Activity Symbol

Seiko Instruments Inc. Japanese name was changed as of 9/1/2004.
Corporate Environmental Administration Group
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1-0410/2000/MS/OP

Striving for Harmony with the Earth

SII Group Green Plan

Environmental Report 2004

Message

Junichi Hattori
Vice chairman, CEO

Yukihiko Chayama
President, COO, CFO

On the first of September, 2004, we changed our official Japanese company name from “Seiko Instruments Inc.” to “Seiko Instru Inc.” (in phonetic description) (Seiko Insutsuru Kabushiki Kaisha in Japanese) —where *Instru* is coined from the Latin verb *instruere*. The new company name embodies the company’s mission to “prepare” and “provide” breakthrough products and services which will “build” new value in society.

There is another way that we can express the goal of our Group: it is *to continue earning the trust of our customers and our society as we continue to make our contribution to the building of a happy and prosperous world*. And to earn such trust, we must leave a legacy of true benefits to the future.

The idea of *Coexistence-Harmony* informs all of our business activities. As a manufacturer, we have expanded on the high-precision technologies we pioneered as a watchmaker to the point where we now offer a wide variety of products and services; but this in turn means that we also find ourselves making significant use of our planet’s natural resources. We see this as a serious challenge, and we recognize that we must do our part to help forge a society that recycles and sustains its environment. We understand our essential responsibility to coexist in harmony with all life, and to pass on a beneficent environment to those who shall come after us.

Our environmental actions, which originated in activities undertaken at our manufacturing facilities, now extend throughout our entire Group. Our environmental consciousness permeates all of our business functions, and is alive in each and every one of our products.

We are pleased to report that FY2003 saw the achievement of some important environmental targets that we had set for the year: the attainment of zero emissions throughout all of our domestic units, the accelerated reduction of greenhouse gas emissions, and an increased share of SII green products. Unfortunately, we were unable to meet our goal of entirely eliminating our use of lead-based solder, as the implementation in our mass production lines was somewhat delayed. We now intend to achieve this goal as early as we can in FY2004.

As we move ahead, it is our intention to apply our technologies and value-building capabilities not only to product creation but also to environment concerns, so that we can continue to earn the trust of our society and our customers, and increase our true value as a business.

We hope that you will find this year’s report to be of interest. It is our firm intention to continue improving our environmental actions, and we welcome any comments and suggestions that you may have.

September 2004

Seiko Instruments Inc.

Junichi Hattori
Vice chairman, CEO

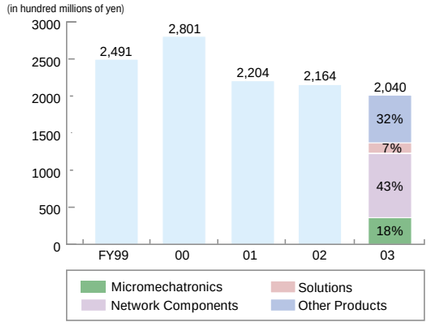
Yukihiko Chayama
President, COO, CFO

Corporate Data (as of FY2003)

Corporate name: Seiko Instruments Inc.
Established: September 7, 1937
Paid-in capital: ¥4,750 million
Fiscal year end: End of February
Products: [Micromechatronics]
Watch movements, optical fiber connectors, ultrasonic motors, HDD components, machine tools, etc.
[Network Components]
LCD modules, CMOS ICs, microbatteries, quartz crystals, etc.
[Solutions]
Restaurant ordering systems, time authentication services, data communication devices, mobile phone content services, electronic dictionaries, etc.
[Other Products]
Watches, compact thermal printers, large format printers-plotters, inkjet printer heads, analysis and measurement equipment, etc.

Annual sales: ¥150,700 million (nonconsolidated); ¥204,000 million (consolidated)
Number of employees: 3,700 (nonconsolidated)
8,500 (consolidated)

Consolidated sales for the last five years:



*FY2003 refers to 11 months from April to February because SII has implemented an annual accounting systems ending in February.

About This Report

Beginning in 1996, the SII Group has published this annual Environmental Report for the purpose of informing our stakeholders about our Group’s environment-oriented activities and results. In drafting this year’s report, we have referred to the 2003 edition of the Japan Environment Ministry’s *Environmental Report Guidelines*, as well as to other relevant guidelines.

This year we have expanded the scope of our report to cover activities undertaken at our production sites outside of Japan, in an effort to offer a greater range of information to our readers.

Scope of This Report

This report focuses on efforts and achievements at our eleven major facilities within Japan and at our five major facilities overseas.

Period Covered by This Report

This report covers activities and results from April 2003 to March 2004, and also includes information about subsequent activities and about our outlook for the future.

Major Developments during This Report Period

- We have changed the end of our fiscal year from March 31 to the end of February. As of FY2004, this new fiscal year also applies to management of our environmental activities.
- Our compressor operations, EDA operations (development and sales of semiconductors and electronic-design automation software), and systems building operations are now excluded from the scope of SII Group environmental activities owing to capital tie-ups and other structural changes.

Major Developments Post-Dating This Report Period

Aug. 2004:
- Assimilated SII Quartz Techno Ltd. (now our Tochigi business unit)
- Relocated our Nihonbashi business unit to our Makuhari headquarters

Sept. 2004:
- Changed our official Japanese company name from “Seiko Instruments Inc.” to “Seiko Insutsuru Kabushiki Kaisha.”

Contact Us at...

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Overview of SII Group Operations

SII Group products appear in many places and at many levels throughout our society. They are used and worn by individuals, and also used by restaurants and taxis, offices, and in laboratories and factories. We also manufacture parts that serve as key components in a wide range of goods. Here we introduce some of the products we provide and the places that they appear.

Fully Automatic Cylindrical Grinder

This fully automatic high-precision device grinds inner races for miniature bearings. It features a small footprint and low energy consumption.

Large Format Printers-Plotters

These devices offer high-speed output and high-quality imaging. Intended for use in graphics industries and for use by businesses that are involved in designing in the fields of construction, civil engineering, machining and tooling, and electronic circuitry.

Network Devices

A wide range of broadband-oriented components—for remote access servers, communication servers, and other such devices—intended to support IP VPN, wide-area Ethernets, and many other communication services.

Mechanical Watches

These classic-style wristwatches use no electronic parts at all. Some are self-winding, while other requires manual winding. All of them offer graceful and impressive mechanisms.

Quartz Analog Watch Movements

One of our bestselling components, used by OEMs throughout the world.

Analysis and Measurement Equipment

Our devices support a wide range of analyses and measurement. These include: high-speed high-resolution fluorescent X-ray analysis; ICP emission spectrometry; probe microscopes; and film thickness measurements. These devices are used by laboratories, analytic institutions, and manufacturers.

Restaurant Ordering System

This popular, widely used system implements integrated management of all relevant information: from customer orders to cooking directives, to billing and accounting, to shop administration.

Thermal Printers (Mechanical unit and peripherals)

Our miniature printer engine supports low-power, high-speed thermal-head printing. We can provide total print-system support, and fashion rapid customizations to meet specific needs.

Data Communications Devices

We offer a variety of communications devices to support mobile computing. Cards are available in PC, CF, and SD card sizes.

HDD Components

The high-precision processing technologies that we pioneered as a watch manufacturer have also been adopted to the production of components for hard disk drivers. Our fluid dynamic bearings (FDBs) significantly enhance HDD performance and are in use throughout the world.

LCD Modules, CMOS ICs, Microbatteries, and Quartz Crystal Units

We manufacture key components for mobile phones, digital cameras, and many other devices.

Electronic Dictionaries

Available features include Japanese dictionary, English dictionary, Japanese-English dictionary, English-Japanese dictionary, Japanese character dictionary, and more. The device is easy to use, and words are easy to find. We offer a variety of models, some of which provide many dictionary types, and others intended for more specialized usage.

Wireless Credit/Debit Card Authorization System "Crepico"

Japan's first realtime wireless authentication system. Ideal for processing credit and debit card payments where wired systems are not appropriate—in taxicabs, for door-to-door sales and collections, at exhibitions, and in many other such environments.

Photomasking Repair System

This device utilizes an FIB (focused ion beam) to repair defects in the photomasks and reticles used for fashioning semiconductor devices. The device is capable of highly precise, low-damage repair of the tiny defects and multiple shape irregularities that can occur in photomasks.

Profile of the SII Group's Business Units

The following is a profile of the 11 domestic business units involved in environment-related activities. This profile describes each unit's main business operations and lists its environment-related inputs and outputs.

Tohoku Region

SII Micro Parts Ltd.

ISO 14001 Certification: February 1999

Location: Sendai-shi, Miyagi
Main Products: Batteries, capacitors, and other electronic components; Manufacture of materials for precision devices

IN

Energy
- Electricity 9,522 thousand kWh
- LP gas 187,500 m³

OUT

Carbon dioxide: 4,738 tons-CO_2
Wastes
- Total 188 tons
- Recycled 155 tons

(including valuable wastes)

Morioka Seiko Instruments Inc.

ISO 14001 Certification: April 1997

Location: Iwate-gun, Iwate
Main Operations: Integrated watch manufacturing; development of watch production technologies; watch components

IN

Energy
- Electricity 19,304 thousand kWh
- Heavy oil 2.8 kl
- Kerosene 1,017.7 kl
- LP gas 19,500 m³

OUT

Carbon dioxide: 10,058 tons-CO_2
Wastes
- Total 487 tons
- Recycled 423 tons

(including valuable wastes)

SII Microtechno Inc.

