

Environmental Report

Environmental Management System

Environmental policy of the Group of Soshin Electric companies

1. Compliance with legislation, pacts, agreements with customers and voluntary standards
2. Identification of environmental objectives and organized continuous promotion of activities with local communities to reduce environmental loads
3. Development, design, production and marketing of environmentally-friendly products
4. Implementation of preventive measures and monitoring of environmental pollution
5. Continuous encouragement of education, training and enlightenment activities to raise awareness of the roles and responsibilities of employees, as well as all other people involved in our business activities

◆ System of promoting environmental preservation activities

Decisions on policies and tactics of the Group of Soshin Electric companies regarding environmental preservation will be made by the “Environmental Committee” which the Director responsible for environmental matters chairs. The policies and tactics decided will be put in action across the company via factory managers, the location manager and the managers responsible for environmental matters for each site.

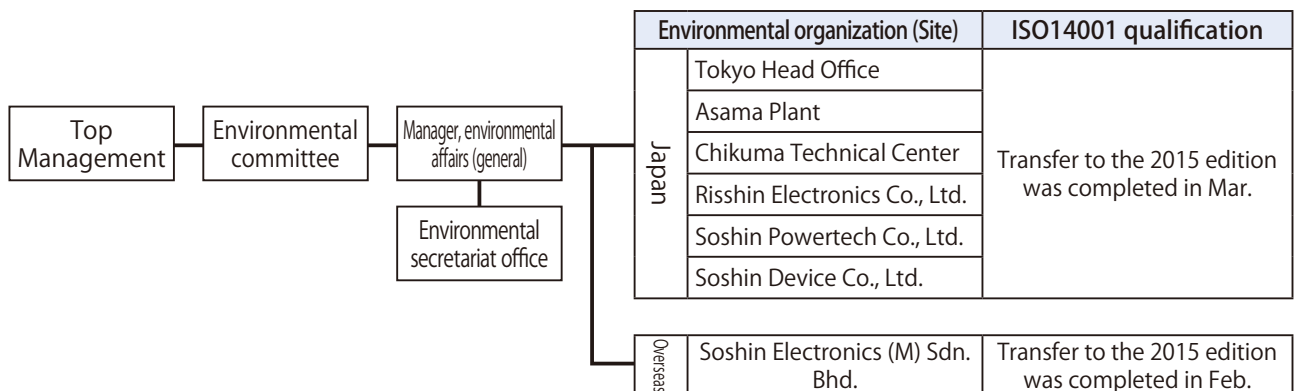
Activities for which the environmental organization is responsible include a monthly environmental meeting, as well as the Environmental Committee held semi-annually. These meetings are to control the progress toward the targeted amounts of CO₂ emissions and industrial waste discharged, exchange information on the environment and continue the promotion of the environment preservation activities.

◆ Qualification for ISO14001 and environmental audits

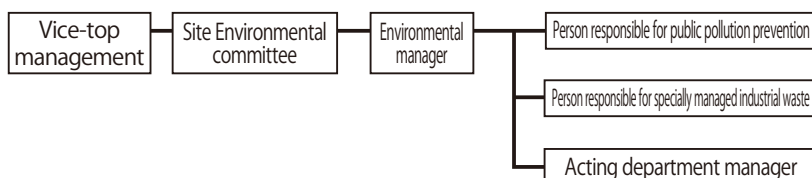
The Group of Soshin Electric companies successfully transferred the qualification for ISO14001, the international environmental standards, to the 2015 edition in fiscal 2017.

Our environmental audit is comprised of audits conducted by an external qualifying organization, environmental assessments by our Environment Control Office and internal environmental audits by the execution department. (The number of internal environmental auditors: 175)

【Environmental preservation organization】



【Site-specific environmental preservation organization】



Audit scene by the ISO14001 qualification organization

Environmental Report

Outline of Environmental Preservation Activities

It reduces a climate change and the influence.



We, the Group of Soshin Electric companies, have been trying autonomously to preserve the environment by setting environmental objectives and targets to accomplish the objectives.

◆ Activity report for 2017 and targets for 2018

【CO₂ emission amount】

We achieved the target for reduction of CO₂ emissions which was part of 2017 activities for environmental load reduction.

