

# 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 burdens
3. Development, design, production and marketing of environmentally-friendly products
4. Implementation of preventative 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 1.

#### ◆ 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 thus decided will be disseminated across the company via the vice-top management (plant / site manager) and the manager responsible for environmental matters for each site.

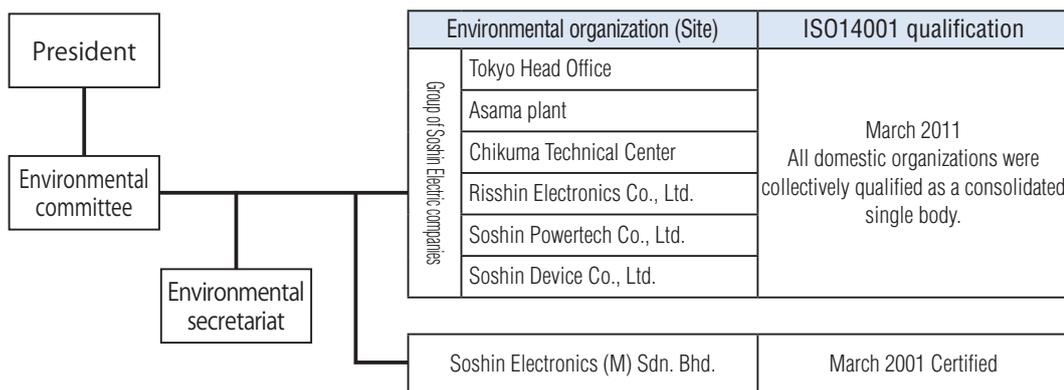
Activities for which the environmental organization is responsible include reciprocally holding an Environmental Conference every six months and an energy management conference every month, in addition to the Environmental Committee held semiannually. These conferences are to gain a grasp of the amounts of CO<sub>2</sub> emitted and industrial waste and control progress toward targets and exchange information on the environment, in addition to continuous promotion of the environmental preservation activities.

#### ◆ Qualification for ISO14001 and environmental Audits

For ISO14001, the international standard for the environmental management system, the Asama Plant qualified in 2000, followed by successful qualification of all other Japanese production sites in 2002. In 2011, all Japanese organizations including the Head Office (administration and sales / marketing departments) collectively qualified as a consolidated single body. (Soshin Electronics Malaysia has been qualified for ISO14001 by another qualification agency.)

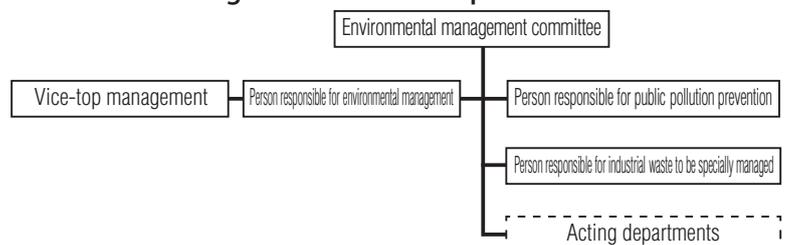
Our environmental audit is comprised of audits conducted by an external qualifying organization, environmental assessments by our Environment Control Office and internal environmental audits by the execution department. The total number of our internal auditors was 183 as of the end of Mar. 2016.

#### Environmental preservation organization



Audit scene by an ISO14001 qualification organization

#### Environmental organization of each production site



## 0 Outline of Environmental Preservation Activities

We have tried to preserve the environment by setting environmental objectives and environmental targets to accomplish the objectives as one element of our environmental activities.

### ◆ Activity report for 2015 and targets for 2016

#### 【CO<sub>2</sub> emission amount】

We achieved the target for reduction of CO<sub>2</sub> emissions which was part of 2015 activities for environmental load reduction.

Our approach in 2016 for reduction of CO<sub>2</sub> emissions will be to gain a detailed grasp and analysis of electric power consumption by each site and a feasibility study of a gradual changeover to power saving facilities including LED lighting.

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

#### 【Amount of discharged industrial waste】

In 2015, we achieved the target. This was because the discharged industrial waste reduced substantially due to the fact that there was no waste originated from in-plant layout changes and as disposal was carried out in line with the previously established plan. It is our intention to continue to control waste disposal.