ISO 14001 Certification: April 1997

Location: Omagari-shi, Akita
Main Products: LCDs and LCMs for mobile phones; IC packages

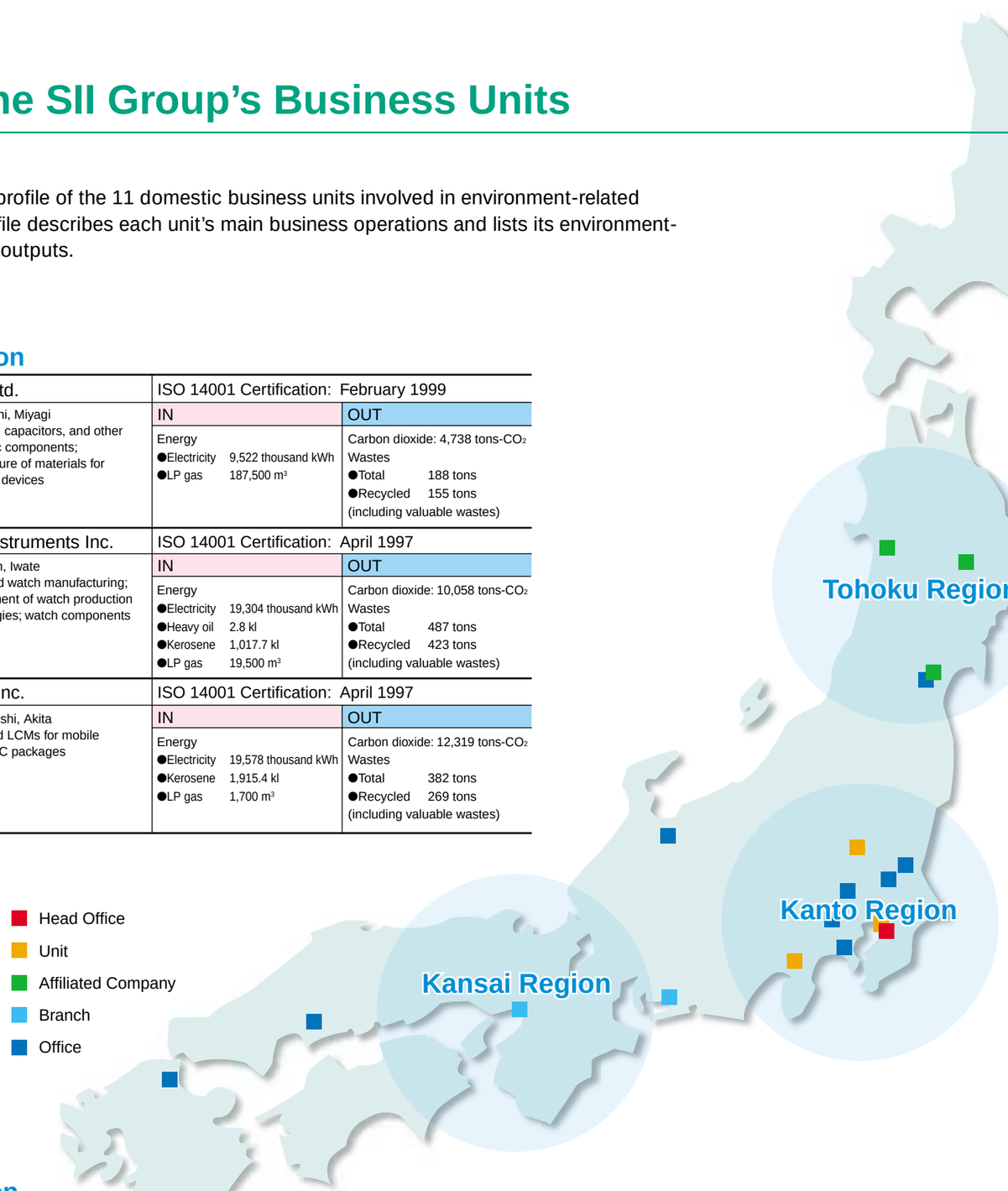
IN

Energy
- Electricity 19,578 thousand kWh
- Kerosene 1,915.4 kl
- LP gas 1,700 m³

OUT

Carbon dioxide: 12,319 tons-CO_2
Wastes
- Total 382 tons
- Recycled 269 tons

(including valuable wastes)



Kansai Region

Osaka Branch

ISO 14001 Certification: Sep. 2002
(Extended to all domestic units*: Oct. 2003)

Location: Toyonaka-shi, Osaka
Main Products: Sales of electronic components, analysis and measurement equipment, information devices and related products; technical support; after-sales service

(Includes data from the Nihonbashi sales headquarters, which was relocated to our Makuhari headquarters in August 2004)

IN

Energy
- Electricity 1,346 thousand kWh
- Heating and air-conditioning 1,348 GJ

OUT

Carbon dioxide: 555 tons-CO_2

*Osaka branch, Nagoya branch, Sendai office, Tsukuba office, Mito office, Omiya office, Tachikawa office, Yokohama office, Toyama office, Hiroshima office, Fukuoka office

Kanto Region

Makuhari Unit (SII Head Office)

ISO 14001 Certification: October 2001

Location: Chiba-shi, Chiba
Main Operations: SII Group headquarters; development and sales of watches, electronic dictionaries, and IT devices; sales of electronic components, analysis and measurement equipment

IN

Energy
- Electricity 8,718 thousand kWh
- Municipal gas 31,500 m³
- Heating and air conditioning 16,518 GJ

OUT

Carbon dioxide: 3,915 tons-CO_2
Wastes
- Total 214 tons
- Recycled 163 tons

(including valuable wastes)

Takatsuka Unit

ISO 14001 Certification: November 1996

Location: Matsudo-shi, Chiba
Main Operations: Development and production of semiconductors, and electronic components; development of microtechnologies and electronic devices

IN

Energy
- Electricity 55,102 thousand kWh
- Heavy oil 35.1 kl
- Municipal gas 2,294.9 thousand m³

OUT

Carbon dioxide: 26,511 tons-CO_2
Wastes
- Total 721 tons
- Recycled 618 tons

(including valuable wastes)

Ohno Unit

ISO 14001 Certification: March 1999

Location: Ichikawa-shi, Chiba
Main Operations: Manufacturing and sales of cutting tools, jigs, precision parts, and small auto parts; sales of optical communication components and photometric devices

IN

Energy
- Electricity 6,754 thousand kWh
- Municipal gas 140,300 m³

OUT

Carbon dioxide: 2,906 tons-CO_2
Wastes
- Total 364 tons
- Recycled 364 tons

(including valuable wastes)

Miyakubo Unit

ISO 14001 Certification: March 1997

Location: Ichikawa-shi, Chiba
Main Operations: Manufacturing of motors, flexible PC boards, and IC-chip-mounted inkjet print heads

IN

Energy
- Electricity 4,456 thousand kWh
- Municipal gas 6,300 m³

OUT

Carbon dioxide: 1,714 tons-CO_2
Wastes
- Total 119 tons
- Recycled 116 tons

(including valuable wastes)

Narashino Unit

ISO 14001 Certification: January 1997

Location: Narashino-shi, Chiba
Main Operations: Development, manufacture, and sales of internal grinders and FA systems

Note: Figures include data for compressor operations through Aug. 2003.

IN

Energy
- Electricity 4,000 thousand kWh
- Heavy oil 77.4 kl
- Municipal gas 121,200 m³

OUT

Carbon dioxide: 2,004 tons-CO_2
Wastes
- Total 174 tons
- Recycled 131 tons

(including valuable wastes)

Oyama Unit

ISO 14001 Certification: August 1998

Location: Sunto-gun, Shizuoka
Main Operations: Development and manufacture of analysis and measurement equipment, and acoustic devices

IN

Energy
- Electricity 4,565 thousand kWh
- Heavy oil 8.9 kl
- Kerosene 413.4 kl
- LP gas 3,500 m³

OUT

Carbon dioxide: 2,831 tons-CO_2
Wastes
- Total 72 tons
- Recycled 67 tons

(including valuable wastes)

Tochigi Unit (former SII Quartz Techno Ltd.)

ISO 14001 Certification: February 1998

Location: Tochigi-shi, Tochigi
Main Operations: Manufacture of quartz crystal units

IN

Energy
- Electricity 9,498 thousand kWh
- Kerosene 4.8 kl
- LP gas 2,800 m³

OUT

Carbon dioxide: 3,651 tons-CO_2
Wastes
- Total 119 tons
- Recycled 119 tons

(including valuable wastes)

Environmental Management by the SII Group

Our environmental management approach is based on a policy of “three greens”: *green process*, *green products*, and *green life*.

■ SII Group Environmental Policy

Environmental Concept

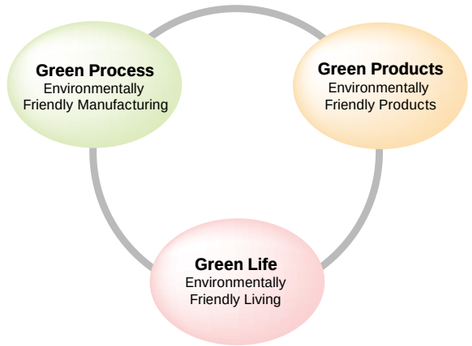
As a good corporate citizen, the SII Group will continue to harmonize its corporate activities with the global environment, protect and improve the environment, and contribute to the establishment of a sustainable society that can coexist with all living things.

Environmental Activity Guidelines

We must

1. Continue implementing and enhancing our environmental management system.
2. Observe all of laws, rules, regulations and agreements relevant to the environment, and prevent environmental pollution.
3. Continue reducing the impact on the environment through the following actions:
   (1) Provide products and services that, throughout their lifecycles, minimize their impact on the environment.
   (2) Save energy and contribute to the reduction of global warming.
   (3) Save resources and practice the 3 R’s: Reduce, Reuse and Recycle.
   (4) Reduce environmental risks of chemical substances and promote the disuse of harmful substances.
4. Promote SII GREEN PURCHASING and purchase eco-friendly products, parts, materials and services.
5. Enforce internal environmental audits to improve employees’ self-management.
6. Contribute to society through our unique activities for environment preservation.
7. Give environment-related seminars and training to all employees to elevate their consciousness, and guide each employee on how to protect the environment in his or her personal life.
8. Proactively disclose, to all classes of society, information about the implementation state of our environmental management system.

■ Conceptual Green Plan Scheme



■ Environmental Management System

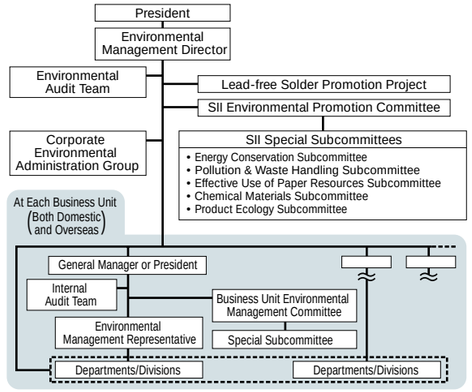
The SII Group carries out environmental management at the Group level and within each of our business units. We follow a “Plan – Implement – Check – Review” (PDCA) cycle to continuously reduce our environmental footprint. We begin with the SII Group Environmental Policy, from which we set intermediate activity targets and annual Group-wide environmental targets. These various targets are then worked out through the environmental management system at each of our business units. These units regularly report their results back to the head office, which oversees the Group’s overall environmental management system.

