



Social and Environmental Report 2018



Digest Version

Seiko Instruments Group

Sll Group Overview

Corporate Data



About This Report

- This report was published to provide all stakeholders with the SII Group's CSR activities and is regarded as a tool to promote improvements in our CSR activities by collecting their opinions.
- Additional data and the latest information not covered in this report are available on the SII website. http://www.sii.co.jp/eco/eg

Scope of This Report

- This report covers business units, sales offices, and affiliated companies of Seiko Instruments Inc.
- * The report focuses on the efforts and achievements made by nine sites in Japan and seven overseas sites, which obtained ISO 14001 certication.
- * The various types of data contained in this report essentially include the semiconductor business that was spun off from the SII Group in January 2018.

Period Covered by This Report FY 2017 (from April 2017 through March 2018)

Contact us

Seiko Instruments Inc.

Corporate Environmental Administration Department 8, Nakase 1-chome, Mihama-ku, Chiba-shi, Chiba 261-8507, Japan Telephone: +81-43-211-1111/Direct: +81-43-211-1149 Facsimile: +81-43-211-8019 Website: http://www.sii.co.jp/eco/eg/

Message from the President

Grow as a manufacturer and strive to enrich time



Since a wide range of social issues are emerging, corporations are now urged to fulfill their roles and social responsibilities more actively. As investments in Environment, Society, and Governance (ESG) are drawing more attention, corporations have entered an era in which pursuing a profit is no longer a sufficient reason alone to be chosen by stakeholders. We must change our sense of existing values, set goals that enable us to coexist with Earth and society, and take bold actions to achieve these goals.

In 2017, Seiko Instruments Inc. (SII) formulated an Environmental Vision that looks to the future of environmental management. It highlights the SII's direction, "Enrich time that the Earth and people are enjoying," based on achieving a sustainable society by the coexistence with nature, low carbon, and material cycle. "Enriching of time" means that we promote the accomplishment of the United Nation's Sustainable Development Goals (SDGs) adopted in 2015 so that everyone is able to live happy and fulfilling lives into the future. To that end, our most important mission is to create environmentally friendly products that can contribute to the environment in a manner that mitigates the environmental burden.

SII has created environmentally friendly products, especially since the introduction of our SII Green Product Label System in 2001. On the other hand, global environmental laws and regulations have become increasingly stringent and customers' needs regarding the environment have been diversifying. We regard this trend as an opportunity, speedily comply with such requirements, and provide products with high-level environmental performance so that we are able to make a contribution to one of the SDGs goals, "Ensure sustainable consumption and production patterns."

When I became president of SII in April 2018, I stated that my policy was to "Grow SII as an excellent manufacturer." SII has technologies and traditions that our predecessors have built up over many years, however, we cannot develop them simply by maintaining the status quo. To grow further, we need to keep evolving our strength, Craftsmanship, Miniaturization, and Efficiency that has been honed by the processes involved in SII's well-established history of watchmaking. The scope of this evolution is not only development and manufacturing, but also all business activities including marketing, sales, and management. Together with our suppliers, we will make a concerted effort to grow further as a manufacturer.

We remain committed to growing and expanding these efforts with our employees to "enrich time," the sustainable society we strive for.

Tetsu Kobayashi, President Seiko Instruments Inc.

Core Values and Charter of Corporate Behavior

The SII core values, "Integrity, Trust and Appreciation" represent the basic stance of our relationship with society and our stakeholders. SII strives to stand as a company that society and our stakeholders need and trust, all through the ages.

The SII Group's Corporate Social Responsibility (CSR) is at the very root of these core values. We established the SII Group Charter of Corporate Behavior to express our strong will as a company bearing expectations to help create a sustainable society.

Core Values and Corporate Identity

Core Values Integrity - Trust - Appreciation

Creating Time - Optimizing Time - Enriching Time

The SII Group Charter of Corporate Behavior (Established in October 2005, Revised in April 2011)

The SII Group is committed to pursuing its affairs ethically and lawfully. This Charter of Corporate Behavior establishes policies and procedures intended to secure our position as an entity that honors its responsibilities to contribute to the economic development of society and seeks to serve as a needed and trusted part of society at all times. The SII Group companies and their employees are committed to providing value to all group stakeholders, as well as to society at large, fulfilling their social responsibilities based on a strong ethical sense and contributing to the creation of a more sustainable society.

<Article 1.> Providing value

- We are committed to enhancing our technologies, creating new value, and producing safe, socially useful, and high-quality products and services that strengthen satisfaction and trust among our customers.

<Article 2.> Approaching corporate activities with fairness and integrity

- In addition to compliance with all applicable laws and regulations, we accurately manage all types of information, including personal and customer data, and pursue our corporate activities with ethics, fairness and integrity.
- We maintain a sound relationship with governmental and administrative authorities and take a rigorous, resolute position against antisocial forces that pose a threat to social order or security.

<Article 3.> Human rights and human resource development

- We respect the diversity and the human rights of all our employees and seek to achieve safe, comfortable working conditions. We facilitate and support the advancement and growth of each employee and endeavor to ensure all employees the fair evaluation and treatment.
- We respect the human rights and individuality of all stakeholders in our business activities.
- We strive to develop a creative, professional human resources characterized by a strong ethical sense.

<Article 4.> Creating harmony with the environment

- Recognizing that environmental issues affect all of us, we focus intently on resolving such issues and initiate proactive measures to avoid burdening the public.