As an approach to CO₂ emission reduction continuing from 2017, we will study a step-by-step change over to energy-saving facilities including lighting with LEDs in 2018.

Action will continue for productivity improvement, efforts to reduce losses and loads of facility operations and elimination of wastes through energy-saving patrol.

【Amount of discharged industrial wastes】

Fiscal 2017 was a year when industrial wastes increased due to the full-fledged metal processing line for industrial products.

In fiscal 2018, we will try to improve the raw material recovery rate and reduce such wastes.

Continued achievement of zero emissions is another target.

【Preservation of biodiversity】

Soshin Electric is in support of PICCHIO, an NPO, based in Karuizawa, Nagano Prefecture, which aims for preservation of the local ecological system so that humans and wildlife can coexist.

【Enhanced control of contained chemical substances】

Restriction and control of substances usable for products are getting increasingly stricter, as evidenced by the regulations related to phthalic acid esters required by the RoHS directive and year-by-year additions by REACH Regulations of substances to be controlled.

We control such chemical substances in line with the latest regulations based on the Soshin Electric Co. Green Procurement Guidelines. To control chemical substances contained in product component parts, we audit suppliers for their environmental quality to ensure adherence to the Green Procurement activity.

【Environmental complaints and incidents】

In fiscal 2017, we had no complaints or incidents related to environmental matters. We will continue our activities for local environment preservation to prevent any environmental matter-related complaints or incidents from happening in fiscal 2018.

◆ Main environmental preservation activities

Items	Achievements in 2017			Targets for 2018
	Targets	Achievements	Self-evaluations	
Environmental management system (ISO14001)	<ul style="list-style-type: none"> We will continue environmental education and enlightenment activities. We will provide each department and internal environmental auditor with training to get ourselves prepared for a qualification assessment for the successful transfer of the Environmental Management System from the 2015 edition to the 2017 edition. We will comply with environmental legislation. 	<ul style="list-style-type: none"> The environmental policy was disseminated and education of environmental targets provided. We provided environmental education based on the 2015 edition of the Environmental Management System and the transfer was successfully completed. We reviewed a list of environmental legislation and regulations to ensure that our environmental assessment covered every item. 	○	<ul style="list-style-type: none"> We will continue environmental education and enlightenment activities. We will operate the 2015 Environmental Management System in an ensured manner to raise the level of expertise of each department and internal auditor. We will comply with environmental legislation.
Prevention of global warming	<ul style="list-style-type: none"> We will reduce domestic CO₂ emissions to a maximum of 7,098t. (With the CO₂ emission amount divided by sales amount no greater than 80/100 million yen) 	<ul style="list-style-type: none"> We achieved the target for domestic CO₂ emissions of 6,827t for fiscal 2017 against 6,758 tons for fiscal 2016. (The CO₂ emission amount divided by the sales amount registered roughly 78/100 million yen and achieved the target.) 	○	<ul style="list-style-type: none"> We will keep the domestic CO₂ emissions at 6,989t, max. (with the CO₂ emission amount divided by sales amount maintained no greater than 74t/100 million yen).
Waste management activities	<ul style="list-style-type: none"> We will keep the amount of discharged wastes at no greater than 240t (with zero emissions continuing). 	<ul style="list-style-type: none"> The wastes discharged in fiscal 2017 was 247 tons against 190t in fiscal 2016 and we failed to achieve the target. We continued zero emissions. 	×	<ul style="list-style-type: none"> We will keep the amount of discharged wastes at no greater than 239t. (We will continue zero emissions.)
Activities for biodiversity	<ul style="list-style-type: none"> We will support activities of PICCHIO, an NPO. 	<ul style="list-style-type: none"> We supported activities of PICCHIO, an NPO. 	○	<ul style="list-style-type: none"> We will continue to support PICCHIO, an NPO. We will run an internal lecture about biodiversity and disseminate awareness of the importance of its activities.
Adequate control of chemicals	<ul style="list-style-type: none"> We will continue to inspect goods procured from overseas sources with an X-ray fluorescence spectrometer, survey such sources' environmental quality and comply with the Green Procurement Guidelines. 	<ul style="list-style-type: none"> There have been no abnormalities with goods procured from overseas sources, nor were any irregularities found in the quality of goods from these sources. Thus, we complied with the Green Procurement Guidelines. 	○	<ul style="list-style-type: none"> We will continue to inspect goods procured from overseas sources with an X-ray fluorescence spectrometer, survey such sources' environmental quality and comply with the Green Procurement Guidelines.
Reduction of hazardous chemicals	<ul style="list-style-type: none"> We will reduce the use of hazardous chemicals (PCB and lead). 	<ul style="list-style-type: none"> We discarded part of equipment that used low concentration PCB. We redesigned part of lead-containing products to make them lead-free. 	○	<ul style="list-style-type: none"> We will reduce the use of hazardous substances including PCB and lead.