#### 【Enhanced control of contained chemical substances】

Restriction and control of substances usable for products are getting increasingly stricter as evidenced by the decision by the RoHS Directive to put phthalic acid esters under control and by the REACH Regulations' move toward a year-by-year increase of the number of substances to be controlled. In April 2016, we issued the 6th edition of the Soshin Electric Co.'s Green Procurement Guidelines to make it possible to control chemical substances in conjunction with the latest regulation-related information. To control chemical substances contained in product component parts, we conducted an audit based on the Guidelines of suppliers, checking their environmental quality to ensure their adherence to the Guidelines. Within the Group of Soshin Electric companies, environmental audits have been conducted for tighter control of contained chemical substances.

#### 【Environmental complaints and incidents】

In 2015, 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 2016.

### ◆ Main environmental preservation activities

項目	Achievement in 2015			Targets for 2016
	Target	Achievement	Self-evaluation	
Environmental management system (ISO14001)	<ul style="list-style-type: none"> <li>We will continue environmental education and enlightenment activities.</li> <li>We will make ourselves prepared to move to the Environmental Management System 2015.</li> <li>We will comply with environmental legislation.</li> </ul>	<ul style="list-style-type: none"> <li>The environmental policy was disseminated and education of environmental targets provided.</li> <li>We got aboard seminars to obtain information about the Environmental management System 2015.</li> <li>We reviewed a list of environmental legislation and regulations to ensure that our environmental assessment covered every item.</li> </ul>	○	<ul style="list-style-type: none"> <li>We will continue environmental education and enlightenment activities.</li> <li>We will work in a specific manner to get ready for qualification for the Environmental Management System 2017 on the occasion of updating the System from 2015 issue.</li> <li>We will comply with environmental legislation.</li> </ul>
Prevention of global warming	<ul style="list-style-type: none"> <li>We will reduce domestic CO<sub>2</sub> emissions by 6.0% from the 2014 achievement. (We will reduce the CO<sub>2</sub> emission amount divided by sales amount by 5.6% from the 2014 achievement.)</li> </ul>	<ul style="list-style-type: none"> <li>Domestic CO<sub>2</sub> emissions were 7,505 tons in 2015, lower by 2.6% than 7,709 tons of 2014. (The CO<sub>2</sub> emission amount divided by sales amount rose by 6.2% over that of 2014.)</li> </ul>	×	<ul style="list-style-type: none"> <li>We will reduce the CO<sub>2</sub> emission amount in Japan by 10.3% from that of 2015. (We will reduce the CO<sub>2</sub> emission amount divided by sales amount by 18.6% from the 2015 achievement.)</li> </ul>
Activities for biodiversity preservation and waste management	<ul style="list-style-type: none"> <li>We will support NPO organizations working to protect wild life.</li> <li>We will reduce discharged waste by 2.5% from the 2014 achievement.</li> </ul>	<ul style="list-style-type: none"> <li>We supported NPO organizations.</li> <li>The waste discharged in 2015 was 123 tons, a 22.6% reduction from 159t of 2014.</li> </ul>	○	<ul style="list-style-type: none"> <li>We will continue to support NPO organizations.</li> <li>We will limit the increase of the amount of discharge at no greater than 16.3% of the 2015 achievement.</li> </ul>
Adequate control of chemicals and reduction of hazardous chemicals	<ul style="list-style-type: none"> <li>We will continue inspection with an X-ray fluorescence spectrometer.</li> <li>We will conduct environmental surveys at suppliers to promote further compliance with the green procurement program.</li> <li>We will confirm the compliance status of "lead-free" identification.</li> </ul>	<ul style="list-style-type: none"> <li>We confirmed acceptability of delivered parts which were subject to our acceptance inspection.</li> <li>We promoted green procurement by conducting supplier environmental quality surveys as planned.</li> <li>We conducted environmental assessments and verified successful compliance.</li> </ul>	○	<ul style="list-style-type: none"> <li>We will continue inspection with an X-ray fluorescence spectrometer.</li> <li>We will revise Soshin Electric's Green Procurement Guidelines.</li> <li>We will conduct environmental surveys at suppliers to promote further compliance with the Green Procurement Program.</li> <li>We will carry on verifying at all Soshin companies' compliance with the "leadfree" identification program.</li> </ul>

# Environmental Report

## E nvironmental Accounting

### ◆ Introduction of environmental accounting

The Group of Soshin Electric companies introduced environmental accounting in 2001. Environmental accounting is for the purpose of gaining a quantitative grasp of the effectiveness of investment and expenses made for environmental preservation.