■ System Organization

Our environmental management system operates both at the Group level and within each of our business units. Ultimate responsibility rests with our Environmental Management Director, who reports to the President of Seiko Instruments Inc.

The SII Environmental Promotion Committee implements top-level decision-making. General environmental issues—such as energy conservation—are promoted by Group-level subcommittees under the coordination of the head office’s Environmental Administration Department.

In April 2003, we launched a system for promoting each department/division, complementing our existing system for promoting each business unit.



■ ISO 14001 Certification

As of March 1999, all of our major manufacturing units within Japan had received ISO 14001 certification. As of October 2003, all of our major non-manufacturing units within Japan had also received certification. Five of our major overseas units are also obtaining certification.

ISO 14001 Certification List

Certified Units and Subsidiaries	Location	Date of Certification
Guangzhou Seiko Instruments Inc.	Guangzhou, China	7/03
Instruments Technology (Johor) Sdn. Bhd	Malaysia	10/02
Domestic Units (In Oct. 2003, certification of Western Japan unit was extended)	Osaka, Nagaya, etc. All business units	9/02
Seiko Instruments (Thailand) Ltd.	Thailand	3/02
Makuhari Head office	Chiba-shi, Chiba	10/01
Sukagawa Precision Co., Ltd.	Sukagawa-shi, Fukushima	9/01
Dalian Seiko Instruments Inc.	Dalian, China	6/01
Ohno Unit	Ichikawa-shi, Chiba	3/99
SII Micro Parts Ltd.	Sendai-shi, Miyagi	2/99
Oyama Unit	Sunto-gun, Shizuoka	8/98
Tochigi Unit (Former SII Quartz Techno Ltd.)	Tochigi-shi, Tochigi	2/98
Seiko Instruments Singapore Pte. Ltd.	Singapore	5/97
Morioka Seiko Instruments Inc.	Iwate-gun, Iwate	4/97
SII Microtechno Inc.	Omagari-shi, Akita	4/97
Miyakubo Unit	Ichikawa-shi, Chiba	3/97
Narashino Unit	Narashino-shi, Chiba	1/97
Takatsuka Unit	Matsudo-shi, Chiba	11/96

■ Environmental Auditing

Environment auditing is essential not only for maintaining our environmental management system but also for achieving continuous improvements in its performance. All of our major business units undergo an internal audit at least one each year, carried out by auditors from that unit working in concert with auditors from other units and from SII headquarters. This use of auditors from various units is intended to ensure effective auditing, promote a synergistic exchange of information across units, and achieve consistent implementation of the Group policy and targets.

Internal Audits for 2003 13 audits at 11 units

Number of Issues Identified: 311	Minor disparities	104 issues
	Observations	207 issues
The greatest number of identified issues concerned our environmental management program:		79 issues

To help ensure reliability, we carry out regular training of our internal auditors. We have also set up SII’s Environmental Auditor Certification system, as a means of raising the level of our auditing. SII certified auditors and publicly accredited auditors both participate in internal audits, improving the audit quality and providing on-the-job training for the internal auditors working with them. We also receive regular audits from outside certification agencies, whose objective evaluations help to ensure that we are always moving in the right direction.

Number of People

SII Certified Environmental Auditors		28
Completed Environmental Auditor Training		433
Official Environmental Auditors (CEAR* Accredited environmental auditors)	Lead auditors	6
	Auditors	1
	Provisional auditors	11

*Center of Environmental Auditors Registration

■ Risk Management

We have established a Risk Management Committee whose purpose is to help ensure that we always maintain an appropriate stance with respect to risks throughout our Group. The committee is charged with coordinating with the relevant departments to identify and evaluate risks related to all Group operations—including catastrophic risks, product liability and quality defect risks, risks of criminal activities against our businesses, risks related to our information systems, and environmental risks—and to work out and promote appropriate prevention policies. We also work out plans for continuing our operations in the event of such occurrences, and for responding appropriately and rapidly on a company-wide basis to any such occurrences.

Company-wide policies for environmental risks are established by our head office’s Corporate Environmental Administration Group. Each business unit also works out its own coordinated prevention and response policies from within its own environmental management system.

Results for FY2003, and Plans for FY2004 and Beyond

The tables below show our results in meeting FY2003 targets, and outline our goals and plans for FY2004 and beyond.

■ Results for FY2003

We are happy to report that we were able to achieve zero emissions, one of our main targets for FY2003. We also exceeded our plans with respect to anti-global-warming policies and environment-friendly products. Unfortunately, we were unable to meet our goal of entirely eliminating lead-based solder. We intend to continue our efforts so as to achieve this target in the near future.

Score (☺: Achieved ☹ Not Achieved)

Action Item	Medium-Term Target	FY2003 Target	FY2003 Actual	Score	See page...
Action Against Global Warming	By the end of FY2010, reduce CO_2 emissions by 3% from FY1990 level. 76,706 tons-CO_2 → 74,405 tons-CO_2	74,950 tons-CO_2 FY2002 - 1%	70,647 tons-CO_2 FY2002 - 6.7%	☺	22
	By the end of FY2010, reduce emissions of greenhouse gases (HFCs, PFCs, SF_6) by 20% from FY2001 levels. 9,937 tons-CO_2 → 7,950 tons-CO_2	2,867 tons-CO_2 FY2002 - 3%	973 tons-CO_2 FY2002 - 67%	☺	
Reduce Waste and Promote Recycling	By the end of FY2010, reduce total waste generation by 50% from FY2000 level. 4,322 tons → 2,161 tons	3,213 tons FY2002 - 3%	2,840 tons FY2002 - 14%	☺	24
	Reduce dumped waste (landfill) to zero by the end of FY2003. (Achieve zero emissions at all of the Group's major business units within Japan.)	———	Achieved at 10 major units.	☺	
Reduction/Control of Chemical Materials	By the end FY2010, reduce emissions of reportable (PRTR) chemical materials by 20% from FY2001 level.*	8.6 tons FY2002 - 3%	7.3 tons FY2002 - 18%	☺	23
	Eliminate the use of lead solder by the end of FY2003.	Complete elimination	Not achieved	☹	
	Eliminate cadmium, hexavalent chromium, mercury, lead, and polyvinyl chloride from products. (By 12/2004 for new products; by the end of FY2005 for existing products.)	———	———	In progress	
Creation of Eco-Friendly Products	Increase sales share of SII Green Products to 70% by the end of FY2005.	20% (Later revised to 30%)	35.5%	☺	18

*In addition to chemicals covered by the PRTR statutes, these figures also include HFCs, PFCs, and SF_6 (which are managed by SII under our own initiative).

■ Targets for FY2004 and Beyond

We have established new performance targets for our overseas units. And in areas where we achieved targets ahead of time (in 2003), we shall continue to work for further improvements.

Environmental Performance Indicators

Action Item		Medium-Term Target	Base Fiscal Year (Base Value)	Target Fiscal Year (Target Value)	FY2004 Target
Action Against Global Warming	Domestic	CO_2 emissions Have already achieved original FY2010 goal, but action continues.	—	—	69,941 tons-CO_2 FY2003 - 1%
		Greenhouse gas emissions (HFCs, PFCs, SF_6) Have already achieved original FY2010 goal, but action continues.	—	—	Maintenance control
	Overseas	Reduce CO_2 emissions by 1% each year.	—	—	35,851 tons-CO_2 FY2003 - 1%
Reduce Waste and Promote Recycling	Domestic	Reduce total waste generation by 50%.	2000 4,322 tons	2010 2,161 tons	2,755 tons FY2003 - 3%
	Overseas	Reduce total waste generation by 3% each year.	—	—	FY2003 - 3%
Reduction/Control of Chemical Materials		Eliminate cadmium, hexavalent chromium, mercury, lead, and polyvinyl chloride from products.	By 12/2004 (new products) By the end of FY2005 (existing products)		—
		Emissions of reportable (PRTR) chemical materials Have already achieved original FY2010 goal, but action continues.	—	—	6.9 tons FY2003 - 5%
Creation of Eco-Friendly Products		Increase sales share of SII Green Products to 70%.	—	2005	50%
		Apply for product-related environmental commendations.	—	—	3 cases

Note: We are also continuing to pursue our previous goal of totally eliminating the use of lead solder.

Environmental Management Indicators

Action Item	Medium-Term Target
Environmental Management System	• Achieve ISO 14001 certification at 3 overseas business units by the end of FY2004. • Manage environment performance using a consolidated approach that includes overseas units.
Environmental Education	Promote environmental training for managers.
Environment-Related Communication	Issue site reports at all business units.

Environmental Accounting

The SII Group began carrying out "environmental accounting" in FY1999. Environmental accounting provides a quantitative assessment and evaluation of the results, costs, and savings attributable to our environmental protection activities. The results for FY2003 are as follows.

■ Results

The figures for this year, as for previous years, were calculated in accordance with guidelines issued by Japan's Ministry of the Environment.

Results indicate that our Group's environment-related investments and expenses for FY2003 totaled about 138 million and 1.694 billion yen, respectively. These are both increases from the corresponding values of the previous years. Our anti-pollution investment more than doubled from the previous year, with most of the funds going to policies for dealing with nitrogen and phosphorous. Expenses increased in the areas of administrative activities and R&D.

We are also pleased to report that our results show improved effectiveness of our environmental protection activities, and improved economies resulting from our environment-related activities.