Environmental Report

Environmental Accounting

◆ Environment preservation costs and economical effects resulting from environment preservation measures

The Group of Soshin Electric companies implemented environmental accounting. Environmental accounting is for the purpose of gaining a quantitative grasp of the effectiveness of investment and expenses made for environment preservation.

The investment amount by the Group of Soshin Electric companies for replacing equipment with energy-saving alternatives totaled 26.04 million yen in the fiscal 2017 global environmental preservation costs.

Economical effects in fiscal 2017 were an increase of 0.76 million yen over fiscal 2016. (The expected annual effect is 1.18 million yen.)

Effective implementation of environmental preservation activities enabled a reduction of 23.66 million yen in expense, lower by 2.23 million yen than last year.

Promotion of waste recycling and revision to valuable-resource prices assisted the resource recycling effects to rise by 24.77 million yen.

The economical effects in fiscal 2017 totaled 55.24 million yen.

Total of actual achievement: in fiscal 2017 (Apr. 1, 2017 to Mar. 31, 2018)

*Generated in observance of the guidelines prepared by the Ministry of the Environment

Unit: 10,000 yen

Categories	Major measures	Investment amounts		Expenses		Economical effects	
		Fiscal 2016	Fiscal 2017	Fiscal 2016	Fiscal 2017	Fiscal 2016	Fiscal 2017
Pollution prevention	Costs for pollution prevention	0	0	244	174	-	-
Global environmental preservation	Costs for CO ₂ reduction such as introduction of energy saving equipment	103	2,604	156	144	7453	529
Resource recycling	Costs for effective use of resources, including water saving, and reduction, recycling, processing and disposition of wastes	0	0	1,028	988	2,518	4,995
Upstream / downstream	Costs for controlling environmental burdens that arise in the business upstream and downstream	0	0	0	0	-	-
Administration	Costs for environment preservation efforts such as acquisition and maintenance of ISO14001 qualification, provision of environmental education and monitoring environmental impact	0	0	757	771	-	-
R&D	Costs for R&D and planning of environmental impact reduction efforts and for R&D and study of product contributing to environment preservation	0	0	0	0	-	-
Social activities	Costs for preservation of nature, greening and support for the local environment, public announcements of environmental information and advertisements for environmental matters	0	0	404	289	-	-
Environmental remediation	Costs for improvement of contaminated soils and recovery of destroyed nature	0	0	0	0	-	-
Total		103	2,604	2,589	2,366	2,971	5,524

Mass Balance (Inputs and outputs)

It realizes management which was considered to environment of chemicals and waste.