<Article 5.> Establishing a constructive coexistence with society

- We communicate openly with society and promote the appropriate disclosure of company information to become a more open enterprise.
- As good corporate citizens, we engage in extensive philanthropic activities.
- Through our business activities on the global stage, we advance corporate management that takes into account the interests of our stakeholders and contributes to the development of each country pursuant to this Charter.

<Article 6.> The commitment of senior management

- After realizing the spirit of this Charter and taking the lead in an exemplary manner for the implementation of the Charter, senior management has established a mechanism throughout the corporation to ensure thorough implementation of the Charter within the SII Group companies. Senior management encourages our business counterparts to follow this example.
- In the event of violations of the Charter, senior management must assume responsibility for resolving the issues in question and make full and prompt public disclosure. On identifying the responsibility for the violation, senior management must impose strict disciplinary action on those responsible, including members of senior management itself.

CSR Committee Activities

In January 2005, SII established the CSR Committee to promote the CSR activities more efficiently. SII has established a CSR Committee comprised of the President, who serves as the Chairman, and the managers at our head office, who serve as members of the standing committee.

It discusses and decides important issues and matters that are derived from the promotion of CSR activities, including compliance and risk management, and reports their performance to senior management on a regular basis.

Corporate Governance

To live up to the trust of our stakeholders, we focus on transparency and fairness in our management as an important business priority and strive to enrich our corporate governance to improve our corporate value. SII has adopted the status of a company with a Board of Company Auditors.



Internal Control System

At SII, the internal control system is developed and the status of its operation is reported to the SII Board of Directors for supervision every year. This is based on the "Basic Internal Control System Policy" resolved by the Board of Directors.

For our internal control system with regard to financial reporting in compliance with the Financial Instruments and Exchange Act, our senior management evaluates the SII Group's internal control system and we report the results to a publicly listed parent company, Seiko Holdings Corporation (SHD), as one of their subsidiary companies. This is to evaluate and report the internal control system relating to SHD's financial reporting.

In terms of internal audits, the Internal Audit Division performs periodic audits and the management divisions conduct various kinds of audits on a regular basis.

Compliance

SII Compliance System

As our CSR committee carries the function of compliance, it has been working on raising compliance awareness and responding to each compliance problem.

Based on the Internal Control Basic Policy, we continue to reinforce and improve the compliance framework of subsidiary companies in the world.

At the overseas subsidiary companies, their appointed compliance coordinators are promoting activities to enhance the compliance framework.

Compliance Consultation Services

The SII Helpline has been set up for consultation with an outside attorney upon discovery of a violation of compliance.

The service has been expanded to include not only SII but also our clients to receive any information regarding our employees' compliance violations. We also provide an internal consultation service, and the detail of the report is informed to the senior management and auditors on a regular basis.

Five cases were reported to the SII helpline and processed by the consultation service in FY 2017.

Risk Management

Group-Wide Risk Management Efforts

At SII, the CSR Committee with the President serving as the chairman plays a central role in promoting across-the-board risk management. The committee aggregates information on various types of risks including potential ones in advance and identifies risks to be controlled every fiscal year. The risks are evaluated and sorted according to their severity and frequency, and the progress of relevant countermeasures is checked every quarter. Critical risks of the fiscal year are reported to the Board of Directors on a regular basis. The CSR Committee met six times in FY 2017.

Also, the status that could be business risks is managed using KPI, Key Performance Indicator, and monitored at the management meetings on a regular basis.

Upon occurrence of a large-scale disaster which is one of the risks, it could be difficult for employees to go home at least temporarily due to closedown of transportation. Therefore, we have prepared water, food, bedding, and other emergency supplies.

Risk Management in Continuing Business

SII manufacturing sites conduct risk management to prevent production interruption, aiming to continually provide products even when a risk arises.

The examples of our wide-ranging risk management are operational improvements at the local-working level and radical improvement which requires equipment investment.

Information Security

Our Concepts

SII began using information and communications technology (ICT) to further enhance the technologies of "SYO"ism that it has developed over the years. We also run many information systems to grapple with the rapidly-changing business environment. As ICT has become deeply rooted in corporate activities, the threats associated with ICT, including information leakage, destruction, and falsification, have also extended to a broad range of the activities.

SII regards all information on networks inside and outside the company, as well as information systems including computers and networks, as significant assets of the Group. We recognize that management has an important responsibility to ensure the information security to maintain these assets.

Intellectual Property Initiatives

Basic Policy and Management of Our Intellectual Property

Regarding intellectual property as an essential resource for business activities, we proactively obtain and utilize our development results as intellectual assets. Based on the mid- to long-term policy to "develop a business culture that respects intellectual property," the Intellectual Property, R&D, and Production Technology Divisions work together to implement intellectual property-related activities to create new business and supporting divisions in cooperation with the Corporate Strategy Division.



Status of patent applications and patent grants

SII's technology development originated from watch manufacturing based on its patented technology.

Although the number of our patent applications within Japan exceeded 600 per year up to FY 2011, actions such as business reviews and alliances resulted in a downward trend from FY 2012, and the number of applications in FY 2017 was 256^{*1}.

Similarly, patent applications outside Japan exceeded 500, but dropped from FY 2012, with the number of applications in FY 2017 at 337^{*1}.

