

The FY2018 targets and results and FY2019 targets for environmental protection and management of chemical substances are as listed below.

Item	Priority Issues (Target)	Implementation Status for Fiscal 2018	Evaluation	Planned Implementation Items for Fiscal 2019
Management System	1. Continuous improvement and implementation of the environmental management system	<ul style="list-style-type: none"> Set qualitative plans to meet environmental challenges Implement plans and achieve goals without fail through activities leveled throughout the year Conduct substantial internal audits 	◎	<ul style="list-style-type: none"> Set qualitative plans to meet environmental challenges (ongoing) Implement plans and achieve goals without fail through activities leveled throughout the year (ongoing) Conduct substantial internal audits (ongoing)
	2. Qualitative improvement of environmental safety audits	<ul style="list-style-type: none"> Appropriate follow-up on the matters pointed out during environmental safety audits Qualitative improvement of environmental safety audits for affiliated companies at the plant area Active involvement at overseas manufacturing bases through guidance and auditing 	◎	<ul style="list-style-type: none"> Appropriate follow-up on the matters pointed out during environmental safety audits Qualitative improvement of environmental safety audits for affiliated companies at the plant area Active involvement at overseas manufacturing bases through guidance and auditing
Environmental conservation	1. Zero environmental accidents	<ul style="list-style-type: none"> Achieved target of zero environmental accidents 	◎	<ul style="list-style-type: none"> Zero environmental accidents
	2. Thorough environmental management	<ul style="list-style-type: none"> Continued appropriate compliance with environmental laws and regulations 	◎	<ul style="list-style-type: none"> 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)	<ul style="list-style-type: none"> The Shin-Etsu Group: Reduced by 2.2% annually on average Shin-Etsu Chemical: Reduced by 3.7% annually on average 	◎	<ul style="list-style-type: none"> Reduce energy consumption by an average annual rate of 1% per unit production
	4. Reducing greenhouse gas emissions (Intensity reduction to 54% of 1990 level by fiscal 2025)	<ul style="list-style-type: none"> The Group reduced to 52.8% and the Company 47.9% 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 	○	<ul style="list-style-type: none"> Reduction to 45% of 1990 level in intensity by fiscal 2025 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))	<ul style="list-style-type: none"> The Shin-Etsu Group: Landfill waste to total waste ratio of 1.54% Shin-Etsu Chemical: Landfill waste to total waste ratio of 1.54% 	△	<ul style="list-style-type: none"> Promote achievement of zero waste emissions (waste to landfill ratio to 1% or less) Promotion of waste generation reduction through intensity unit
	6. Reduced emissions of substances causing water pollution or air pollution (Reduction in intensity at annualized rate of 1%)	<ul style="list-style-type: none"> Reduced at an annualized rate of 1.4% for BOD¹ Increased at an annualized rate of 23.0% for soot Reduced at an annualized rate of 9.9% 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 	△	<ul style="list-style-type: none"> 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%)	<ul style="list-style-type: none"> The Shin-Etsu Group: reduced at an annualized rate of 6.6% Shin-Etsu Chemical: reduced at an annualized rate of 7.1% 	◎	<ul style="list-style-type: none"> Reduction in intensity at an annualized rate of 1% Plan and implement measures for improving recycling water ratio
Chemical substance management	1. Thorough new chemical substance management	<ul style="list-style-type: none"> Thorough management of permitted production volumes (confirmed) and production results Communicated reporting of harmful substance information, etc., at the time of acquisition 	◎	<ul style="list-style-type: none"> Thorough management of permitted production volumes (confirmed) and production results (ongoing) Communicated reporting of harmful substance information, etc., at the time of acquisition (ongoing)
	2. Compliance with legal and other requirements for chemical substance control	<ul style="list-style-type: none"> 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: 2020) 	◎	<ul style="list-style-type: none"> 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) Implement control of PCB waste and dispose required by the deadline (Deadline: 2022)
	3. Information disclosure on the harmfulness of chemical substances	<ul style="list-style-type: none"> Information disclosure and awareness raising of substances handled by contractors and subcontractors 	○	<ul style="list-style-type: none"> Confirmation 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.

3 PRTR Law

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.

* Intensity unit

A measure calculated from the production volume of a reference product.

* Average annual rate for implementation

Average annual reduction rate from fiscal 2015 to fiscal 2018

* Evaluation standards

◎: Goal achieved ○: Goal basically achieved △: 50% achieved ×: Far from achieved