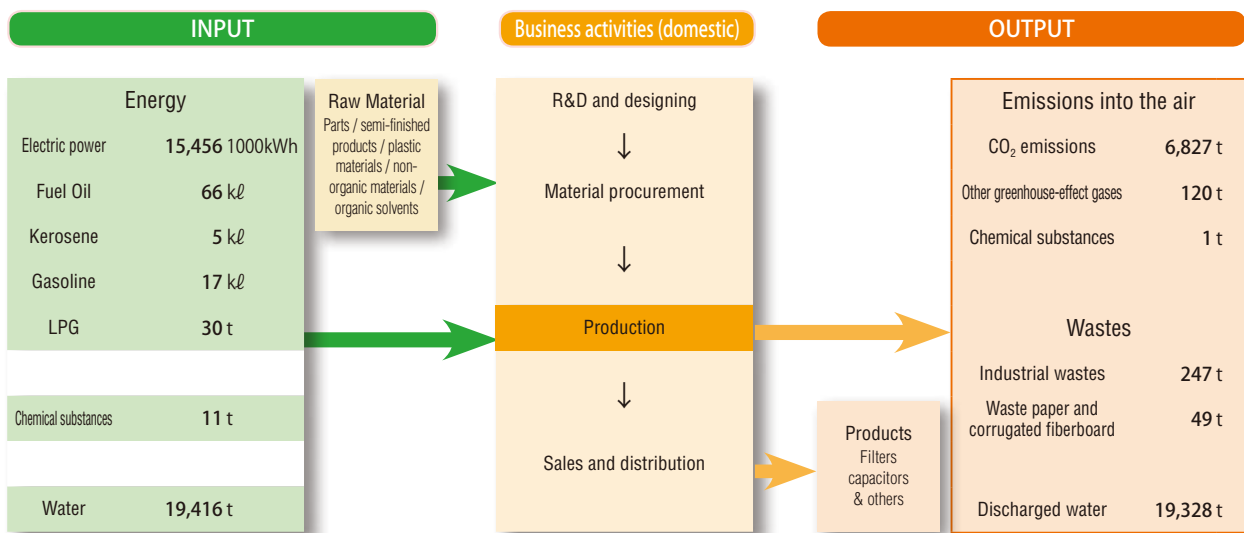


This section describes resources and energy inputs for domestic business activities, and products, wastes and other discharged items (outputs) that resulted from domestic business activities of the Group of Soshin Electric companies in fiscal 2017.

Outline of inputs and outputs

Inputs comprise parts, raw materials, energy, chemical substances and water necessary for business activities while output comprise product, CO₂ emissions, water and wastes developed incidentally to production activities.

The Group of Soshin Electric companies strives to reduce as much as possible inputs from the aspects of energy saving to prevent the exhaustion of natural resources. This is an attempt to reduce outputs other than products.



Management of Contained Chemical Substances

Survey of contained chemical substances

In fiscal 2017, the Group of Soshin Electric companies completely avoided the use 4 phthalic acids, which RoHS will prohibit from use starting in 2019.

Introduction of chemSHERPA is another one of our approaches for quicker response to customers' requests for survey of chemical substances contained in products.

*ChemSHERPA

A scheme which is usable throughout supply chains for communication of information on the chemical substances contained in products.

Green procurement

The Group of Soshin Electric companies has proceeded with procurement of parts and materials with the minimum possible environmental impact by conducting a survey of suppliers' environmental quality and making sure that chemical substances were handled adequately.

Requests have been made to suppliers asking them to take necessary action to meet the requirements in the Green Procurement Guidelines.

Analysis with an X-ray fluorescence spectrometer

Parts and materials that possibly contain prohibited substances will be subjected to screening with an X-ray fluorescence spectrometer to confirm that they are free from prohibited substances.

Environmental Report

A pproach to Reduction of Environmental Loads

It reduces climate change and influence.



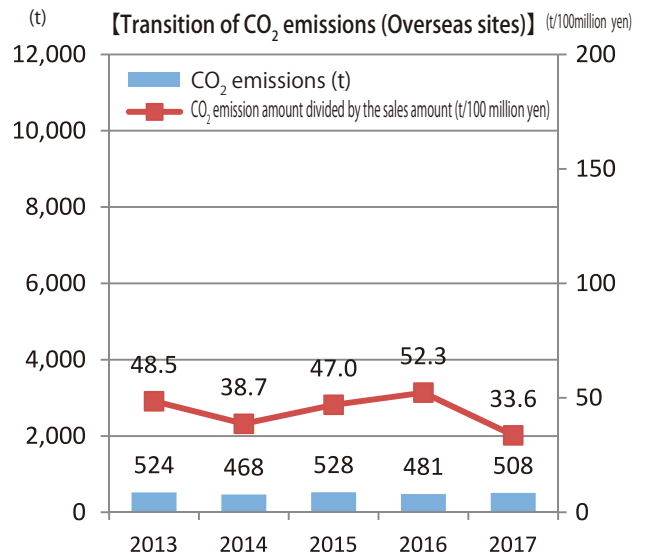
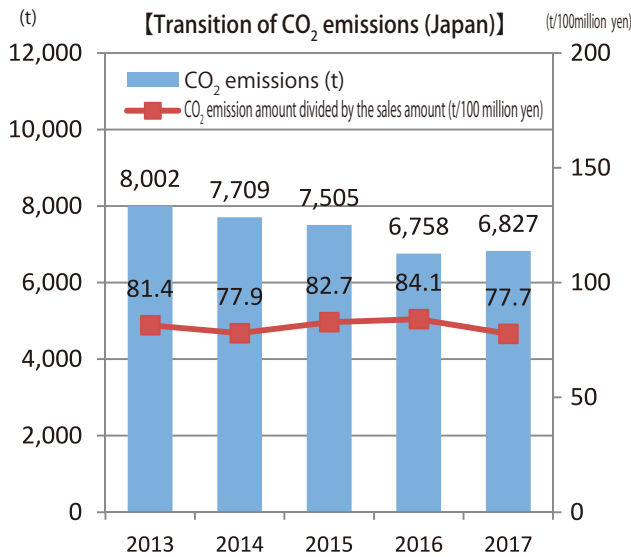
To prevent global warming, we tackled reduction of CO₂ emissions as well as energy saving.

