

# 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

#### ◆ 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 lower levels of executive management (plant manager, site manager) and the manager responsible for environmental matters for each site.

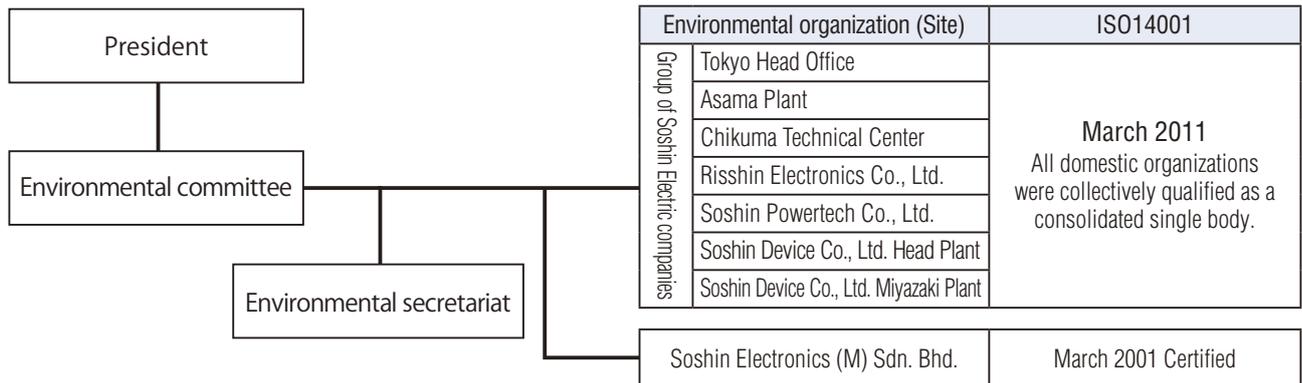
Activities for which the environmental organization is responsible include reciprocally holding an Environmental Conference and an energy management conference every month, in addition to the Environmental Committee held semiannually. These conferences are to gain a grasp of the amounts of CO<sub>2</sub> 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 to be the first of all Soshin Electric companies, followed by successful qualification of all other Japanese production sites in 2002. In 2011, all Japanese organizations including the Head Office (administration departments and sales / marketing department) collectively qualified as a consolidated single body. (Soshin Electronics Malaysia has been qualified for ISO14001 by another qualification agency.)

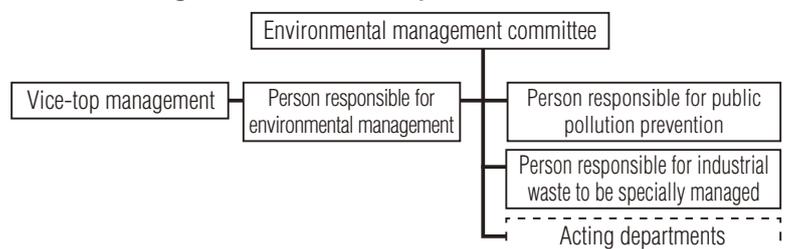
Our environmental audit is comprised of audits conducted by an external qualifying organization, environmental assessments by our Environment Control Office and internal auditing by the execution department. The total number of our internal auditors was 175 as of the end of Mar. 2015.

### Environmental preservation organization



Audit scene by an ISO14001 qualification organization

### Environmental organization of each production site



## 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 2014 and targets for 2015

#### 【CO<sub>2</sub> emission amount】

We achieved the target for reduction of CO<sub>2</sub> emissions which was part of 2014 activities for environmental burden reduction.

Our approach in 2015 to reduction of CO<sub>2</sub> emissions will include continuous efforts to improve productivity, decrease facility operation losses and loads and eliminate waste through energy saving patrol.

#### 【Amount of discharged industrial waste】

In 2014, the changes made to the production facility layout within the previous year allowed us to achieve a substantial reduction.

Our approach in 2015 will include planned efforts to reduce discharged waste while continuing zero emissions (zero landfill discharge).

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

Restriction of environmentally hazardous substances and their control have been tightened year after year by the RoHS Directive and REACH rule.