Costs of Environmental Protection

Scope: All 11 domestic business units; 4/1/03 to 3/31/04

(in millions of yen)

Costs of Environmental Protection								
Category		Content	Investment[1]		Change	Expense[2]		Change
			FY2003	FY2002	('03-'02)	FY2003	FY2002	('03-'02)
(1) Internal Costs (within each operational area)								
Breakdown	① Anti-Pollution	Water, atmosphere, noise, vibration	102.3	46.3	56.0	480.4	514.6	-34.2
	② Global Protection	Measures related to global warming, ozone-layer depletion, etc.	22.7	6.2	16.5	187.8	230.4	-42.6
	③ Resource Efficiency	Resource saving, reduction and recycling of waste, procurement management, etc.	3.9	37.1	-33.2	402.8	376.7	26.1
(2) Upstream and Downstream Costs		Development of eco-friendly products, recycling of products and packaging, etc.	0.0	0.0	0.0	72.5	80.4	-7.9
(3) Administrative Activities Costs		Environment training, information releases, running of Environment Management System, etc.	9.3	0.0	9.3	402.4	322.7	79.7
(4) Research & Development Costs		Lead-free soldering technology, etc.	0.0	0.0	0.0	143.0	75.7	67.3
(5) Social Activities Costs		Support for environmental protection groups, communities, etc.	0.0	0.0	0.0	4.6	1.5	3.1
(6) Reclamation Costs		Reclamation of contaminated soil, etc.	0.0	0.0	0.0	0.0	0.0	0.0
Totals			138.2	89.6	48.6	1,693.5	1,602.0	91.5

1. Investment amounts are for FY2003 only. In case where we judge that total outlay covers purposes in addition to environmental protection, we have counted only the portion deemed to apply to environmental protection.
2. Expenses include depreciation for investments through FY2002. (Equipment investment and facility investment are depreciated over 5 and 10 years, respectively, in equal yearly increments.) In case where we judge that total outlay covers purposes in addition to environmental protection, we have counted only the portion deemed to apply to environmental protection.

Environmental Protection Results, and Savings from Environmental Protection Activities

(in millions of yen)

Environmental Protection Results		Economies Achieved from Environmental Protection Activities			Total: 970.3
Environmental Impact	Quantity of Reduction (FY2002–FY2003)	Actual Savings	(subtotal) 637.0	Estimated Savings from Risk Reduction	(subtotal) 333.3
CO_2	5,060 tons-CO_2	Expense reduction attributable to energy conservation	125.0	Avoidance of stoppage due to air or water pollution, etc.	254.0
Water	44,000 m^3	Expense reduction attributable to resource conservation (water, paper)	21.1		
Paper Resources	4 tons				
Industrial Waste	342 tons	Reduction of waste processing expense	11.3	Avoidance of penalties for illegal dumping, etc.	79.3
General Waste	131 tons	Income from sale of salable materials	29.2		
Materials Purchasing Reduction	842.1 tons	Savings from reduction in purchasing of inputs, etc.	450.4		

Legal Compliance and Worksite Environmental Protection

The SII Group's production sites have established emissions standards that are stricter than those required by law. We monitor and measure a wide variety of values daily to ensure that levels remain within requirements. We anticipate unexpected situations by establishing emergency policies for all of our facilities, so as to ensure that the plant environment remains safe.

■ Nitrogen and Phosphorus at Tokyo Bay

Waste water from our sites in the Keiyo area discharge into a river system that flows into Tokyo Bay. Because the bay is a wide but enclosed body of water, there are special pollution limits on levels of COD (chemical oxygen demand), nitrogen, and phosphorus in accordance with the Water Pollution Control Law. Our sites have set up appropriate means to ensure strict compliance, as we continuously work to protect the aquatic environment.

At our Takatsuka plant (Chiba prefecture), we have initiated a "Nitrogen and Phosphorus Project" to determine the best ways to process drainage water.

▲Drainage Treatment Facility

An underground cistern at our new processing facility is designed with a triplex hollow structure so as to protect the environment from accidental leakage that might be caused by cracks in the tank. A new automatic triple-element measuring device simultaneously measures COD, nitrogen, and phosphorus levels, enabling more precise management and control.

▲Monitoring of Waste Water

■ Compliance

We are pleased to report that in FY2003 we were in full compliance with all environmental regulations. There were no incidents resulting in environment-related complaints or damage outside our grounds.

ND: Not detected
Dash ("—") indicates that the item is not regulated or was not measured.
Values: Highest measurements

Water-Quality Measurements

Units: mg / liter; pH; parts per cubic meter

		Regulated Substance \ Unit	Takatsuka	Ohno	Miyakubo	Narashino	Oyama	Tochigi	SII Micro Parts Ltd.	Morioka Seiko Instruments Inc.	SII Microtechno Inc.
Life-Environment Values	1	pH	6.7–8	6.8–8	7.1–7.8	6.8–7.5	6.8–7.6	6.8–7.5	6.7–7.1	7–7.7	6.4–7.3
	2	BOD	7.4	7.1	8.3	5	7.6	5.2	190	6.1	16
	3	COD	—	—	—	12	19	—	—	6.4	—
	4	Suspended solids	4	2	12	3	8	10	3.1	3	9
	5	n-Hex	ND	ND	ND	0.6	—	ND	27	ND	1
	6	Phenols	ND	ND	ND	ND	—	ND	ND	ND	—
	7	Copper	0.01	0.02	0.15	ND	—	ND	1.6	0.05	—
	8	Zinc	0.12	0.09	0.08	0.01	—	ND	0.32	0.125	—
	9	Iron	0.27	0.06	0.08	0.07	—	0.34	0.72	0.04	—
	10	Manganese	0.02	ND	0.02	0.04	—	ND	1.2	ND	—
	11	Total chromium	0.04	ND	ND	ND	—	ND	ND	ND	—
	12	Number of coliform group	55	ND	ND	ND	—	ND	—	ND	990
	13	Nitrogen	42	23	11	34	—	17	—	—	—
	14	Phosphorus	2.3	5	1.7	0.18	—	0.29	—	—	—
Toxic Substances	1	Cadmium	ND	ND	ND	ND	—	—	ND	ND	ND
	2	Cyanogen	ND	0.1	ND	ND	—	ND	ND	ND	ND
	3	Organic phosphorus	ND	ND	ND	ND	—	—	ND	ND	ND
	4	Lead	0.04	ND	ND	ND	—	0.04	ND	ND	ND
	5	Hexavalent chromium	ND	ND	ND	ND	—	—	ND	ND	ND
	6	Arsenic	ND	ND	ND	ND	—	—	ND	ND	ND
	7-1	Total mercury	ND	ND	ND	ND	—	—	ND	ND	ND
	7-2	Alkyl mercury	ND	ND	—	ND	—	—	—	ND	ND
	8	PCB	—	ND	ND	ND	—	—	ND	ND	ND
	9	Trichloroethylene	ND	ND	ND	ND	—	—	ND	ND	ND
	10	Tetrachloroethylene	ND	ND	ND	ND	—	—	ND	ND	ND
	11	Dichloromethane	ND	ND	ND	—	—	—	ND	ND	ND
	12	Carbon tetrachloride	ND	ND	ND	—	—	—	ND	ND	ND
	13	1,2-dichloroethane	ND	ND	ND	—	—	—	ND	ND	ND
	14	1,1-dichloroethylene	ND	ND	ND	—	—	—	ND	ND	ND
	15	cis-1,2-dichloroethylene	ND	ND	ND	—	—	—	ND	ND	ND
	16	1,1,1-trichloroethane	ND	ND	ND	ND	—	—	ND	ND	ND
	17	1,1,2-trichloroethane	ND	ND	ND	—	—	—	ND	ND	ND
	18	1,3-dichloropropane	ND	ND	ND	—	—	—	ND	ND	ND
	19	Thiuram	ND	ND	ND	—	—	—	ND	ND	ND
	20	Simazine	ND	ND	ND	—	—	—	ND	ND	ND
	21	Thiobencarb	ND	ND	ND	—	—	—	ND	ND	ND
	22	Benzene	ND	ND	ND	—	—	ND	ND	ND	ND
	23	Selenium	ND	ND	ND	ND	—	—	ND	ND	ND
	24	Boron	0.07	0.58	0.91	0.03	—	ND	0.45	2.7	0.11
	25	Fluorine	2.2	ND	0.8	0.5	—	1.5	0.26	0.4	ND
	26	Ammonia, Ammonia compounds, Nitrous acid compounds, Nitrates	8.1	—	—	16	—	8.5	—	3.07	1.1

Air-Quality Measurements

ND: Not detected Dash ("—") indicates that the item is not regulated or was not measured. Values: Highest measurements

		Regulated Substance \ Unit	Takatsuka	Ohno	Miyakubo	Narashino	Oyama	Tochigi	SII Micro Parts Ltd.	Morioka Seiko Instruments Inc.	SII Microtechno Inc.
		Particulate matter (g/m³N)	ND	—	—	ND	ND	—	ND	ND	ND
		SOx (m³N/h)	0.0284	ND	—	0.02	0.0556	—	ND	0.055	ND
		NOx (ppm)	84.6	17.3	—	38.3	41.4	—	26	76	70

Environmental Education

Success of our environmental activities rests on the meaningful and informed participation of all of our employees. The SII Group offers various types of education designed to provide employees with the awareness, knowledge, and skills necessary to support these activities and produce continuous improvements.

■ Company-Wide Education

We run a wide variety of training, from courses sponsored and held by SII headquarters to training that is planned and implemented by each of our units. In FY2003, we expanded our curriculum by adding two new courses: training for salespersons, and training for environmental-risk communicators.

During the year, headquarters held courses for 210 individuals, bringing the total number of employees who have passed through these courses to 1,662.

Following each course, we distribute a questionnaire to participants, and we use this feedback to continuously improve the quality of the education that we offer.

Education Held at SII Headquarters

General Education

Theme	Participants	Content
Global environmental issues, and the SII Group's measures for addressing them	New employees	SII Group's environment-related actions and policies
Environmental protection activities: course for mid-level staff	Mid-level staff	Environmental concepts and management techniques required for understanding and acting on ISO 14001
Environmental protection activities: administrator course	Managers	Essential internal and external environmental information; and policies for improving performance
Environmental protection activities: course for salespersons	Salespersons	Essential knowledge; and the role of a salesperson in environmental protection

Special Education

Theme	Participants	Content
Waste management	•Employees who handle chemicals and wastes •Operators of environment-related equipment •Manufacturing and production engineers	Reduction and appropriate management of waste Promotion of a recycling-oriented society and reduction of environmental impact
Chemical management		Appropriate management of chemical substances and dangerous materials Prevention of environmental risks
Energy saving		Energy-saving manufacturing techniques, and trends at other companies
Product design assessment	Product development personnel	Methods for reducing environmental impact of products; case study of eco-friendly products from other companies

Training for Internal Qualification

Theme	Participants	Content
Training to become an internal environmental auditor	Candidates from each business unit	Skills and knowledge required to conduct internal audits in accordance with ISO 14001
Training to become an environmental-risk communicator	Candidates from each business unit	Skills and knowledge required to effectively communicate about environmental risks with citizens and government officials

▲Mock Internal Audit

▲Environment Education Class

■ Raising Consciousness through Our Intranet

The Eco-Town bulletin board on the SII intranet offers a wide variety of useful information about environmental issues and activities. Employees can visit this site to learn about environmental terminology, to view information about current laws and statutes, and to access a wide range of other information. The site also offers "Eco-Quiz" pages that challenge, educate, and amuse all at the same time.

