at protecting the environment.

SUMCO Environmental Policies

1. Basic Environmental Philosophy

As a manufacturer of high-quality silicon wafers for semiconductors and of quartz crucibles, SUMCO has established the following action guidelines and is committed to self-initiated and sustained environmental conservation activities to pass on the Earth's irreplaceable environment to future generations.

2. Environmental Action Guidelines

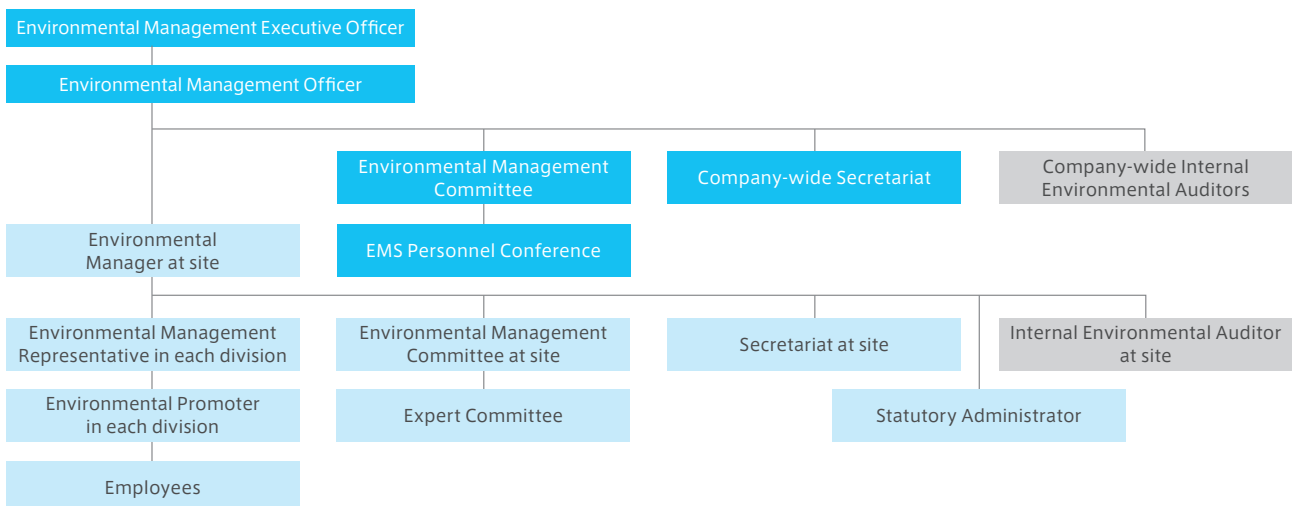
- 1 Through our business activities, we shall pursue activities with an emphasis on the following points.
 - ① We shall act to conserve electricity and other energies consumed by our business activities, thereby curbing emissions of greenhouse gases.
 - ② We shall strive to reduce waste and increase recycling and reuse rates.
 - ③ We shall strive to reduce chemical substances used in our business activities.
 - ④ We shall thoroughly manage the harmful chemical substances and waste, thereby reducing the risks to the environment.
- 2 We shall abide by environment-related laws and regulations, bylaws, and other agreed requirements.
- 3 We shall strive to prevent environmental pollution in our entire business activities and undertake efforts to protect the global environment and coexist in harmony with local communities.
- 4 We shall define environmental objectives, and by periodically reviewing these objectives and targets, shall promote continuous improvement of our environmental management system.

January 1, 2017

Environmental Management Structure

The environmental management officer and the environmental managers at each site report to the environmental management executive officer and act in accordance with their respective roles, responsibilities and authorities. Thoroughness of instructions and information sharing are ensured at meetings of the company-wide Environmental Management Committee and the Environmental Management Committee at each site, both of which are convened periodically.

Environmental Management Structure



Environmental Objectives

The SUMCO Group sets environmental objectives based on its Environmental Policies and the results of environmental impact assessments that are conducted periodically. At each of our manufacturing sites, we implement initiatives to reduce environmental impact and improve the environment in accordance with these objectives, such as reducing CO₂ emissions, the usage of chemical substances, the generation of industrial waste and water consumption. The previous year's performance serves as the base value for these environmental objectives. Further, we verify our performance every six months and review the target figures as necessary.