We have put in place green procurement activities to control chemical substances contained in materials making up products. Within the Group of Soshin Electric companies, environmental audits have been conducted for tighter control of contained chemical substances.

#### 【Environmental complaints and incidents】

We had no such complaints or incidents in 2014.

We will continue our activities for local environment preservation.

### ◆ Main environmental preservation activities

Item	Achievement in 2014			Targets for 2015
	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 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 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 comply with environmental legislation.</li> </ul>
Prevention of global warming	<ul style="list-style-type: none"> <li>To limit the increase of domestic CO<sub>2</sub> emissions at 7.8%, max., of those in 2013. (To limit the increase of CO<sub>2</sub> emission amount divided by sales amount at 13%, max., of those in 2013.)</li> </ul>	<ul style="list-style-type: none"> <li>Domestic CO<sub>2</sub> emissions were 7,709 tons in 2014, lower by 3.7% than 8,002 tons in 2013. (The CO<sub>2</sub> emission amount divided by sales amount was lower by 4.3% than that in 2013.)</li> </ul>	○	<ul style="list-style-type: none"> <li>To reduce the CO<sub>2</sub> emission amount in Japan by 6% of that in 2014. (The CO<sub>2</sub> emission amount divided by sales amount in Japan by 5.6% of that in 2014)</li> </ul>
	<p><b>【Middle- and long-term targets】</b>                      Middle-term targets: The increase in CO<sub>2</sub> emission amount in 2015 will be maintained at no greater than 2% over that of 2009.                      Long-term target: The increase in CO<sub>2</sub> emission amount in 2020 will be maintained at no greater than 6% over that of 2009.</p>			
Activities for biodiversity preservation and waste management	<ul style="list-style-type: none"> <li>To reduce the waste discharge amount by 30% of that in 2013. (We will carry on the zero-emission target.)</li> </ul>	<ul style="list-style-type: none"> <li>The waste discharged in 2014 was 159 tons, a 24.7% reduction from 210t in 2013. (We have successfully continued zero emissions.)</li> </ul>	×	<ul style="list-style-type: none"> <li>To reduce the discharged waste amount by 2.5% from that in 2014. (We will carry on the zero-emission target.)</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> </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> </ul>	○	<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> </ul>
	<ul style="list-style-type: none"> <li>We will confirm the compliance status of "lead-free" identification.</li> </ul>	<ul style="list-style-type: none"> <li>We conducted environmental assessments and verified successful compliance.</li> </ul>	○	<ul style="list-style-type: none"> <li>We will carry on verifying at all Soshin companies' compliance with the "lead-free" identification program.</li> </ul>

# Environmental Report

## Environmental 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 2014 performance data (from April 1, 2014 to the March 31, 2015) was compiled.

### ◆ Environmental preservation costs

Of the environmental preservation costs the Group of Soshin Electric companies expended in 2014, 17.28 million yen was invested in introduction and replacement of energy saving facilities. This was a 28% year-on-year increase. The resource recycling cost in the expended amount increased by 22% from a year earlier. The total environmental preservation costs were up by 23% over the same time.

### ◆ Economic effects coming from environmental preservation measures

The economic effects in 2014 were 35.96 million yen. Of this, global environmental preservation effects decreased by 20% and resource recycling effects by 33% over a year earlier. In all, a year-on-year 29% decrease resulted.

### ◆ Environmental preservation costs and economic effects

Unit: 10,000 yen

Category	Specifics of the main measures	Investment		Expenses		Economic effects	
		2013	2014	2013	2014	2013	2014
Pollution prevention cost	Investment and expenses for pollution prevention	0	0	234	188	-	-
Global environmental preservation cost	Investment and expenses for CO <sub>2</sub> reduction such as introduction of energy saving equipment	1,346	1,728	92	79	1,772	1,409
Resource recycling cost	Investment and expenses for effective use of resources, including water saving, and reduction, recycling, processing and disposition of waste	0	0	1,265	1,546	3,290	2,187
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	858	724	-	-
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	300	857	-	-
Environmental remediation cost	Expenses for improvement of contaminated soil and recovery of destroyed nature	0	0	0	0	-	-
Total		1,346	1,728	2,750	3,394	5,062	3,596