Domestic CO₂ emissions in fiscal 2017 registered 6,827t due to an increase in the sales of noise-related products and thick-film PCBs with the CO₂ emission amount divided by the sales amount being 78t/100 million yen.

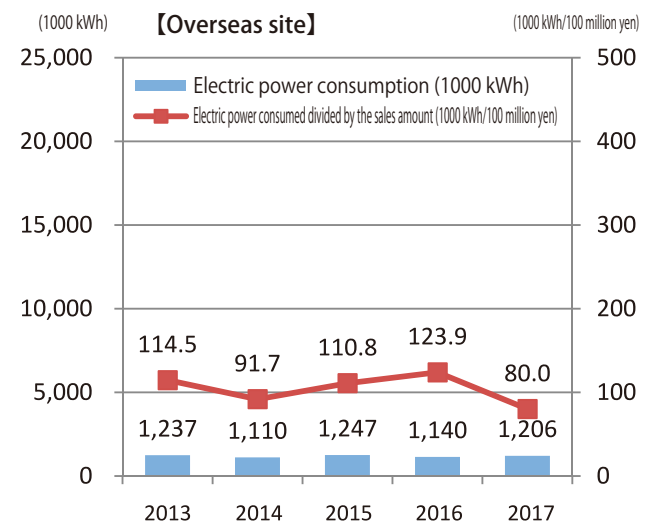
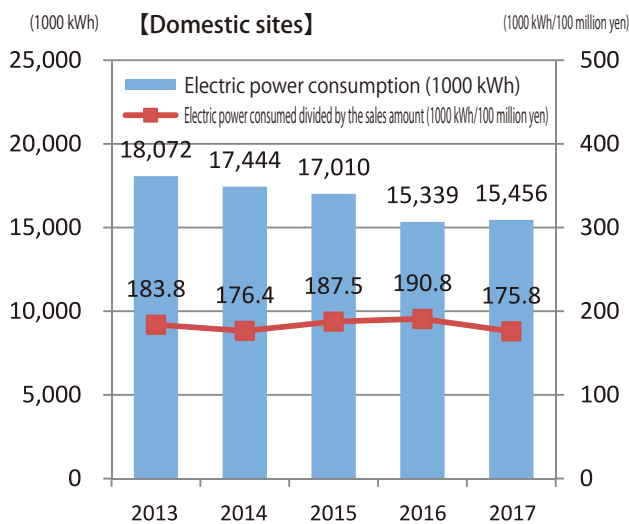
In fiscal 2017, CO₂ emissions at the overseas sites were 508t and the CO₂ emission amount divided by the sales amount was 34t/100 million yen.

Our target for CO₂ emissions for fiscal 2018 is no greater than 6,989t (with the CO₂ emission amount divided by the sales amount of 74t/100 million yen).

◆ CO₂ emissions



Ref. Electric power consumption



E xamples of Energy Saving Measures

(1) Replacement of transformers by Soshin Powertec

Soshin Powertec replaced transformers with a high efficiency type, which enabled the power conversion rate to rise and the electric power loss to decrease, resulting in a reduction of CO₂ by 51% (8t) per annum.