For patent grants in Japan, we improved the patent grant rate from FY 2008, acquired rights, and greatly increased the number of patents. The 1,624 patents held in 2008 dropped temporarily due to alliances and other factors, but recovered from FY 2013 and reached 1,779 in March 2018^{*2}.

Patent grants outside Japan are in the same situation, and the number of patents in March 2018 was 1,536^{*2}.

The overall numbers of patent applications and patent evaluations have decreased due to business divisions restructuring, however, our applications for patents and acquisition of rights are active in the ongoing divisions.

^{*1} The semiconductor business was spun off from the SII Group in January 2018. The number of applications in and outside Japan includes the semiconductor business up to the third quarter. In FY 2018, the semiconductor business will be excluded, so the number of applications is likely to fall.

^{*2} The number does not include the semiconductor business that was spun off from the SII Group.

Quality Control and Product Safety

Our Concepts and SII Group Basic Quality Policy

SII deploys a wide range of quality assurance activities across the board from customers' viewpoints to ensure that our customers use our products safely with a sense of security.

"Improve the Quality, Cost, Delivery and Safety of our Products and Services to create increased value for customers."

This is the SII Group Basic Quality Policy, which incorporates our strong commitment to achieve customer satisfaction with our product quality as well as meeting high standard of cost, delivery and product safety.

We have established a quality assurance promotion system to embody the policy and have been taking the following basic measures.

1. Comply with each country's engineering laws, regulations and a wide variety of specifications

2. Establish a system and develop human resources to ensure product quality and safety in the development and design phases

3. Share information of product quality and safety

Quality Assurance that Establishes Security and Reliability

The SII basic concept of product safety is "to improve customers' trust by providing safe products and services." Based on this concept, we continue to provide the Products Safety Education to raise product safety awareness and cultivate engineers with safety knowledge.

We also established the Product Safety Network within the SII Group. For all the SII products, it conducts regular inspections of compliance with laws and regulations concerning product and technical safety, and verifies product safety and appropriateness according to each country's laws and regulations.

In case of accidents due to SII products, we report to the senior management within ten minutes, as well as attempt to promptly solve the problem and prevent the recurrence of accidents. After these actions, we share the information throughout the entire Group and deploy activities horizontally.

Communication with Customers

SII Customer Service Center

SII Customer Service Center is committed to providing prompt, accurate and sincere responses to customer inquiries. Our customers' opinions, requests and complaints are communicated to the relevant divisions, and are used effectively for product and service quality improvement.

In addition, we focus on improving the quality of our after-sales service to attain the higher level of customer satisfaction through product consultation service as well as repair and supply services.

Disclosure of Product Safety and Quality Information

We strive to minimize our customers' disadvantages by promptly and precisely providing SII products' safety, accidents, and important quality information.

Support for Employee Development

Respect for Human Rights

In the SII Group Charter of Corporate Behavior, "Article 3: Human rights and human resource development" states as follows. We respect the diversity and the human rights of all our employees and seek to achieve safe, comfortable working conditions. We facilitate and support the advancement and growth of each employee and endeavor to ensure all employees the fair evaluation and treatment.

We respect the human rights and individuality of all stakeholders in our business activities.

We strive to develop a creative, professional human resources characterized by a strong ethical sense.

We have been trying to ensure that the Charter is thoroughly implemented within SII Group companies.

In regard to the "basic policies of human rights," our overseas affiliated companies are promoting documentation for this that reflects the cultures and customs of each country. Upon completion of the work, thorough instructions will be provided to employees so that they will communicate with stakeholders in compliance with the spirit incorporated into the message of "basic policies of human rights."

In FY 2017, SII verified that this spirit is incorporated into each regulation. In FY 2018, we will introduce a rule to ensure that all employees are aware of the spirit, and human resource employees at head office will visit each site to confirm the awareness of all employees.

Support for Career Development

SII is focusing on developing independent and self-responsible human resources who can establish their own careers and missions.

An "in-house recruitment system," a "free-agency system," and an "open study abroad system" were established to respect each employee's goals and to support expansion of the range of career choices available to them.

Work/Life Balance

From April 2017, an hourly leave system has been modified to two hours to one hour, enabling more flexible working styles. In addition, semiweekly No Overtime Days and semimonthly No Meeting Days have been established across the board to improve productivity. In FY 2018, the labor-management team will hold a meeting to discuss the Short-Time Regular Employee System to be introduced in FY 2019.

Status of Utilization of the Systems (Japan)

System	FY2013	FY2014	FY2015	FY2016	FY2017
Childcare leave	25	26	33	22	18
Short-hours work for childcare	29	29	35	38	27
Elderly nursing care leave	0	0	0	0	0
Short-hours work for elderly nursing care	0	0	0	1	1

Safety and Health

Concept of Occupational Safety and Health

SII believes that the basis of a healthy company is formed by maintaining a safe and healthy work environment as well as all the employees' physical and mental well-being.

Based on the "SII Group Occupational Safety and Health Policy" established in 2008, all the SII Group sites work on the prevention of plant and industrial accidents as well as pursue the high safety level to create a comfortable workplace.

Purchasing Activities with Fairness and Integrity

Our Concept of CSR in Supply Chain

Cooperation from our suppliers is essential for SII to fulfill our social responsibilities. The SII Group Purchasing Policy stipulates "Enhancing our partnerships with suppliers," and we seek to improve the level of CSR together with our suppliers based on fair and honest transactions.

Purchasing Policy

SII develops our purchasing activities based on the following Purchasing Policy.