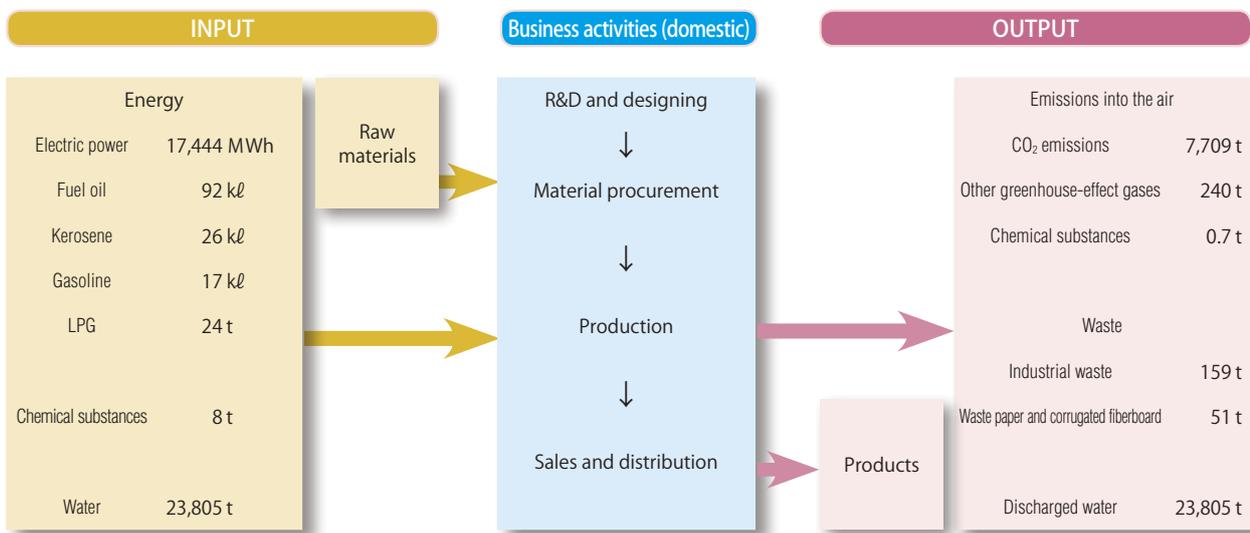
## Mass Balance (Inputs and outputs)

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

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

The Group of Soshin Electric companies strives to reduce as much as possible inputs from the aspects of greater energy saving and desire 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

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.

### ◆ Green procurement

The Group of Soshin Electric companies has proceeded with procurement of products with the minimal possible environmental burdens. For this, we issued guidelines for green procurement, Rev. 5 in Jan. 2014, for suppliers' reference to help them observe these guidelines aggressively.

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.

### ◆ Analysis with an X-ray fluorescence spectrometer

Products and materials that possibly contain prohibited substances will be subject 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 Burdens

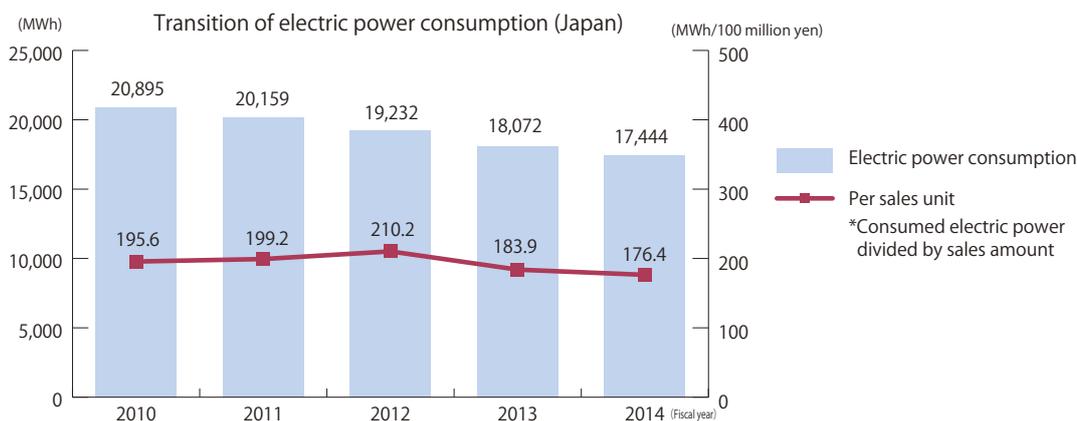
To prevent global warming, we tackled reduction of CO<sub>2</sub> emissions as well as energy saving.