▲Eco-Town

▲Eco-Quiz Page

■ Training for Emergencies

Each business unit drafts its own procedures for dealing with emergencies, and carries out periodic drills based on these procedures. These drills are intended to ensure that the procedures are effective, and that employees will be ready to act quickly to prevent the spread of environmental contamination.

▲Emergency Training

❍ Easy Ways to Educate and Inform ❍

q Environmental posters in corridors

w Poster at sink: shows where the waste water goes, and tells you what you should not be throwing down the drain

e Poster on environment-related machinery, explaining the machine's functions and structure.

New SII Technologies and the Environment

Having started as a watch manufacturer, the SII Group is very familiar with micro-machining and miniaturization technologies. We are now working to significantly advance these technologies in ways that can make a meaningful contribution to our environment.

MEMS Technology

Micro-Electromechanical Systems

This is one of our core technologies for building high-precision miniaturized systems. Such systems consist of semiconductor manufacturing technology-based devices that feature sensors, actuators, and circuitry all integrated into units whose dimensions are measured in micrometers. These systems are useful in a wide range of industrial applications. They consume few resources, run on very low power, and are currently being developed for use as micro-sized machine parts, measurement sensors, and optical communication devices.

Cantilever for Scanning Probe Microscope
The self-detecting cantilever uses a piezoresistor detection system. It enables measurement not only of topology but also of minute surface characteristics.

Ultrasensitive Photon Sensor
Formed on a super-thin (1 micron) membrane, this sensor is capable of detecting single photons.

Optical Switch
This 2 x 2 switch consists of densely arranged mirrors and springs.

▲Cantilever for Scanning Probe Microscope

▲Ultrasensitive Photon Sensor

▲Optical Switch

MEMS Technology
Micro-Electromechanical Systems

Development of a Noninvasive Blood-Flow Measuring Method

Development of a Noninvasive Blood-Flow Measuring Method
Measuring blood flow without drawing blood

Measuring blood flow without drawing blood

SII has developed a technology and a device that allow blood fluidity to be measured by simply inserting a finger into a sensor area.

The sensor area, which is only about 1 cm square, consists of an arrangement of ultrasonic, thermal, and optical sensors, and is capable of detecting the state of blood flowing through arterioles in the finger. Since there is no need to draw blood, the process imposes no stress on the user and generates no used needles or other such medical waste. Because it simplifies the currently difficult task of measuring fluidity changes over time, it is also ideal for deployment at health-food development sites and similar institutions. We are currently making plans to commercialize this device for the healthcare field. Since no special qualifications are required to operate this device, we believe that it can play a useful role in day-to-day health management.

Development of this technology was carried in cooperation with the National Food Research Institute.

Development of a No-Battery Wireless System

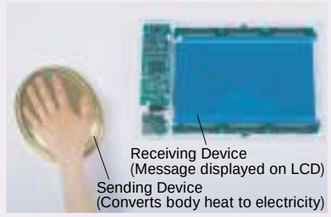
Using body heat to generate electricity

SII is pleased to be a participant in a NEDO-initiated project to develop LSIs for use in low-power information terminals[1]. Our role was to lead in the development of the generating and conversion components that produce electricity from body heat and supply it to the LSI. As part of this effort, we succeeded in implementing a demo version of a no-battery wireless communication system that can be powered by body heat, room illumination, and other low energy sources that typically go to waste.

Our demo system consists of a sending device and a receiving device. When the user touches the sending device, body heat is converted into electrical energy that is used to transmit a message. The message is then displayed on the receiving device, which can be up to 5 meters away.

These technologies represent an essential step toward the realization of a ubiquitously networked society[2].

1. NEDO (New Energy and Industrial Technology Development Organization) consigned this project to seven companies, including SII, NTT Microsystems Integration Laboratories, and Seiko Epson.
2. A *ubiquitous network* is one that enables real-time information transfer regardless of location, and that accepts connection from mobile phones and from a wide variety of other information devices.



Development of a No-Battery Wireless System
Using body heat to generate electricity

CAE

Computer-Aided Engineering

We use 3D CAD and other CAE software to generate product models, and to apply simulated conditions (stresses, vibrations, heat, etc.) to these models to see how they react. The results are used to confirm product functionality and quality prior to start of physical production.

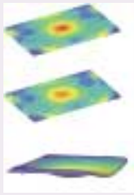
Before the advent of CAE, we would analyze past experience and data to develop a design, then do a trial production run, then conduct various experiments on the result, and then repeat the entire cycle as necessary to ensure functionality and quality. Currently, however, we are able to apply CAE and 3D CAD toward development of many different products and manufacturing technologies, reducing the number of trial runs and thereby reducing the impact on our environment—while at the same time reducing both the time and the costs of development work.

Magnetic Field Analysis of Stepping Motor for Watches

Analysis of magnetic field, transient responses, and motor operation help in designing a more efficient motor.

Analysis of Stressing and Deformation of Electronic Dictionary Casing

We analyze stressing on a variety of product shapes, to help ensure that products are sufficiently sturdy.



CAE
Computer-Aided Engineering

Industrial Activities and Environmental Impact

Our manufacturing operations utilize many input materials and large amounts of energy, and output CO_2 and many different types of waste. In order to develop effective environment policies, it is essential to understand the environmental loads generated over the entire life cycle of our products. For FY2003, we recorded various loads related to material inputs, and to emissions of SOx, COD, and BOD. We also began to record, although in a limited way, the loads generated by internal transport and by customer usage of our products. We shall continue to expand the scope of coverage as we move ahead, so that we can understand our true impact and take appropriate actions to mitigate it.

Figures for FY2002, where available, are shown in parentheses.

INPUTS

Materials

Raw materials: 2,446 tons
Packaging: 348 tons (389)
Office paper: 73 tons (77)

Chemicals

63 tons (69)

Energy

Electricity: 141,000 thousand kWh (150,000 thousand)

Gas
- Municipal: 2,594 thousand m³ (3,011 thousand)
- LP: 215 thousand m³ (210 thousand)

Fuel
- Kerosene: 3,351 kl (3,641)
- Heavy: 124 kl (222)

Water

890 thousand m³ (934 thousand)

Energy for Internal Transport[1]

Gasoline: 71 kl
Light oil: 71 kl

Energy Consumed by Green Products[2]

Electricity: 2,135 thousand kWh

Plan & Design
(pp. 18, 21)

Purchase Materials and Components
(p. 17)

Manufacture
(pp. 22, 23, 24)

Transport[1]
(p. 21)

Usage by customers[2]
(p. 19)

Collect and Recycle
(p. 19)

Discard

OUTPUTS

Into Atmosphere

CO_2: 70,647 tons-CO_2 (75,707)
NOx: 24 tons
SOx: 2 tons
Chemicals: 7.1 tons (8.6)

Into Water

Waste water: 587 thousand m³
Chemicals: 0.2 tons (0.3)
COD: 3 tons
BOD: 2 tons

Waste

General (non-industrial)
Amount generated: 648 tons (780)
Recycling rate: 72% 464 tons (64% 500 tons)

Industrial
Amount generated: 2,191 tons (2,533)
Recycling rate: 90% 1,962 tons (84% 2,125 tons)

Into Landfill
4% 105 tons (8% 264 tons)

Transport-based Discharge into Atmosphere[1]

CO_2: 356 tons-CO_2

Usage-based Discharge into Atmosphere[2]

CO_2: 807 tons-CO_2

INPUTS

Materials:	Metals, plastics, glass, and other such materials used in production
Packaging:	Plastics and paper that can be recycled in accordance with packaging recycling statutes
Office Paper:	Paper for printers and copiers
Chemicals:	PRTR chemicals, HFCs, PFCs, SF_6 (PRTR: Pollutant Release and Transfer Register)
Electricity:	Power purchased from electric companies
Gas:	Municipal gas, LP gas
Fuel:	Kerosene, heavy oil
Water:	Tap water, industrial water, groundwater

OUTPUTS

CO_2:	From use of electricity, gas, oil, etc.
NOx:	From use of gas, oil, etc.
SOx:	From use of oil, etc.
Chemicals:	PRTR chemicals, HFCs, PFCs, and SF_6 discharged into atmosphere and water
Waste Water:	Released into rivers and sewerage
COD and BOD:	Covers only business units that are obligated to report
General Waste:	Paper waste and household-type waste generated by or attendant on industrial operations
Industrial Waste:	Waste oil, waste acids, waste alkalis, waste plastics, ash, sludge, and other such materials generated by industrial operations

1. Counts Group-internal transport only
2. Based on estimated use of SII green products during FY2003

Green Purchasing

If we wish to produce environmentally-friendly products, we must pay close attention to the eco-friendliness of materials and components that we use as our inputs. From input materials to office supplies, the SII Group is fully committed to green purchasing.

■ Supplier Certification System

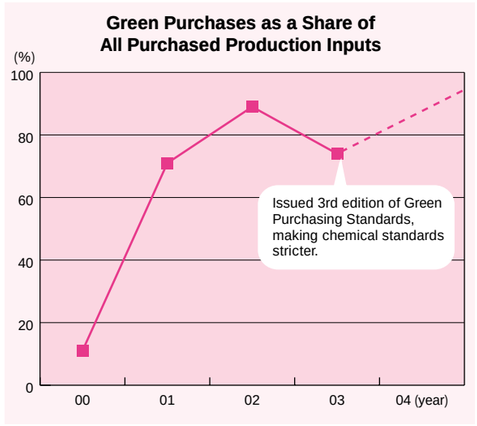
We plan to have a supplier certification system in place by the end of FY2005. The system shall be based on Group-wide supplier certification standards, and shall require that all suppliers maintain environmental control systems that meet or exceed the specified level.