Purchasing Policy

- 1. Pursuing minimum costs.
- 2. CSR
 - a) Strengthening compliance.
 - b) Promoting Green Purchasing.
 - c) Risk management
- 3. Enhancing the partnership with suppliers.
- 4. Reforming and reinforcing our purchasing function and items listed above.

Supplier Certification System

SII uses the Supplier Certification Criteria to select fair business partners and build the CSR framework based on the purchasing supply chain.

SII Group Supplier Certification Criteria

- Existing framework to conduct fair and honest business, respect human dignity and achieve coexistence with society
- Stable business condition
- Environmental management system
- Management system for quality and risk management

We reviewed our Supplier Certification System in FY 2015, and took action for the CSR requirements and entrenched the smooth assessment in FY 2016.

Conflict Minerals Policy

SII recognizes conflict minerals as being a critical international issue that supports the financing of organizations engaged in human rights violations and/or injustices committed in the Democratic Republic of Congo and adjoining countries. In March 2012, the "SII Group Conflict Minerals Policy" was established, and we ask our suppliers for their cooperation in prohibiting the use of any conflict minerals.

With Regions and Society

Academic Promotion and Technical Advancements

Advanced Technology Institute

SII contributes to technical advancements as a social contribution through donation and operational support to Foundation Advanced Technology Institute (ATI).

ATI's mission is to contribute to the promotion of learning, which is fundamental to the progress of society as a whole. As an attempt to find true harmony between science and people and to clear the way for a fruitful future for a new generation, they have organized international forums and other international exchanges to promote researches across various professional disciplines conducted by human resources with different approaches in science and technology, and have granted aid to young researchers to nurture the leaders of the next generation.

Environmental Activities

Environmental Report Meeting

Morioka Seiko Instruments Inc. (MSI) has held an "Environmental Report Meeting with Local Communities" since 2008. For FY 2017, a total of 16 members, including local residents as well as members from companies and the government of the Shizukuishi area, participated in the meeting held on October 16, 2017.

After MSI's explanation and report of the company profile and our environmental activities focusing on biodiversity conservation, the participants visited the manufacturing premises, outdoor facilities, and the biodiversity conservation areas of MSI.

It was the 10th Environmental Report Meeting this year. MSI will continue to conduct business and environmental activities while appreciating local residents' understanding.

Educational Support

Each SII Unit continues to provide factory tours as well as work-study and internship programs for local pupils and students.

Internship Programs and Factory Tours

SII Watch Technical Training and Education Center in Makuhari Unit has accepted eight junior high school students in Chiba prefecture for work-study and internship programs.

These educational programs are called Job and Dream Best Match Programs and the aim is to help people find ways to make their work rewarding and interesting and to learn the importance of having a connection with society through working. This marked the 12th time the program was implemented.

Seiko Instruments Singapore Pte. Ltd. accepted five junior high school students for a work-study program from the Japanese School in Singapore. This program is promoted by the Ministry of Education, Culture, Sports, Science and Technology in Japan and carried out by many of Japanese junior high schools in Singapore. This was the eighth time.

The students participated in the reception service and watch assembly process over a total of two days. During the watch assembly process, they were surprised at the mechanisms and functions of watches, and enjoyed their learning experience.









Community Activities

Social Welfare Activities

The SII Group subsidiaries and affiliates conduct social welfare activities entrenched in local community.

Three employees of Seiko Instruments Singapore Pte. Ltd. visited a nursing home and spent time talking with residents. They also donated funds they had raised.

As part of Safety and Health Month activities carried out by Instruments Technology (Johor) Sdn. Bhd, employees have been donating blood to the local national hospital since 2013. In FY 2017, 187 employees donated blood.

Ohno Unit is supporting Emergency Safe Haven activity for the local elementary school students. A part of the premises is provided as a bus stop for kindergartens.

Local Cleanup Activities

Every SII Unit in and outside Japan holds regular cleanup activities around their premises, at roadsides, etc. for contribution to the local community and as part of environmental conservation.

[In Japan]

One of SII's training programs for new employees is cleanup activity in a local area. This aims to raise their environmental awareness and teach them the importance of making a contribution to a local community as businesspeople. In FY 2017, 41 new employees cleaned up a wide area from Makuhari Unit premises to the nearest Kaihinmakuhari station.

Akita Unit carries out an annual cleanup activity with walking titled "Tomoshibi, cleaning and walking." The title "Tomoshibi" means "servicing together" for making a contribution to a local community. For FY 2017, about 250 employees participated after work on May 31.

This activity combines various kinds of advantages including exercise, a contribution to beautification of a local area, and even improvement of communication among employees.

[Outside Japan]

Guangzhou Seiko Instruments Ltd. (GSW) employees volunteered to clean up Huayang Lake Wetland Park in Dongguan City on December 2, 2017. About 150 employees and their family members including the president gathered, divided into the groups, and cleaned up the park. GSW continues to make a contribution to environmental conservation of a local community.

In conjunction with the Environmental Month 2017, Seiko Instruments Singapore Pte. Ltd. has organized "Keep the Park Clean Activity" at the Woodland Waterfront Park on December 21, 2017 and 28 employees participated. The aim of this project is to involve employees in nature conservation and to Adopt Clean & Green Attitude.









SII Environmental Vision

On the occasion of SII's 80th anniversary in 2017, we have formulated an "Environmental Vision" that looks to the future of environmental management from SII's perspective.