The guidelines developed by the Ministry of the Environment were complied when the 2015 performance data (from April 1, 2015 to the March 31, 2016) was compiled.

### ◆ Environmental preservation costs

Out of the total environmental preservation costs the Group of Soshin Electric companies expended in 2015, 24.24 million yen was invested in the introduction and replacement of energy saving facilities. This was a 40% year-on-year increase.

The total expense was 30.84 million yen, being a year-on-year reduction of 9.1%. The major reduction came from the resource recycling cost which showed a 31.8% reduction.

### ◆ Economic effects coming from environmental preservation measures

The economic effects in 2015 were 22.33 million yen. Of this, global environmental preservation effects decreased by 55.6% and resource recycling effects by 33.3% from a year earlier.

### ◆ Environmental preservation costs and economic effects

Unit: 10,000 yen

Category	Specifics of the main measures	Investment		Expenses		Economic effects	
		2014	2015	2014	2015	2014	2015
Pollution prevention cost	Investment and expenses for pollution prevention	0	0	188	203	-	-
Global environmental preservation cost	Investment and expenses for CO <sub>2</sub> reduction such as introduction of energy saving equipment	1,728	2,424	79	71	1,409	775
Resource recycling cost	Investment and expenses for effective use of resources, including water saving, and reduction, recycling, processing and disposition of waste	0	0	1,546	1,054	2,187	1,458
Upstream / Downstream costs	Cost for controlling environmental burdens that arise in the business upstream and downstream	0	0	0	0	-	-
Administration cost	General and labor expenses necessary for environmental preservation such as acquisition and maintenance of ISO14001 qualification, environmental education, and monitoring and measurement of environmental burdens	0	0	724	922	-	-
R&D cost	Expenses and labor charges required for R&D, planning and designing of products for environmental impact reduction and also for R&D of products contributing to environmental preservation	0	0	0	0	-	-
Social activity cost	Expenses for preservation of nature, greening and support for the local environment, public announcements of environmental information and advertisements for environmental matters	0	0	857	834	-	-
Environmental remediation cost	Expenses for improvement of contaminated soil and recovery of destroyed nature	0	0	0	0	-	-
Total		1,728	2,424	3,394	3,084	3,596	2,233

# Environmental Report

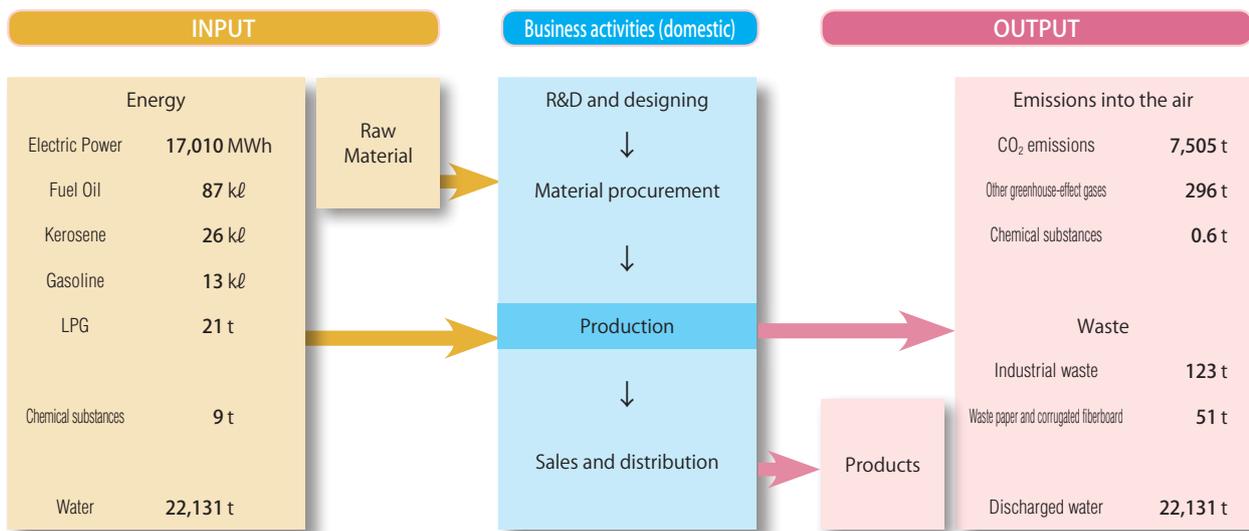
## Mass Balance (Inputs and outputs)

This section describes resources and energy input for domestic business activities by the Group of Soshin Electric companies, products, waste and other discharged items that resulted from domestic business activities.