■ Audit of Green Purchasing at Procurement Departments

To enhance compliance and improve the level of green purchasing activities, we carried out an internal audit during January to March of 2004, mainly focusing on our procurement departments. This audit revealed green purchasing activities, levels, and issues at each of our procurement departments. We plan to carry out follow-up audits as we work to continually improve our green purchasing.

■ Green Purchasing of Production Inputs

The SII Group has been developing green purchasing activities, principally through our procurement departments since 1999. In 2003 we issued the third edition of our SII Group Green Purchasing Standards, featuring even stronger restrictions on regulated chemicals, as we moved to further toughen our green purchasing approach. As a result of implementing these stricter standards, the share of green purchased production inputs relative to all purchased inputs dropped to 74% for the year, although we are now on track to resume an upward trend.

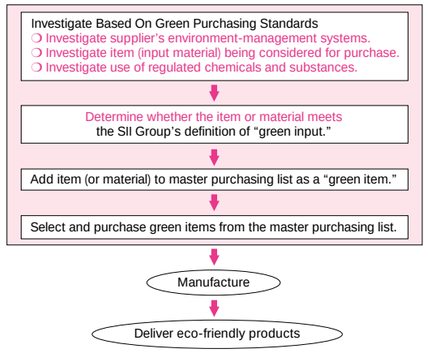


■ Definition of "Green Items"

An input material or component qualified as a *green item* if it meets all of the following criteria.

- It contains no banned substances or materials.
- Its manufacture does not involve the use of banned substances or materials.
- The supplier's environmental protection systems have been found to meet SII's green purchasing standards.

Green Purchasing Rate for Production Inputs = "Green Items" on Master Purchasing List / All Items on Master Purchasing List



■ "Green Agenda" Meeting

In January 2004 the SII Group convened an informational meeting to explain our green purchasing activities to our suppliers. The meeting focused on (a) our efforts to entirely discontinue the use of specified substances, (b) the concept of green products, and (c) our green purchasing activities. We are pleased that our suppliers responded well to the meeting and that they understand our objectives.


▲"Green Agenda" Meeting

■ Green Purchasing of Office and MRO Supplies

The SII Group uses the *Benrinet* online procurement service to purchase office and MRO (Maintenance, Repair, and Operations) supplies. An Internet-based procurement system run by Net Kokuyo Co., Ltd., *Benrinet* gives priority listing to eco-friendly products. It also clearly identifies products by Ecomark labels, Green Mark labels, and other established indicators of eco-kindness. So the site makes it easy to carry out green purchasing, and to learn more about eco-friendly products.

Environment-conscious Products

As a manufacturer, we recognize our responsibility to create and supply eco-friendly products. We consider eco-friendliness through all stages of production and use: from planning and design to product use and disposal.

Recap of FY2003

- We revised our FY2003 target for share of green products, relative to share of total sales, from 20% to 30%. And we outperformed even this revised target, coming in at 35.5% for the year.
- We made standards for SII Green Products even more rigorous.
- We increased the number of our LCA (life cycle assessment) trials.

■ Assessing the Environmental Impact of Products

In 1998, we established our Product Environmental Assessment Guidelines. The purpose of these guidelines is to promote eco-friendly production throughout the company. Business offices throughout the Group have used these guidelines as the basis for formulating related rules and for assessing the environmental impact of our products.

■ The SII "Green Product" Label

To raise public awareness of our Group's eco-friendly products, we introduced our SII Green Product Label in December 2001. This is a Type II environmental label as defined under ISO 14021, meaning that it represents a self-declared environmental claim. To determine whether a product qualifies for this label, we evaluate it using our own "green product standards." Specifically, we assign a score of 1 to 5 for each of 19 evaluation parameters. Products that receive an average score of 3.5 or better are classified as "green products" and carry the Green Products label.

■ Steps in Green Product Certification

First Evaluation: Planning Stage
↓
Second Evaluation: Trial Production Stage
↓
Third Evaluation: Mass Production Stage
↓
Judgment by Certification Committee

Developers and designers from all business departments participate in green product certification, helping to ensure a fair, objective, and wide-viewed evaluation while also promoting consistency and information sharing across the company.

■ Environmental Compatibility Factors for SII Green Product Standards

No	Parameter
1	Power consumption during use
2	Power consumption during standby
3	Weight of product
4	Use of reused parts and recycled materials
5	Recyclability of used products
6	Longer-lasting products
7	Reduction of the use of containing avoidance substances* in goods
8	Reduction of the use of containing abolition substances* in goods†
9	Prohibition of the use of containing prohibition substances* in goods
10	Smaller and more lightweight packaging
11	Reduction of the use of foam materials in packaging
12	Avoidance of polyvinyl chloride and heavy metals in packaging
13	Energy conservation in the manufacturing process
14	Resource conservation in the manufacturing process
15	Reduction of the use of use avoidance substances* in the manufacturing process
16	Prohibition of the use of use prohibition substances* in the manufacturing process
17	Easy disassembly
18	Easy sorting of materials
19	Information disclosure in user/instruction manuals, and other related documents.

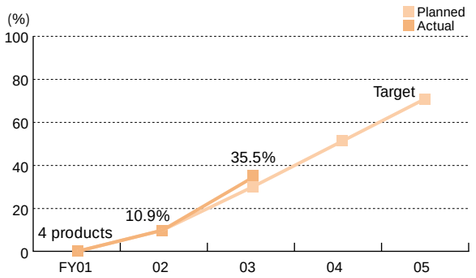
* Based on SII Group standards.
† Added in 2003.

We review and revise our SII Green Product Standards once every two years. In FY2003, we made our standards stricter and we added a new parameter—"reduction of the use of containing abolition substances in goods"— in accordance with our mid-term plan.

■ FY2003 Results

Our share of green products sold reached 35%. The share for general personal appliances, such as electronic dictionaries and data communication devices, exceeded 70%, while the share for semiconductors and other electronic components reached 30%. We also added new certification categories for analysis and measurement equipment and for mobile information devices, as we continue our efforts to add new categories and apply eco-efforts to our entire product line.

■ Green Product Share; Targets and Achievements



■ Examples of Green Products

<AH-S405C Data Communication Device>

This Type I Compact Flash card is thin, light weight, and eco-friendly.

• Eco-friendly Features

The card consumes only 561 mW of power (when running at 3.3 V), a full 14% reduction from our previous comparable products. The package is also 14% lighter, for a further saving of resources. The packing materials include no Styrofoam, polyvinyl chloride, or heavy metals, and the package and manual are printed in soy ink.

<SEA1000A Fluorescent X-ray Analyzer>

This device is designed to measure heavy metals covered under the RoHS (Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment) directive.

• Eco-friendly Features

This device offers 5% less power consumption than its predecessor, even as it doubles the applied X-ray power so as to enable quick and easy measurement. It is also 43% lighter. Its X-ray detection mechanism requires no liquid nitrogen, its X-ray shielding does not use lead sheets, and the circuit boards that we manufacture for this product are lead-free.

■ Compatibility with Japan's Green Purchase Promotion Laws

We offer printers, plotters, and paper supplies that comply with these requirements.

<IP-4500Mk-II 6-Color Oil Pigment Inkjet Printer>

This printer uses clean, oil-based pigments, and produces few untoward odors. It requires no ventilation, and can be easily set up indoors. We also offer 100% recycled, ecomark-certified paper for this printer, which is available in a wide variety of paper sizes.

■ For Environment-related Information about Our Products

The following website introduces our green product line and provides a variety of environmental information about our products.

http://www.sii.co.jp/eco/04_greenproducts/products_lineup.html

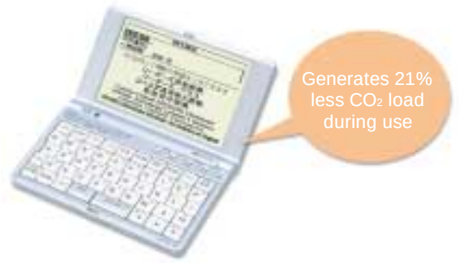
■ LCA Trials

We began running life-cycle assessment trials in 2001, carrying out inventory analyses of various components and mechanisms—including watch and thermal printer mechanisms. We used the experiences and results of these efforts as the basis for drafting our LCA Guidelines, released in March 2003. These guidelines, in turn, now serve as the basis for extending our LCA activities to other products. We have now deployed LCA trials to virtually all of our products, and our next step shall be to implement LCA-based quantitative evaluations for our new products.

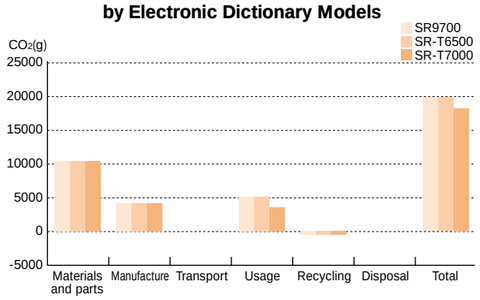
<Example: Electronic Dictionary>

A CO_2 inventory analysis of our SR9700 electronic dictionary revealed that the materials used for its manufacture had a high environmental load. To reduce the load and improve portability, we adopted a thinner and more lightweight design for the successor model, the SR-T6500—reducing the input weight and the environment load by 0.2% each, a real if small improvement.

Recognizing that the product's second largest load came from its usage, we then set to work to reduce the power consumption. Our newest model, the SR-T7000, generates 21% less CO_2 load during use, and 6% less overall, than did the SR9700.



CO_2 Emissions Generated by Electronic Dictionary Models



■ Collection and Recycling

To promote effective use of resources, we are involved in efforts to collect and recycle discarded products and consumables.

❍ Collection of Ink Cartridges

Used ink cartridges and used bottles are sent to our collection center, where they are separated into plastic and ink for recycling.

❍ Collection of Data Communication Devices

We participate in the mobile recycling network that has been jointly established by the Telecommunications Carriers Association and the Communications and Information Network Association of Japan.

Mobile Recycling Network

★ Indications on Boxes

Product boxes include the recycling network marking illustrated above, which urges users to recycle their old products. The boxes also indicate that they are printed with soy ink.

❍ Recycling of Rechargeable Batteries

We also participate in efforts of the JBRC (Japan Portable Rechargeable Battery Recycling Center) to collect and recycle small rechargeable batteries.

❍ Collection of Packaging

We consign collection and recycling tasks to the Japan Containers and Packaging Recycling Association.