It highlights SII's direction based on achieving a sustainable society by coexistence with nature, low carbon, and material cycle.

SII was founded in 1937 as a watch manufacturer, and its corporate identity is "Creating Time, Optimizing Time, Enriching Time". As a corporation focused on "time," we pursue the creation of a sustainable society by "enriching time for the Earth and people." This means that SII is making a commitment to "enriching time" that the Earth and people are enjoying, and we hope that enriched "time," which also involves sustainability, will continue into the future.

Innovation is essential for our Environmental Vision, and it cannot be actualized if we continue to work as we have done in the past. However, SII has led in the area of technological innovation to create quartz watches, and has developed new businesses by harnessing its "SYO"ism* technology that has been honed by the processes involved in SII's wellestablished history of watchmaking.

We remain committed to pursuing innovations by leveraging our "SYO" ism technology and strive to make a contribution to achieving enriched, sustainable time.

*Note-"SYO"ism signifies three keys of our technological philosophies: "Craftmanship", "Miniaturization", "Efficiency."

SII Group Long-term Vision Sustainable Society in which SII Believes



Green Plan and Environmental Policy

SII Green Plan Concept

The SII Group has formulated the Green Plan based on the "Three Green" concept of "Green Process, Green Products, and Green Life," under which the company practices environmentally conscious management.



SII Group Environmental Policy Revised in January 2017

Environmental Concept

The SII Group will continue to harmonize its corporate activities with the global environment, designate the "Three Green" concept consisting of Green Process, Green Products and Green Life as our basic concept, promote and conduct environmental activities, and contribute to the establishment of a sustainable society that can coexist with nature.

Environmental Activity Guidelines

We will strive to

- 1. Continue to improve our environmental management system and environmental performance, while performing advanced activities that respond to the requirements of society to enhance stakeholder value.
- 2. Not only observe all laws, rules, regulations, agreements and other duties, but also mitigate environmental risks and prevent environmental pollution.
- 3. Carry out our tasks with a focus on the following activities based on "SYO"ism*1:
 - 1. Providing products and services that minimize their impact on the environment throughout their lifecycles and can contribute to environmental conservation.
 - 2. Proactively promoting eco-friendly, efficient manufacturing.
 - 3. Fully enforcing energy conservation measures in the entire business activities and addressing global warming.
 - 4. Recognizing the finite nature and the preciousness of resources of the earth, and encouraging their responsible use.
 - 5. Reducing risks arising from chemical substances and promoting the elimination of harmful substances.
- 4. Promote SII Green Purchasing and ensure proper and strict management of chemical substances contained in products.
- 5. Be aware of our impact on biodiversity and all the benefits we receive from it, and make efforts toward biodiversity conservation.
- 6. Raise environmental awareness of all employees and encourage them to protect the environment in their personal lives.
- 7. Make a social contribution to and achieve accountability for environmental protection, while facilitating communication with the society.
- 8. Ask our suppliers for their cooperation in following this policy.

*1 "SYO"ism: SII technology philosophy

Environmental Management System

We established the environmental management systems in compliance with ISO 14001 at each site and throughout the Group. The Plan-Do-Check-Act cycle has been steadily implemented to improve our environmental performance.

Our mid-term and annual goals are established based on the "SII Group Environmental Policy," and pursued by the environmental management system at each site.

The Corporate Environmental Administration Department at the head office operates the entire SII Group environmental management system and achievements of each site are reported on a regular basis.



Environmental Management Framework

SII established the environmental management system consisting of the SII President as well as the Environmental Management Director serving as a chief executive. Having two organizational structures on a unit and divisional basis, the Corporate Environmental Administration Department at the head office cooperates with each unit and division and takes a leading part in addressing their issues.

The SII Environmental Promotion Committee discusses the SII Group targets and exchanges information including activity report submitted by each site. We strive to promote the environmental activities steadily throughout the group. In the FY 2017 committee, the participants shared the review of the FY 2016 theme "water risks" and the FY 2018 key measures carried out at each site.



Eco-friendly Products that Contribute to Environmental Conservation

Evolution of Green Products — Eco-friendly Products that Contribute to Environmental Conservation—

The basic concept of SII environmental management is the "Three Green" concept: Green Process, Green Products, and Green Life.

Among these, Green Products (in other words, creating eco-friendly products that can contribute to environmental conservation) are a manufacturer's mission. We keep evolving based on the SII's technological philosophy of "SYO" ism.

SII Green Products

SII introduced the SII Green Product Label System in December 2001 and the SII High Grade Green Product Label System in October 2006, which have ensured the Improvement of environmental performance of our own products.

Green Products plus

In addition to improving the environmental performance of our own products, the concept of "improving the environmental performance of our clients' products in which SII devices or components are incorporated" and "contributing to conserving the environment we all share" is called "Green Products plus," and we have been focusing on developing the products and services.

Expansion of Scope – Software and Services–

In addition to hardware products such as equipment and components, the scope of the SII Green Products certification system has been expanded to include software and services.



their fabrication technology.

Action against Global Warming

Our Concepts and Current Status

The Paris Agreement was adopted in December 2015, and a global framework for ratifying plans to take measures against global warming after 2020 was set forth and every participating country has determined a target value. Corporate roles and responsibilities in finding solutions for global warming issues are becoming bigger and bigger.