### Outline of inputs and outputs

Input comprises parts, raw materials, energy, chemical substances and water necessary for business activities while output comprises product, CO<sub>2</sub> emissions, water and waste developed incidentally to production activities.

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



## Management of Contained Chemical Substances

### ◆ Survey of contained chemical substances

We made our products free from lead and eliminated other prohibited substances from products in 2006 and the Group of Soshin Electric companies has since then fully complied with the requirements of the RoHS Directive, with the exception of several products made to meet customers' requirements.

In an attempt to respond to requests from customers for timely provision of information on chemical substances contained in products, we have set up a database for management of chemical substances.

### ◆ 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.

### ◆ Green procurement

The Group of Soshin Electric companies has proceeded with procurement of parts and materials with the minimal possible environmental loads. For this, we issued guidelines for green procurement, Rev. 6 in Apr. 2016. Every supplier is requested to observe these guidelines proactively as reference.

In addition, the Group of Soshin Electric companies has conducted an environmental quality survey on suppliers' premises and confirmed that their management system of chemical substances is acceptable.

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## A pproach to Reduction of Environmental Burdens ●

To prevent global warming, we tackled reduction of CO<sub>2</sub> emissions as well as energy saving.

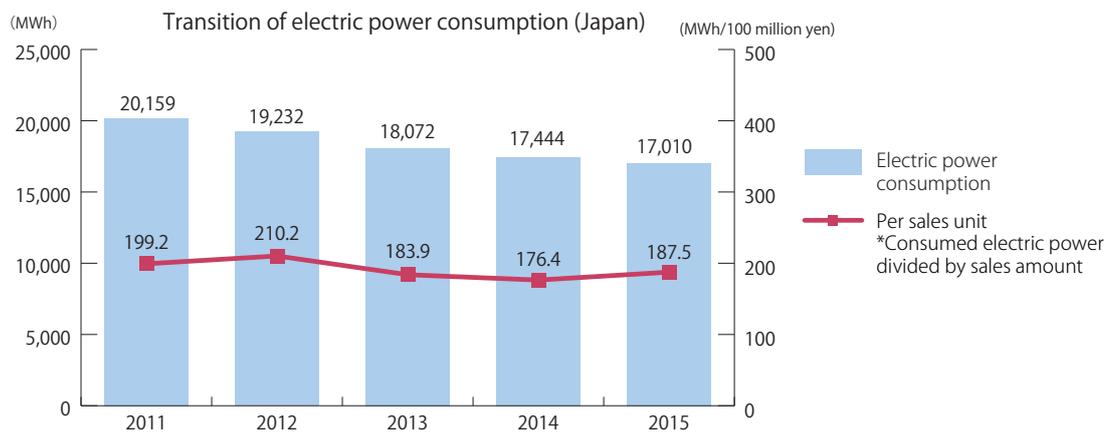
The domestic consumption of electric power in 2015 was reduced by 2.5% from a year earlier due to the success in additional countermeasures such as the introduction of energy saving equipment, and power saving and energy saving patrol. The consumed electric power divided by the sales amount increased by 6.3% over a year earlier.

At overseas sites, the amount of consumed electric power registered a 12.8% increase and the consumed electric power divided by the sales amount rose by 21.4% over a year earlier.

More than 90% of CO<sub>2</sub> emissions originate from electric power consumption. Domestic CO<sub>2</sub> emissions decreased by 2.6% year-on-year, while the consumed electric power divided by the sales amount increased by 6.2% over the same time. At overseas sites, CO<sub>2</sub> emissions increased by 12.8%, and consumed electric power divided by sales amount was up by 21.4% over a year earlier. In 2016, we will try to reduce CO<sub>2</sub> emissions by 10.3% on a year-on-year basis.