Next Steps…

We plan to further establish LCA-based quantitative evaluations, and to use the results to further improve and expand on the eco-consciousness that we build into our products.

Environmentally-friendly Manufacturing

Reducing Our Usage of Resources

As a manufacturer, we recognize that resources are limited and that we must use them as efficiently as we can. Consequently, we actively work to make effective use of resources in all of the production processes carried out by our Group.

Recap of FY2003

- We continued previous activities, and added new activities at the planning and design stages.
- We reduced water usage by 44,000 m^3, and paper usage by 4 tons.

❍ Less Waste in Panel Production

SII Michrotechno (Akita prefecture), which manufactures LCD panels for mobile phones, has successfully increased the number of panels produced from a single sheet of glass—an improvement achieved by implementing appropriate changes at the planning and design stages. The improved processing applies to a variety of different models, realizing a 21% increase in panels per sheet overall, with an increase of 60% for the most improved model. The result is a more efficient use of resources. A corollary benefit is a 21% reduction in the amount of waste glass generated by this processing. Efforts are now underway to extend these improvements to all models.

❍ Effective Use of Runners

The runners for small plastic watch parts (that is, the plastic strips that hold the molded parts to the mold substrate) weigh several times more than the parts themselves. Morioka Seiko Instruments (Iwate prefecture) has been continuously working to increase material yields. They are also reusing runners by pulverizing them and mixing the powder back into the input material. As a result of these efforts, the company was able to reduce plastic purchases in FY2003 by 614 tons. The plant is now working to achieve even further improvements in yield.

▲Injection Molding Machine

▲Pulverizing the Runners

❍ Effective Use of Water (Reuse of Waste Water)

Production processes use large quantities of water. To conserve this valuable resource, we retrieve and filter waste water and then reuse it in process, redirect it into sprinklers, or make other good use of it. In FY2003 the Group as a whole used 890,065 m^3 of water, a savings of 44,000 m^3 relative to the preceding year.

▲Water Demineralizer

❍ Effective Use of Paper

We have been working to conserve paper since 1993, and the goal we had originally set for FY2005 was moved ahead and achieved early. As of FY2003 we have continued working to maintain good results. In FY2003 our paper usage was 73 tons—down 4 tons from the preceding year.

Next Steps…

We shall work harder to incorporate resource-saving goals into our planning and design stages, and to revise our processes so as to accelerate our improvements.

Environment-conscious Distribution

While distribution is an essential part of manufacturing, it also generates its own variety of environmental loads. The SII Group is working to reduce distribution-related environmental impact in the areas of packing, loading, transport, and storage.

❍ Improvement in Packing

We have replaced disposable transport trays with trays that can be used both for transport and in the production line. This improvement has increased work efficiency at the same time as it has reduced waste.

❍ Improvement in Transport

SII Logistics Inc., the company in charge of distribution throughout the Group, is continuously working to improve the efficiency of distribution. It is currently engaged in a joint project with SII operating departments aimed at promoting a Group-wide distribution system that can efficiently meet the needs of all relevant departments while at the same time optimizing loads and routes and reducing and rationalizing inventories.

In FY2003, it once again reconsidered inventory locations and transport routes, and made various improvements—such as discontinuing some of the transport runs between our Makuhari headquarters and our Takatsuka Unit. These improvements reduced transports to a minimum, which in turn reduced transport-related CO_2 emissions by 289 kg-CO_2. The next step in these efforts is to improve distribution to our overseas sites.

❍ Improvements in Loading

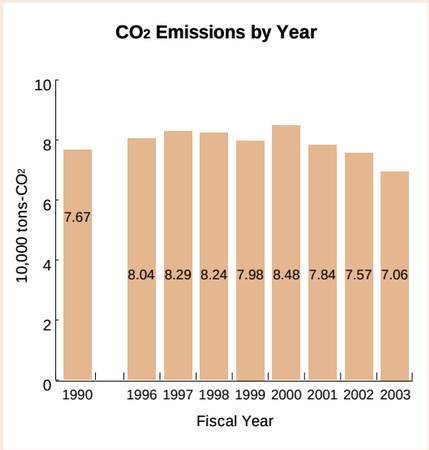
Where previously we had borrowed large forklifts to handle loading and unloading of heavy machinery, we are now using ceiling-mounted cranes installed directly in the plant. This has eliminated the need to use trucks to pick up and return the forklifts.

Initiatives Related to Global Warming

We address the issue of global warming by following a Group-wide energy-reduction approach that covers our worksites, machinery, our daily living, and our finished products.

Recap of FY2003

- We reduced CO_2 emissions by 5,060 tons-CO_2, or 6.7%, relative to the preceding year, achieving a level that was originally targeted for FY2010.
- Emissions of other greenhouse gases (HFCs, PFCs, and SF_6) were down by 1,982 tons-CO_2, or 67%, from the preceding year, also achieving the goal originally set for FY2010. However, it is important to note that environmental activities at some departments were excluded from FY2003 calculations as a result of restructuring (specifically, as a result of capital tie-ups of our compressor business).
- We implemented energy-conservation policies with respect to heating and air conditioning.



❍ Energy Conservation by Using Outside Air and Waste Heat

Our Tohoku facilities are successfully saving energy by making effective use of the weather.

q Production operations at Morioka Seiko Instruments must be cooled year-round. To save energy during winter, the facility has installed a cooling tower that draws in low outside air to provide the cooling—allowing for cold-water and warm-water generators to be shut down. This has reduced the annual amount of kerosene used by these generators by 71 kl, and cut CO_2 emission by 179.3 tons-CO_2.

▲Cooling Tower

w SII Microtechno has installed inverters for cold-water and warm-water pumping, so as to take advantage of seasonal changes. During winter, exhaust heat from the boiler-equipped machine room is used to control the temperature of the clean room—allowing for efficient heating even when outside temperatures are below freezing. And by reusing surplus air from the clean room, the company saves 269 liters of kerosene per day.

▲Duct Used for Discharging Heat from the Machine Room

❍ Evaluating the Performance of Air Conditioning Equipment

SII Micro Parts (Miyagi prefecture) has undertaken a thorough evaluation of the performance and efficiency of their heating and air-conditioning equipment. Where the company used to use multiple pumps for ventilation, careful evaluation of each pump's performance revealed that this was not necessary, and it now achieves the same performance using only a single pump. As a result, CO_2 emissions have been cut by 220 tons-CO_2. The company also gives high priority to energy efficiency when selecting new equipment; new compressors that the company has installed are 1.5 times more energy efficient than its predecessors.

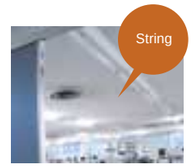
▲Compressor

Day-to-Day Energy Conservation

The entire Group carries out various efforts to reduce day-to-day energy usage:

- Switch off office machines when not in usage.
- Switch lights on and off separately for each area.
- Run regular "energy patrols."
- Save energy for vending machines.
- Our "Idling stop" campaign reminds people to reduce car idling.

At Morioka Seiko Instruments, all lights in staff rooms are equipped with strings, so that they can be turned off individually when not in use.



Next Steps…

- As we have already achieved goals that were set for FY2010, we shall establish new medium-term goals and work toward further improvements.
- We shall strengthen activities to achieve energy conservation in our production processes.

Control of Chemical Substances

Safe and correct handling of chemical substances is essential not only for environmental reasons but also as a risk-management issue. The SII Group manages chemicals carefully at all stages: purchase, use, storage, and disposal.

Recap of FY2003

- We advanced our efforts to entirely eliminate hazardous substances from our products.
- We did not achieve our goal of entirely eliminating the use of lead solder.
- We reduced emissions of PRTR substances (substances covered by the Pollutant Release and Transfer Register law) by 1.6 tons, or 18%, relative to the preceding year—achieving a target level that was originally set for FY2010.

❍ Activities to Eliminate Hazardous Substances

To reduce risks associated with chemical content in products, and in view of the RoHS directive[1], we have been working since 2002 to totally eliminate cadmium, hexavalent chromium, mercury, lead, and PVCs[2] from our products. Our goal is to eliminate these substances from new products by December 2004, and from existing product lines by the end of FY2005.

❍ Elimination of Lead Solder

We did not succeed in our goal of entirely eliminating lead solder by FY2003. Although we have confirmed that elimination is technically feasible for all products, we were delayed in implementing the necessary changes in mass production lines for some of our products. Our revised goal, therefore, calls for complete elimination of lead solder by sometime early in FY2004. We are pleased that we already have systems in place for supplying lead-free semiconductors, displays, and other such electronic components.

❍ Modifying Production Processes to Reduce Chemical Use

Our Ono unit (Chiba prefecture) has been steadily working to reduce its use of chemical substances. It has completely eliminated the use of kerosene and methanol in the barrel processing (smoothing and polishing) of micro-precision cutting parts, replacing these with water washes; and it is now working to reduce the use of sodium cyanide in the rinsing process. Because the reduction of solvents directly impacts on product quality, these efforts are being carried out under the direction of project teams whose members come from all relevant departments. These efforts succeeded in reducing chemical substance usage by 160 kg in FY2003.

❍ Examples of Facilities Risk Management

q We dug up underground pipes that carry hazardous materials, then reburied them in special walled ditches that we constructed. If pipes should rupture, the ditches will prevent leakage from seeping into the surrounding soil.

▲Installing the Ditches

w We are using two-ply transparent pipes to carry chemical liquids. If one of the pipe layers breaks, the other will continue to hold; and if a leak does occur, its location will be readily visible.

Next Steps…

- We shall accelerate our efforts to eliminate hazardous substances in general, and lead solder in particular.
- Our goal is to reduce discharge of PRTR chemicals by 5% in FY2004 (relative to FY2003).