SII, as a manufacturing company, works toward reducing greenhouse gas emissions not only at manufacturing sites but also throughout the full range of our business activities, with energy-saving activities including the provision of energy-saving products and services.

Reducing CO₂ Emissions and FY 2017 Overview

In FY 2017, the total amount of CO₂ emissions from our sites in Japan was 55,901 tons-CO₂, which was above the target of 54,216 tons-CO₂*. The total volume was 566 tons-CO₂, or 1.0%, greater than the volume for FY 2016. This was due to a production increase. On the other hand, we promoted our continued energy-saving activities including the introduction of highly-efficient equipment, efficient operation of production facilities, and replacing lighting equipment with LED sources.

The total amount of CO₂ emissions at our sites outside Japan was 34,696 tons-CO₂ in FY 2017, which was 3.7% below the total for FY 2016. These sites also made efforts by changing lighting equipment to LED sources, efficiently operating production facilities, and recycling exhaust heat.

* The amount includes the semiconductor business that was spun off from the SII Group in January 2018.

Resource Recycling

Our Concepts

As resource depletion has a critical impact on corporate management, SII regards efforts for the responsible use of earth's finite resources as an extremely important form of corporate responsibility.

We are striving to effectively utilize the resources in our business activities toward creating a sustainable recyclingoriented society.

FY 2017 Overview

Waste

The FY 2017 recycling rate at our sites in Japan achieved the target of 90% or more, in fact, our actual performance was 92%. Total waste generation was 2,183 tons*, which was 3% more than the total for FY 2016. This was due to production increase.

The recycling rate at our overseas sites improved to 71% and total waste generation was 2,252 tons. Both of these figures slightly increased from the respective results for FY 2016.

Water Use

The amount of water used in FY 2017 at our sites in Japan was 568,000 m³*, which was 25,000 m³ more than the corresponding amount for FY 2016, due to production increase.

Water usage at our sites outside Japan was 342,000 m³, which was 19,000 m³ less than the corresponding amount for FY 2016.

* The amount includes the semiconductor business that was spun off from the SII Group in January 2018.

Conservation of Biodiversity

Our Concepts

The SII Group's business activities depend, to some extent, on ecosystem services. We consider biodiversity conservation to be a key issue of environmental management that needs to be addressed in our daily business activities. SII established a "Biodiversity Action Agenda" in April 2011 to specifically work on the conservation of biodiversity.

FY 2017 Overview

FY 2017 was regarded as the second stage of ongoing conservation activities based on the "SII Group Land-use Guidelines on the Conservation of Biodiversity." Each site advanced their specific activities that utilize the characteristics of their sites, including the installation of nest boxes and biological research.

Assessment of Land Use and Nature Watching

Morioka Seiko Instruments Inc. (MSI) has been carrying out an assessment of land use from the viewpoint of biodiversity since FY 2012. This activity conforms to "Guidelines for Sustainable Business Sites" issued by "General Incorporated Foundation JAPAN BUSINESS INITIATIVE FOR BIODIVERSITY"(JBIB), and is assisted by outside specialists and supported by their advice.

In FY 2017, in order to soundly conserve the local forest into the future, they carried out nature watching activities based on the theme of "maintenance of the forest," including measuring every one of the 707 trees in the forest.

In February 2015, MSI was able to acquire the first ABINC * certification (factory version)" from an organization called ABINC, the Association for Business Innovation in harmony with Nature and Community.

In addition, MSI received a special ABINC award established by ABINC in October 2016 for excellence in communication through activities aimed at conserving biodiversity, and they renewed the ABINC certification in January 2018.

Chemical Substances Control

Our Concepts

The SII Group believes that the safe and appropriate chemical substances control is corporate responsibility and important activity for risk management. In terms of chemical substances used in our manufacturing processes at sites in Japan, we control the use and emission of PRTR* substances, SII voluntarily specified 22 substances, and 100 VOC (volatile organic compounds) substances.

* PRTR (Pollutant Release and Transfer Register): This system is designed to assess, gather and disclose data on the volume of chemical materials handled, amounts released into the environment, and volumes transferred in waste materials to points outside of plant locations. Companies collect data on the relevant substances and report them to the appropriate government agency once a year.

Reduction of Chemical Substances Subject to Control/FY 2017 Overview

The FY 2017 total emission of chemical substances subject to control in manufacturing process was 34.6 tons*, which was approximately 1 ton greater than the total for FY 2016.

The amount of handled PRTR substances was 106.6 tons. The breakdown of the amount handled and emitted is shown below.

* The amount includes the semiconductor business that was spun off from the SII Group in January 2018.





Business Activities and Environmental Impact

The SII Group believes that understanding environmental impact properly throughout the product life cycle is the basic practice of environmental activities.

The overview of FY 2017 environmental impact is explained below.



INPUT	
Materials:	Metals, plastics, glass and other materials used in production
Packaging:	Plastics and paper to be recycled according to the Law for Promotion of Sorted
Office Paper:	Paper for printers and copiers
Chemical Substances:	PRTR hazardous chemical substances, HFCs, PFCs, SF ₆ and VOC
Electricity:	Power purchased from electric companies
Gas:	City gas and LP gas
Fuel:	Kerosene and heavy oil
Water:	Tap water, industrial water and groundwater

*1: Transportation among the SII Group companies in Japan

*2: Estimated annual energy consumption of SII Green

Products certified up to FY 2017. The calculation method was reviewed for certain products to make the definition of products in use closer to actual reality.