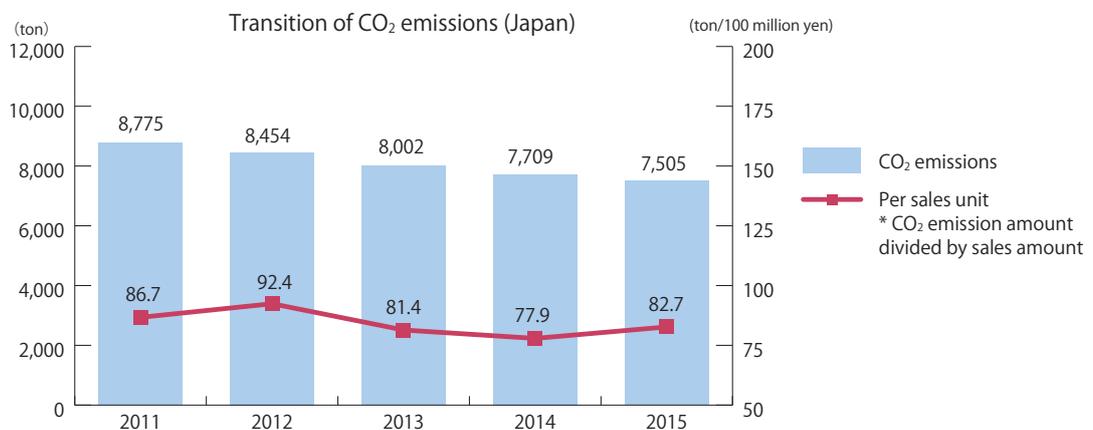
In 2016, we will try to reduce CO<sub>2</sub> emissions by 10.3% on a year-on-year basis.

### ◆ Electric power consumption



Transition of electric power consumption (Overseas)	2011	2012	2013	2014	2015
Electric power consumption (MWh)	1,249	1,405	1,237	1,105	1,247
Per sales unit (MWh/100 million yen)	189.2	156.1	114.5	91.3	110.8

### ◆ CO<sub>2</sub> emissions

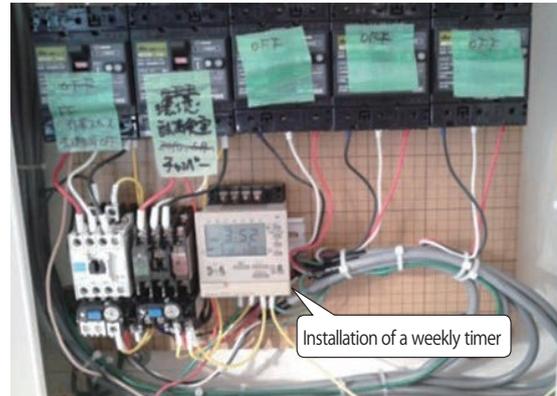


Transition of CO <sub>2</sub> emissions (Overseas)	2011	2012	2013	2014	2015
CO <sub>2</sub> emissions (ton)	530	595	524	468	528
Per sales unit (ton/100 million yen)	80.3	66.1	48.5	38.7	47.0

## C ase Example of Energy Saving Measures ●

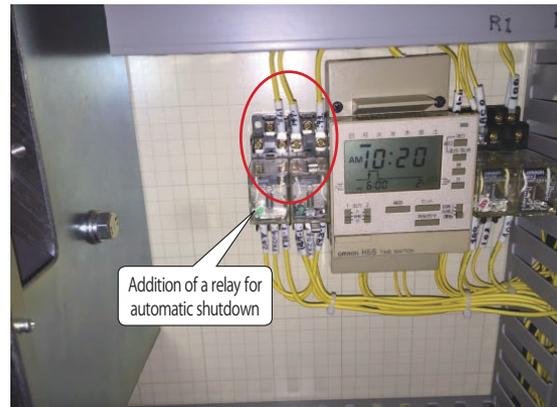
### (1) Electric power saving coming from the environmental test room air conditioner exhaust fans resting during nighttime and on non-working days

The environmental test room fans used to be turned off manually and there were times when operators failed to inform the person taking over from them upon completion of a day's work that they were required to turn off the fans and stop the air conditioners. The settings were not correctly made to meet the actual operation schedule. To deal with this problem, the environmental test room fan system was refurbished to include a weekly timer of a sequencer (PLC) for automatic shutdown and for efficient operations. This made an electricity saving of 75% a reality.