Electric power consumption in Japan in 2014 was reduced by 3.5% from a year earlier due to the success of additional countermeasures such as the introduction of energy saving equipment, and power saving and energy saving patrol. Consumed electric power divided by sales amount declined by 4% from a year earlier.

Overseas, the amount of consumed electric power registered a 10.7% decline from a year earlier and consumed electric power divided by sales amount fell by 20.3%.

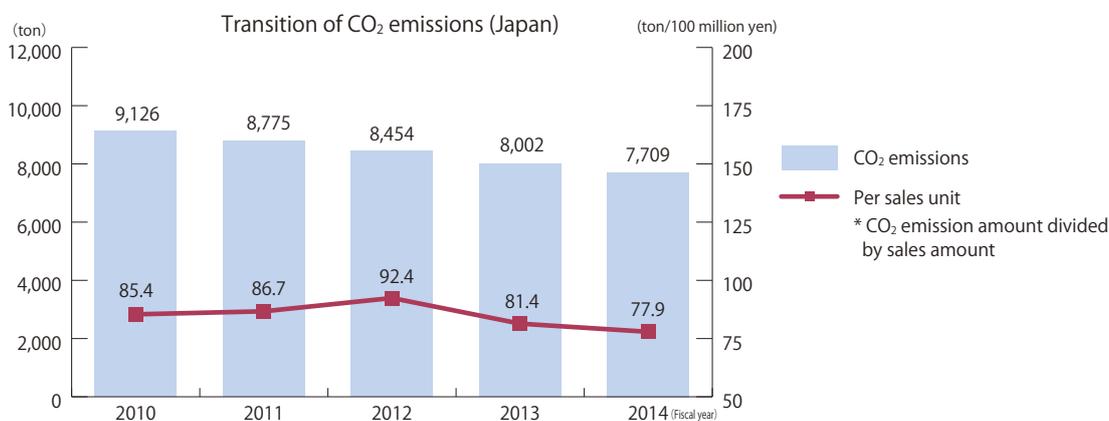
More than 90% of CO<sub>2</sub> emissions originated from electric power consumption and there was a correlation between CO<sub>2</sub> emissions and electric power consumption. Domestic CO<sub>2</sub> emissions decreased by 3.7% year-on-year, while consumed electric power divided by sales amount declined by 4.3% over the same time. Overseas, CO<sub>2</sub> emissions decreased by 10.7% from a year earlier, and consumed electric power divided by sales amount was down by 20.2%. In 2015, we will try to reduce the CO<sub>2</sub> emissions by 6% more than 2014.

### ◆ Electric power consumption



Transition of electric power consumption (Overseas)	2010	2011	2012	2013	2014
Electric power consumption (MWh)	1,298	1,249	1,405	1,237	1,105
Per sales unit (MWh/100 million yen)	175.4	189.2	156.1	114.5	91.3

### ◆ CO<sub>2</sub> emissions



Transition of CO <sub>2</sub> emissions (Overseas)	2010	2011	2012	2013	2014
CO <sub>2</sub> emissions (ton)	552	530	595	524	468
Per sales unit (ton/100 million yen)	74.6	80.3	66.1	48.5	38.7

## Case Example of Energy Saving Measures

### (1) Electric power saving through the improvement resulting from the shift to timer-controlled operations of compressors

A timer has been attached to compressors that had run previously for 24 hours continuously. The compressors are now stopped on holidays. The use of a touch panel that has also been attached permits setting of flexible operation timing, making it easy to set compressor operation timing to match operation of machining centers where compressors are often used.