OUTPUT	
CO ₂ :	From use of electricity, gas, oil, and cooling and heating water
NOx:	From use of gas and oil
SOx:	From use of oil *NOx and Sox figures represent business units installing soot and smoke emitting facilities which are regulated by the Air Pollution Control Law.
Chemical Substances:	\ensuremath{PRTR} hazardous chemical substances, HFCs, PFCs, SF6, and VOC discharged into the atmosphere and water
Waste Water:	Released into rivers and sewer systems
COD (Chemical Oxygen Demand):	Pollution load *Limited to the business units subject to the regulations in the Water Pollution Control Law covering the total pollution amount
BOD (Biochemical Oxygen Demand):	Pollution load *Limited to the business units installing specified facilities as prescribed by the Water Pollution Control Law
General Waste:	Paper and food wastes generated by or as a result of industrial operations
Industrial Waste:	Waste oil, acid, alkali, plastics, ash, sludge, and other materials generated by or as a result of industrial operations
Final Landfill Rate:	The ratio of the landfill amount to the total waste amount

CSR Targets and Results

Our major CSR activities carried out in FY 2017 are as follows.

 \bigcirc : Overachieved \bigcirc : Achieved or almost achieved \triangle : 70% or less achieved -: N/A

Compliance

FY 2017 Target	FY 2017 Results	Evaluation	FY 2018 Target
Continue to implement the regular on- line compliance quizzes (every day and annually)	Today's Dr. Compliance's Word and Quiz: Updated almost every day Period when the compliance quiz was implemented: Dec. 14, 2017 – Feb. 2, 2018 Respondents: 2,665 / 91.9%	0	Continue the Today's Dr. Compliance's Word and Quiz every day as much as possible Implement the compliance quizzes annually
Continue the educational activities to senior management on compliance awareness (every 2 or 3 months)	Period when the educational activities were implemented: - June 2017 - August 2017 - October 2017 *No educational activity in the fourth quarter	0	Implement the educational activities once a quarter
Conduct the periodic compliance awareness survey (annually)	Period when the survey was implemented: Jun. 19 – Jul. 31, 2017 Respondents: 3,306 / 88.54%	0	Implement the survey annually

Risk Management

FY 2017 Target	FY 2017 Results	Evaluation	FY 2018 Target
Continue to implement and promote the group-wide risk management activities	Implemented PDCA for evaluation and management of key risks (Took 32 actions)	0	Continue to implement and promote the group-wide risk management activities

Intellectual Property

The number of SII's patents Japan: 1,779 Overseas: 1,536

Customer Satisfaction

FY 2017 Target	FY 2017 Results	Evaluation	FY 2018 Target
Continue the efforts for customer satisfaction improvement	To be continued	0	Continue the efforts for customer satisfaction improvement

Quality Control/Product Safety

FY 2017 Target	FY 2017 Results	Evaluation	FY 2018 Target
Product safety check: conduct the check at 18 times	Conducted the checks 11 times *The number of products subject to the check was lower	0	Conduct the checks for 7 times
Product safety: review system and conduct seminars for 7 times	Conducted the seminar once and completed the Safety Guidelines for Production and Introduction of Mechanical Equipment as an additional activity	0	No activity is planned
Operation process checks: Conduct the checks at 10 divisions * *The number has been changed from the planned 16 divisions due to structural reforms	Conducted the checks at 10 divisions	0	Operation process checks: Conduct the checks at 13 divisions

Universal Design

FY 2017 Target	FY 2017 Results	Evaluation	FY 2018 Target
Continue education, confirmation, and checking of GREENDESIGN SPIRITS10*	Continued announcement about GREENDESIGN SPIRITS10 Conducted the self-evaluation of products created based on the GREENDESIGN SPIRITS 10 and checked and strengthened insight of the concept	0	Continue education, confirmation, and checking of GREENDESIGN SPIRITS10

* SII's Passion for Design is integrated into 10 key words as the design philosophy.

Respect for Human Rights

FY 2017 Target	FY 2017 Results	Evaluation	FY 2018 Target
Verify thorough communication of the spirit of respecting human dignity to employees at all sites outside Japan	Confirmed thorough communication at all sites	0	Establish a rule to ensure that all employees are aware of the spirit, and human resource employees at head office will visit each site to confirm the awareness of all employees
Thoroughly communicate the Action Guidelines to employees at all sites outside Japan	Completed most of the Action Guidelines except Thailand	0	Establish a rule to ensure that all employees are aware of the spirit, and human resource employees at head office will visit each site to confirm the awareness of all employees
Childcare leave taken by 18 employees Short-hour work for childcare taken by 27 employees			

Safety and Health

FY 2017 Target	FY 2017 Results	Evaluation	FY 2018 Target
 The SII Group comprehensive safety inspection (self-inspection): Conduct the inspection at all sites in Japan and manufacturing sites outside Japan Conduct on-site check after the self- inspection 	The SII Group comprehensive safety inspection (self-inspection): Conduced the inspection at all sites in Japan and manufacturing sites outside Japan - In the process of conducting on-site check after the self-inspection	0	The SII Group comprehensive safety inspection (self-inspection): Conduced the inspection at all sites in Japan and manufacturing sites outside Japan - Continue the on-site check after the self-inspection implemented in FY 2017
Hold the lifesaving seminars at sites in Japan	Held the lifesaving seminars at sites in Japan (197 participants)	0	Hold the lifesaving seminars at sites in Japan
Implementation rate for the specific health checkups: 90%	84.6% *1	0	Implementation rate for the specific health checkups: 86%

*1 The percentages are the forecasts as of July 2018.