### (2) Power saving operation of the clean room air conditioners

We decided the temperature controller of the clean room should be turned off at nighttime and on non-working days because the clean room was often idle during such time periods. This idea brought us a 51% saving.

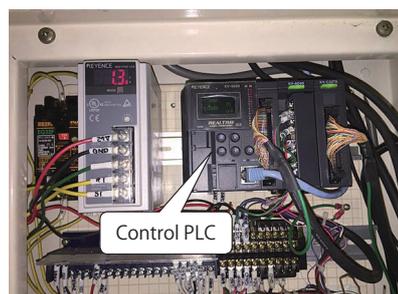


### (3) Power saving from automatic shutdown of air conditioner exhaust fans at nighttime and on non-working days

The exhaust fans used to be turned off manually and failure to communicate to successors the need to turn off air conditioners took place once in a while when the operator changed.

An improvement was made for automatic turn-off by adding the facility for automatic shutdown with an annual timer of a sequencer (PLC).

A 63% saving was made possible with this idea.



# Environmental Report

## A pproach to Resource Utilization ●

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.

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 (control manifests for industrial waste) and retention of disposal records.

Waste disposal service providers are also controlled through our periodic visits to the disposal sites.

In 2015, we audited 10 sites from 9 service providers and learned that they operated acceptably.

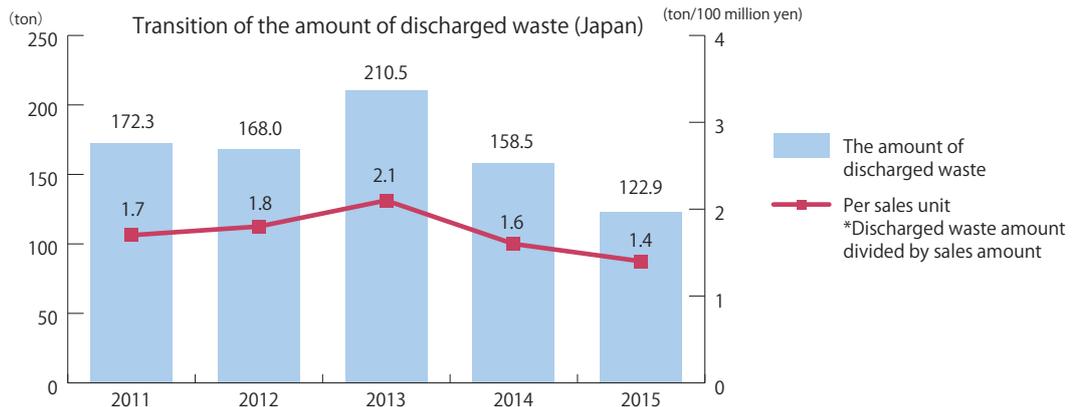
The amount of discharged waste in Japan registered a decrease of 22.6% from the previous year.

Electric power consumed in Japan divided by the sales amount also decreased by 12.5%. We will make efforts to successfully reduce waste so that we can achieve the target we set for 2016, which is a maximum increase of 16.3% year-on-year.



On-site inspection scene of an industrial waste disposal service provider

### ◆ The amount of discharged waste



Transition of the amount of discharged waste (Overseas)	2011	2012	2013	2014	2015
The amount of discharged waste (ton)	3.7	3.8	7.6	7.0	9.4
Per sales unit (ton/100 million yen)	0.6	0.4	0.7	0.6	0.8

## TOPICS

### ◆ SORAMIL

The LLP SAKUSAKU HIMAWARI project, a Limited Liability Partnership program, of which Soshin Electric Co. is a member, is a contributor to the mega-solar power generation business run by Saku City and proactively takes part in local activities for environmental preservation and enlightenment.

To give something back to member companies, SORAMIL, an LED type street light, powered by photovoltaic electricity and environment-friendly, was set up last year.

They are as light as conventional street lights and play a part in activities to help prevent global warming under the slogan of “Stop Global Warming.”