As a result, a 33% electric power saving has become possible.

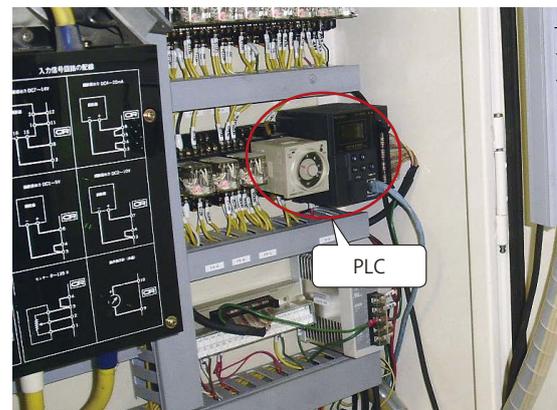


### (2) Electric power saving through automated energy-saving operation of air conditioners

Air conditioners in the tape molding building were previously operated manually and failure to turn them off resulted. Another problem that needed correction was that changes of settings could not necessarily accommodate the operation condition.

Effective operations of air conditioners became possible by preventing failure to turn them off by automating air conditioners through the attachment of a sequencer (PLC) and by interlocking them with the control of the temperature, humidity and return dampers.

Thus, a reduction by 37% of the electric power consumption was realized.

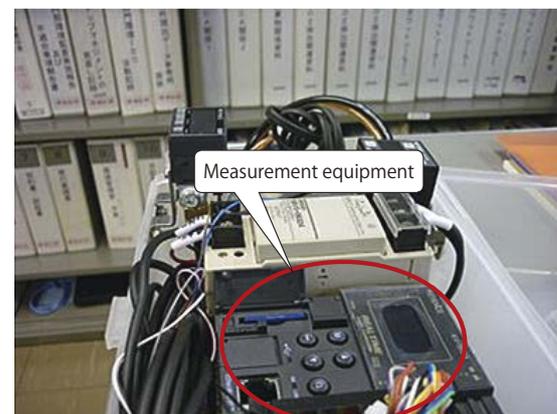


### (3) Electric power saving through a review of pressure settings on compressors

The presence of room for pressure was found when measurement was taken with pressure logging equipment as needed due to the shift of production processes and subsequently occurred changes of air conditioners' operation conditions.

To take advantage of this finding, we decided to lower the pressure during nighttime when production processes are at rest.

This allowed us to reduce the electric power consumption by 6.9%.



# Environmental Report

## A pproach to Resource Utilization ●

For successful preservation of the environment, it is imperative that we make our society recycle-oriented. Regarding waste discharged as a result of business activities as resources, we at the Group of Soshin Electric companies promoted “reduce”, “reuse” and “recycle” (3Rs) and have succeeded in achieving zero emissions (no landfill waste) every year consecutively since 2007.

Furthermore, we used no providers of waste disposal services other than those that had 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), retention of disposal records and periodic visits to the disposal sites run by the service providers.

In 2014, we audited 7 sites of 6 service providers and verified that they operated acceptably.

The amount of discharged waste in Japan registered an decrease by 24.7% over the previous year. Consumed electric power divided by sales amount decreased by 23.8%. We will make efforts to reach the target we set for 2015 of a reduction of 2.5% from last year.



The situation of on-site inspection

### ◆ The amount of discharged waste



Transition of the amount of discharged waste (Overseas)	2010	2011	2012	2013	2014
The amount of discharged waste (ton)	7.7	3.7	3.8	7.6	7.0
Per sales unit (ton/100 million yen)	1.0	0.6	0.4	0.7	0.6

## TOPICS

### ◆ Symposium on LLP SAKUSAKU HIMAWARI

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

In an attempt to provide neighbors with an opportunity to appreciate the blessings of nature, we invited SAKANAKUN, a man well known in Japan for his encyclopedic knowledge of fish, to the 6th symposium on the project that saw a large audience show up.