Coexistence with Society

FY 2017 Target	FY 2017 Results	Evaluation	FY 2018 Target
Continue the local contribution activities at each site	Performed the local cleanup activities, blood donation, contribution, tree planting activities, etc.	0	Continue the local contribution activities at each site
Continue to implement the field-study and internship programs at each site	Implemented the field-study, internship programs, and factory tours at each site	0	Continue to implement the field- study and internship programs at each site

Purchasing Activities with Fairness and Integrity

FY 2017 Target	FY 2017 Results	Evaluation	FY 2018 Target
Continue the buyer education	 Carried out the buyer education: 149 participants Carried out the intranet-based purchasing education: 68 participants 	0	 Continue the buyer education Continue the intranet-based purchasing education
Continue the implementation of supplier certification systems, and maintain/ improve the level of management	Continued the implementation	0	Continue the implementation of supplier certification systems, and maintain/improve the level of management

Creation of Eco-friendly Products

FY 2017 Target		FY 2017 Results	Evaluation	FY 2018 Target
Increase the sales rate of SII Green Products	98 % or more	98.3 %	0	Maintain the rate at 98 % or more throughout SII
Increase the number of SII High Grade Green Products	3 or more products	7 products	0	2 or more products

Control of Chemical Substances Contained in Products

FY 2017 Target		FY 2017 Results	Evaluation	FY 2018 Target
Ensure products free of cadmium, hexavalent chromium, mercury, and lead	Maintain the rate of products free of the substances concerned at 95 % or more ^{*1}	98.0 %	0	Maintain the rate at 95 % or more ^{*1}
Ensure products free of polyvinyl chloride	Maintain the rate of products free of polyvinyl chloride at 95% or more 2	96.0%	0	<new setting=""> Achieve a rate of products that are free of phthalates of 95% or more ^{*3}</new>

*1 Completed the elimination by the end of May 2006 for products to be sold in the EU.

*2 Except those used within the safety standards or difficult to be substitute.

*3 The control of phthalates, DEHP, DBP, and DIBP, is subject to the products to be shipped to countries outside Japan.

Action against Global Warming

FY 2017 Target		FY 2017 Results	Evaluation	FY 2018 Target
Reduce energy-related CO ₂ emissions	Improve by 1 % or more per unit of production at sites in Japan Total amount: 54,216 tons- CO ₂	Total amount: 55,901 tons-CO ₂ +1.0 % from FY 2016	0	Improve by 1 % or more per unit of production Total amount: 53,562 tons-CO ₂ Reduce by 25% from FY 1990 by the end of FY 2020
	Reduce by 1% from FY 2016 at each overseas site	<pre><reference value=""> Total amount: 34,696 tons-CO2 -3.7% from FY 2016</reference></pre>		Reduce by 1 % from FY 2017 at each overseas site

Resource Recycling

FY 2017 Target		FY 2017 Results	Evaluation	FY 2018 Target
Improve the recycling rate of wastes	Maintain the rate at 90 % or more at sites in Japan	92 %	Ο	Maintain the rate at 90 % or more
	Improve by 3 points from FY 2016 at overseas sites	71 %	_	+3 points from FY 2017 at each overseas site
Reduce water use	Maintain the current status at sites in Japan	568,000 m ³ + 5 % from FY 2016	_	Maintain the current status
	Reduce by 1 % from FY 2016 at each overseas site	342,000 m ³ - 5 % from FY 2016	_	-1% from FY 2017 at each overseas site
Reduce office paper use	Reduce by 3% from FY 2016 at overseas sites	18 tons -8 % from FY 2016	_	-3% from FY 2017 at each overseas site

Chemical Substances Control

FY 2017 Target		FY 2017 Results	Evaluation	FY 2018 Target
Reduce the amount of emissions of chemical substances*	(Japan) Maintain +5 % or less from FY 2016	35 tons +3 % from FY 2016	0	(Japan) Maintain +5 % or less from FY 2017

* Chemical substances subject to control at SII: PRTR hazardous chemical substances, HFCs, PFCs, SF₆, and VOC.

Biodiversity

FY 2017 Target	FY 2017 Results	Evaluation	FY 2018 Target
Continue the assessment of land use	 Morioka Seiko Instruments Inc. assessed the current status of land use, and carried out nature watching Completed the second stage of SII Group Land-use Guidelines on the Conservation of Biodiversity 	0	 Continue the assessment of land use Complete the third stage of SII Group Land-use Guidelines on the Conservation of Biodiversity

- Three units in Chiba continue the Supporters for Conserving the Strain of Japanese White Pine (Pinus Parviflora) under the Chiba prefecture's project, monitor the growth, and make periodic reports to Chiba prefecture

- Ohno Unit continues the Biodiversity monitoring members of Ichikawa City and conducts the monitoring of indicator organisms





Seiko Instruments Inc.

Corporate Environmental Administration Department 8, Nakase 1-chome, Mihama-ku, Chiba-shi, Chiba 261-8507, Japan Telephone: +81-43-211-1111/Direct: +81-43-211-1149 Facsimile: +81-43-211-8019 http://www.sii.co.jp/eco/eg/