Before replacement



After replacement



(2) Replacement of gas heat-pump type air conditioners at the Asama plant

The Asama Plant replaced electric package type air conditioners and heavy-oil boilers with high efficiency gas heat-pump type air conditioners (resulting in an approx. 62% reduction of CO₂ per annum).

Before replacement

Electric package type air conditioners



Heavy-oil boiler



After replacement

Gas heat-pump type air conditioner



Use discontinued

Environmental Report

A pproach to Resource Utilization

The degradation prevention biodiversity loss prevention by the forest management, desertification handling, the land



For preservation of the environment, the Group of Soshin Electric companies considers it imperative to make our society recycling-oriented. For this, we will promote “reduce”, “reuse” and “recycle” (3Rs) regarding the waste discharged as a result of business activities as resources.

Of 247t discharged in fiscal 2017, 150t was reused and 97t recycled with zero emissions continuing. Our target for the total discharge amount for fiscal 2018 is 239t, max.

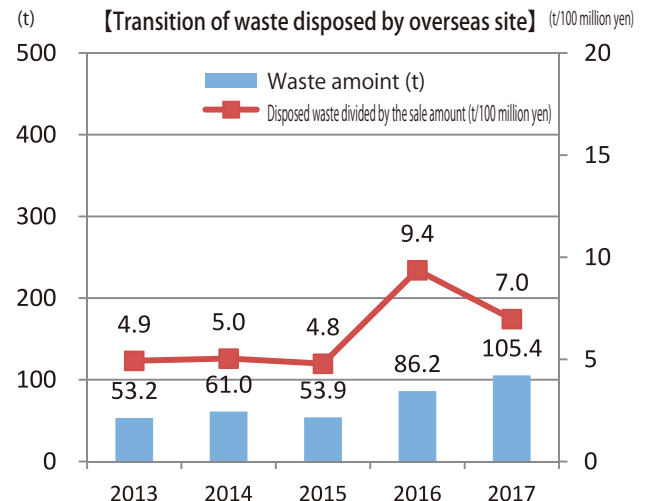
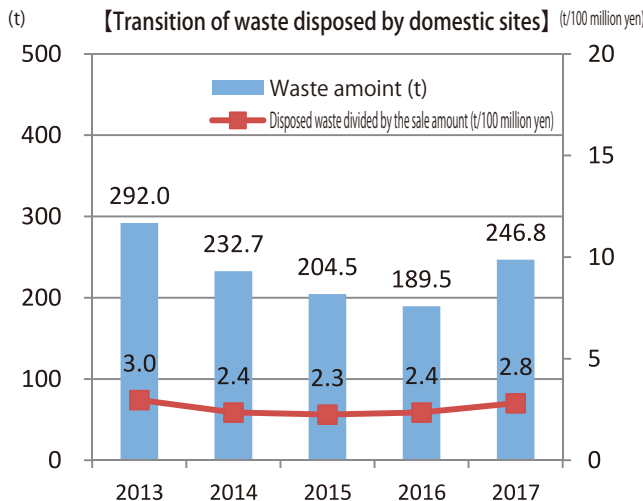
Furthermore, we use no providers of waste disposal services other than those that have earned administrative approval so that disposal services will be provided in compliance with relevant laws. Our control includes issuance of manifests (for control of industrial waste) and retention of disposal records.

We checked waste disposal service providers through periodic visits to their disposal sites and found that their services were adequate and acceptable.



inspection scene of an industrial waste disposal service provider

◆ The amount of discharged waste



TOPICS

◆ Placement of “Welcome Flowers” at the Sakudaira railway station

In support to the “Welcome Flower” program conducted by the Saku City Tourism Association in Nagano, we arranged 44 pots of pansies in the station yard with students of Sakudaira General Technology High School (in Saku City).

This is an attempt to treat with kindness many visitors coming to enjoy events such as Saku Balloon Festival and Saku Koi (=Carp) Matsuri (=Festival) held every year in the Golden Week. The arrangement of flower pots is the embodiment of a regular plan to please them with colorful flowers.



※ As for 5 items which relate to us of SDGs (Sustainable Development Goals), it shows the logo of the goal in the place of the title of each page.