Environmental Objectives (Fiscal Year 2018 to Fiscal Year 2021) and Fiscal Year 2018 Results

Base : Performance in the previous year	2018		2019	2020	2021
	Targets	Results	Targets	Targets	Targets
Reduction of CO ₂ emissions	Reduction by 0.9%	Reduction by 1.1%	Reduction by 0.7%	Reduction by 0.7%	Reduction by 0.7%
Reduction of chemical substance use	Reduction by 0.9%	Reduction by 1.0%	Reduction by 1.6%	Reduction by 1.6%	Reduction by 1.6%
Reduction of industrial waste	Reduction by 0.6%	Reduction by 0.9%	Reduction by 2.6%	Reduction by 2.6%	Reduction by 2.6%
Reduction of water consumption	Reduction by 0.6%	Reduction by 0.7%	Reduction by 0.3%	Reduction by 0.3%	Reduction by 0.3%

Environmental Education

Education Targeted at Suppliers to Prevent Environmental Accidents

The SUMCO Group [Japan] provides environmental education to supplier of chemicals and other products and to industrial waste treatment firms to ensure the prevention of environmental accidents and compliance with laws and ordinances.

Contents of Education

1. Requests for vehicle inspections to prevent fuel, oil and other substances from leaking
2. The importance of SUMCO personnel being present at the time of delivery or collection, and request that their instructions be followed.
3. Request for inspection of industrial waste collection vehicles, particularly to prevent leakage or dripping of sludge, liquid waste, etc.
4. Introduction to actual environmental accidents that occurred at the Company in the past

Suppliers receiving environmental education on the prevention of environmental accidents



Compliance with Environmental Legislation

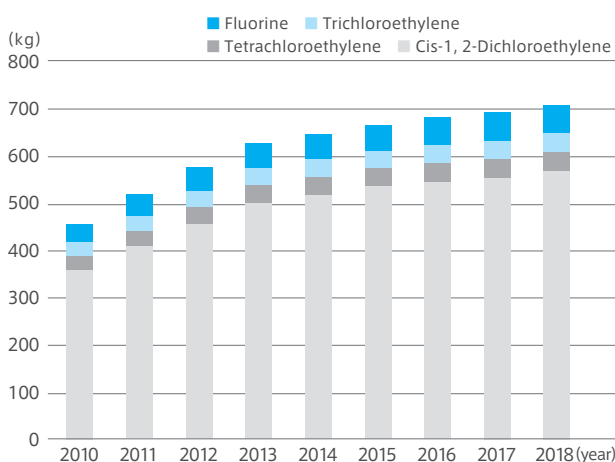
The SUMCO Group identifies the requirements of laws, regulations and agreements and verifies compliance.

We also ensure compliance with overseas chemical substance regulations, namely the Restriction on Hazardous Substances (RoHS) Directive and Regulation on Registration, Evaluation, Authorization and Restriction of Chemical Substances (REACH).

Progress of Soil and Groundwater Contamination Countermeasures at the Noda Office

In a voluntary survey implemented at the Noda Office in 2005, it was found that amounts of volatile organic compounds (VOC) and fluorine exceeded the soil and groundwater environmental standard values. We have been pursuing countermeasures in consultation with relevant parties. At present, we are working to prevent the spread of and recover contaminated substances by using a pumping well set up near the boundary of the plant grounds.

Accumulated Amount of Contaminated Substances Recovered Annually from Groundwater at the Noda Office



Environmental Audits

Through the SUMCO Group, internal environmental audits are conducted by internal auditors, while environmental management system audits are implemented by an outside review organization.

Internal Environmental Audit

Internal environmental audits are annually conducted by internal auditors for all organizations in the SUMCO Group subject to the Company's environmental management system. The results are reported to the environmental management executive officer and reflected in the following year's activities to enable continuous improvement of the environmental management system.

Environmental Management System Audit

The SUMCO Group is subject to regular audits conducted every year and a renewal audit conducted every three years by an external independent auditor.