

Key Sustainability Issue: Energy-saving, resource-saving and the reduction of the environmental impact Targets and Results

The FY2022 targets and results and FY2023 targets for environmental protection and management of chemical substances are as listed below.

Item	Priority Issues (Target)	Implementation Status for FY2022	Evaluation	Planned Implementation Items for FY2023
Management System	Continuous improvement and implementation of the environmental management system	Implement plans and achieve goals without fail through activities leveled throughout the year Conduct substantial internal audits Appropriate responses to the findings of head office audits and plant internal audits, and reliable follow-up	©	Formulation and steady implementation of an action plan throughout the year (ongoing) Conduct substantial internal audits (ongoing) Appropriate responses to the findings of head office audits and plant internal audits, and reliable follow-up (ongoing)
	Qualitative improvement of environmental safety audits	Implementation of appropriate follow-up to the findings of the head office's environmental safety audits Effective and proper implementation of environmental safety audits at affiliated companies in the plant area	0	Implementation of appropriate follow-up to the findings of the head office's environmental safety audits (ongoing) Effective and proper implementation of environmental safety audits at affiliated companies in the plant area (ongoing)
Environmental conservation	1. Zero environmental accidents	Achieved target of zero environmental accidents	0	Zero environmental accidents
	Thorough environmental management	Continued appropriate compliance with environmental laws and regulations	0	Appropriate compliance with environmental laws and regulations (ongoing)
	3. Promotion of energy savings (Reduce energy consumption by an average annual rate of 1% per unit production)	The Shin-Etsu Group: Reduced at an annualized rate of 0.7% Shin-Etsu Chemical: Reduced at an annualized rate of 1.2%	Δ	Reduce energy consumption at an anannualizesd rate of 1% in production intensity and formulation and promotion of an activity plan for achievement
	4. Reducing greenhouse gas emissions (Intensity reduction to 54% of 1990 level by fiscal 2025)	The Group reduced to 54.2% and the Company 46.8% compared to fiscal 1990 Periodic inspection based on the Act on Rational Use and Proper Management of Fluorocarbons and reporting to the national government on the amount of leakage calculated	0	Reduction to 45% of 1990 level in production intensity by fiscal 2025 and formulation and promotion of an activity plan for achievement Periodic inspection based on the Act on Rational Use and Proper Management of Fluorocarbons and reporting to the national government on the amount of leakage calculated (ongoing)
	5. Reduce waste (Achieve zero waste emissions (waste to landfill ratio to 1% or less))	Consolidated in Japan: Landfill waste to total waste ratio of 1.05% Shin-Etsu Chemical: Landfill waste to total waste ratio of 1.40%	0	Promote achievement of zero emissions (waste generation to landfill ratio to 1% or less), and formulation and promotion of an activity plan for achievement Promotion of waste generation in production intensity, and formulation and promotion of an activity plan for achievement
	6. Reduced emissions of substances causing water pollution or air pollution (Reduction in intensity at annualized rate of 1%)	Reduced at an annualized rate of 4.9% for BOD¹ Reduced at an annualized rate of 30.0% for soot Reduced at an annualized rate of 5.6% for SOX Regular review and strict compliance with specific facility using hazardous substances pertaining to the Water Quality Pollution Control Act and installation standards for designated storage facilities Promotion of separation of process wastewater and rainwater discharged (including cooling water) and the laying of pipes installed in the rainwater drainage way on the ground	0	Regular review and strict compliance with specific facility using hazardous substances pertaining to the Water Quality Pollution Control Act and installation standards for designated storage facilities (ongoing) Promotion of separation of process wastewater and rainwater discharged (including cooling water) and the laying of pipes installed in the rainwater drainage way on the ground (ongoing)
	7. Reduction in water withdrawals (Reduction in intensity at an annualized rate of 1%)	Consolidated: reduced at an annualized rate of 16.7% Shin-Etsu Chemical: reduced at an annualized rate of 9.8%	0	Reduction in production intensity at an annualized rate of 1% and formulation and promotion of an activity plan for achievement Plan and implement measures for improving recycling water ratio
Chemical substance management	Thorough new chemical substance management	Thorough management of permitted production volumes (confirmed) and production results Communicated reporting of harmful substance information, etc., at the time of acquisition	0	Thorough management of permitted production volumes (confirmed) and production results (ongoing) Communicated reporting of harmful substance information, etc., at the time of acquisition (ongoing)
	Compliance with legal and other requirements for chemical substance control	Responded to revisions and strict compliance with the Chemical Substances Control Law², Industrial Safety and Health Act, PRTR Law³, and Poisonous and Deleterious Substances Control Act Strict compliance with overseas laws and regulations Implement control of PCB waste and dispose required by the deadline (Deadline: 2022)	©	Respond to revisions and strict compliance with Chemical Substances Control Law, Industrial Safety and Health Act, PRTR Law, and Poisonous and Deleterious Substances Control Act (ongoing) Compliance with overseas laws and regulations (ongoing) Appropriate treatment of PCB waste (High-concentration JESCO treatment, Deadline: 2022)
	3. Information disclosure on the harmfulness of chemical substances	Information disclosure and awareness raising of substances handled by contractors and subcontractors	0	Making sure of well-known situations and information provision related to substances handled by contractors and subcontractors (ongoing)

1 BOD (Biochemical Oxygen Demand)

Biochemical oxygen consumption. The amount of oxygen required when decomposing contaminants in the water by microorganisms. This indicates the degree of water pollution.

2 Chemical Substances Control Law

Short for the "Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc." A law intended to prevent environmental pollution by chemical substances that can be harmful to human health or to ecosystems.

Short for the "Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof." A law intended to promote improved self-directed control of chemical substances by business operators, in order to prevent the risk of damage to the environment.

- A measure calculated from the production volume of a reference product. * Average annual rate for implementation
- Average annual reduction rate from FY 2019 to FY 2022
- * Evaluation standards
- @: Goal achieved $\bigcirc:$ Goal basically achieved $\triangle:$ 50% achieved $\times:$ Far from achieved

Shin-Etsu Chemical Co., Ltd.