Results of PRTR Assessments for FY2003 (PRTR substances only)

(in kilograms)

Substance	Amount Handled[3]	Emitted				Transported		Recycled	Consumed	Eliminated
		①Discharged into air	②Discharged into public water	③Discharged into earth at business unit	④Landfill-processed at business unit	⑤Waste water transported to sewerage system	⑥Waste matter transported out of business unit	⑦Reusable material transported out of business unit	⑧Transported as product, etc.	⑨By decomposition, chemical reaction, etc.
2-aminoethanol	7,332	1,464.7	0.0	0.0	0.0	0.0	5,550.9	0.0	0.0	366.2
Antimony and its compounds	604	0.0	0.0	0.0	0.0	0.0	483.0	0.0	120.8	0.0
Ethyl benzene	255	67.8	0.0	0.0	0.0	0.0	187.4	0.0	0.0	0.0
Ethylene glycol	792	792.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Xylene	14,712	968.7	0.0	0.0	0.0	0.0	13,743.2	0.0	0.0	0.4
Cobalt and its compounds	9,000	0.0	0.0	0.0	0.0	0.0	518.0	382.0	8,100.0	0.0
2-ethoxyethyl acetate	615	386.6	0.0	0.0	0.0	0.0	228.7	0.0	0.0	0.0
Inorganic cyano compounds (excluding complex salts and cyanates)	697	3.1	0.0	0.0	0.0	0.0	297.0	0.0	0.0	396.5
Dichloropentafluoropropane (HCFC-225)	683	643.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0
Mercury and its compounds	271	0.0	0.0	0.0	0.0	0.0	11.0	0.0	260.0	0.0
1,3,5-trimethyl benzene	240	7.2	0.0	0.0	0.0	0.0	228.1	0.0	0.0	4.8
Toluene	1,773	1,517.0	0.0	0.0	0.0	0.0	256.0	0.0	0.0	0.0
Lead and its compounds	152	0.0	0.0	0.0	0.0	0.0	0.0	103.1	48.6	0.0
Nickel compounds	3,028	0.0	88.1	0.0	0.0	0.0	245.0	1,506.0	1,188.5	0.0
Nitrilotriacetic acid	0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Phenol	514	77.1	0.0	0.0	0.0	0.0	411.3	0.0	0.0	25.7
Hydrogen fluoride and its water-soluble salts	15,676	480.9	17.8	0.0	0.0	0.0	6,257.3	0.0	0.0	8,920.2
Boron and its compounds	208	62.7	138.1	0.0	0.0	0.0	0.0	2.0	5.5	0.0
Poly (oxyethylene) = octylphenyl ether	1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Poly (oxyethylene) = nonylphenyl ether	163	0.0	0.0	0.0	0.0	0.0	5.6	78.8	0.0	78.2
Manganese and its compounds	4,953	0.0	0.0	0.0	0.0	0.0	1,607.0	0.0	3,346.0	0.0
Molybdenum and its compounds	151	0.0	0.0	0.0	0.0	0.0	4.0	0.0	147.0	0.0
Total[3]	61,820	6,471	244	0	0	0	30,025	2,072	13,216	9,792

1. The "Restriction of Hazardous Substances" directive, enacted by the European Union in February 2003, bans the following substances from electrical and electronic appliances to be marketed in the EU on or after July 2006: lead, mercury, cadmium, hexavalent chromium, PBBs (polybrominated biphenyls), and PBDEs (polybrominated diphenyl ethers).
2. Elimination of PVCs is being carried out on SII's own initiative.
3. Decimals rounded.

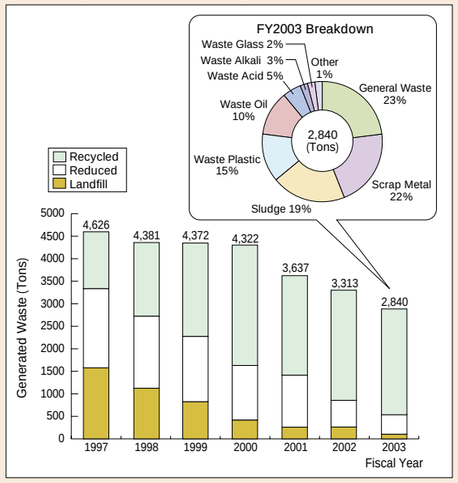
Activities to Reduce Waste

We began with efforts to reduce waste disposal, and then succeeded in achieving zero emissions. We are now working to reduce the amount of generated waste.

Recap of FY2003

- We succeeded in our goal of achieving zero emissions by FY2003.
- We reduced generated waste by 473 tons (by 14%) relative to the preceding year, successfully meeting our target.

Trend in Total Waste Generation (including salable materials)



❍ Optimizing Our Consignment Efforts

In our effort to achieve zero emissions, we studied the intermediate processing and final disposition of waste consigned to outside processors. As a result of these studies we have been able to optimize our consignment efforts and to work out new recycling destinations.

❍ Maximal Reuse

Our Ono unit (Chiba prefecture) uses a special chip processor to recover cutting oil from the chip debris generated during automated machine processing. As a result, reused oil now accounts for 40% of all oil used at the facility.

▲Chip Processor

❍ Rigorous Sorting of Waste

To facilitate reuse and recycling of waste, we carry out careful sorting of waste materials. Waste from our production processes is rigorously sorted into numerous categories: metals, sludge, plastics, oil, acids, alkalis, and glass.

SII Microtechno has investigated how best to recycle 65 different plastic products, and as a result is now sorting these into four groups. Sorting procedures are designed to be clear and error-free.

▲Illustrated Sorting Instructions

❍ On-Site Reduction of Volume and Weight

q Processing of waste water generates large quantities of watery sludge. SII Micro Parts has built on-site plastic greenhouses to dry this sludge, reducing its weight by 50%. This reduces the environmental impact of transporting this waste, and saves on energy that would otherwise be required to dry the sludge during the recycling stage.

▲Plastic Greenhouses for Drying Sludge

▲Sludge Being Dried

w SII Microtechno has installed a compacting packer to compact and pack waste plastic. This reduces the volume of the waste material and allows for more efficient transport.

▲Compacting Packer

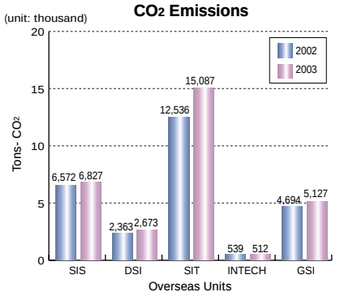
Next Steps…

- Maintain zero emissions, and work to further improve on our "three Rs" (*reduce*, *reuse*, and *recycle*).
- Reduce waste generation by 3% in FY2004, and by 50% by FY2010.

Efforts at Our Overseas Units

In FY2002 our Group instituted an environmental management system for our overseas units, and began to collect environment performance data for these units. Our next step is to set targets for these units, and to achieve better linkage between domestic and overseas environmental management. We also are working to achieve ISO 14001 certification for those overseas units that are not yet certified.

Here we describe some of the environment-related actions taken at the five overseas units that have already attained ISO 14001 certification.



Seiko Instruments (Thailand) Ltd.

Business Profile

Manufactures components for hard disk drives.
Achieved ISO 14001 certification in March 2002.

Environmental Topics

■ **Reducing Amount of Cutting Oil Used in Processing of Motor Parts**

As part of their efforts to make efficient use of resources, the plant uses centrifuges to separate used cutting oil from the aluminum chips generated in the production process. The retrieved oil is then reused. Where the plant previously used 46,800 liters of cutting oil per year, this effort has reduced the usage to only 12,480 liters—a reduction of 73%. The chips, which are long and thin, are compacted into cylindrical blocks which are then sold to the steel industry for recycling.

Chips are placed in centrifuge, where oil is recovered.

After centrifuging, the chips are compacted to remove even more oil and to reshape them into cylindrical blocks.

The recovered oil is filtered to remove remaining aluminum debris, and the filtered oil is then reused.

■ **Promoting Reuse**

Where the plant previously discarded both the trays used for rotation shafts and the rubber gloves used in the clean room, they now wash these items and reuse them.

Instruments Technology (Johor) Sdn. Bhd. (Malaysia)

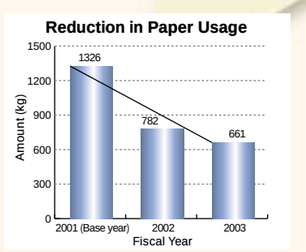
Business Profile

Assembles watch movements; manufactures parts for watch movements; and assembles thermal printers.
Achieved ISO 14001 certification in October 2002.

Environmental Topics

■ **Reducing Paper Usage**

The goal is to reduce paper consumption by 10% a year, from 1,326 kg in the base year of FY2001 down to 70% of this amount by FY2005. Results for FY2003 far exceeded the goal of 1,074 kg, with actual usage for the year coming in at only 661 kg —or less than half the usage immediately before the start of this conservation effort.



■ **Noise Reduction**

The site is working to reduce noise in accordance with the Malaysia Environment Ministry's guidelines.

Waste paper from each department

Final collection center

Dalian Seiko Instruments Inc. (China)

Business Profile

Manufactures and sells watch parts, optical communications parts, electronic ABS parts, and small tools and cutters. Imports and assembles watch components.
Achieved ISO 14001 certification in June 2001.

Environmental Topics

■ **Reuse of Cutting Oil**

Oil separation machines are used to recover waste cutting oil for reuse. In FY2003, cutting oil use was 0.054 kg per 1,000 pieces, a 6% drop (down from 0.057 kg) from the preceding year.

■ **Efficient Use of Air Conditioning**

The facility controls the amount of outside air intake so as to improve air conditioning efficiency. As a result of this effort, the facility has been able to shut down 6 of its 47 air conditioning units.

■ **Recovery of Used Kerosene and Cutting Oil**

The facility has revised its method for separating out used kerosene and cutting oil, so that these can then be resold or reused.

▲Setting Up the Oil Separator

▲Oils Recovered from Oil Separator

▲Intake of Outside Air

Guangzhou Seiko Instruments Inc. (China)

Business Profile

Manufactures and sells LCD modules.
Achieved ISO 14001 certification in July 2003.

Environmental Topics

■ **Acquisition of IS0 14001 Certification**

Achieved ISO 14001 certification in July 2003, becoming our fifth overseas facility to be certified.

■ **Lead-Free Product**

Succeeded in removing lead from LCD module pins, the last step toward achieving a totally lead-free product. Began shipment and sales of these lead-free products.

■ **Reuse of Factory Waste Water**

As part of its efforts to conserve water, the site processes waste water from the factory and reuses it in sprinkler systems and toilets. They anticipate reuse of about 500 m^3 per month, or 6,000 m^3 per year.

▲ISO 14001 Certificate

▲LCD Module (with pins)

▲Pumping Waste Water for Reuse

Seiko Instruments Singapore Pte. Ltd.

Business Profile

Manufactures watch movements, quartz crystals, and thermal printers, and sells electronic components.
Achieved ISO 14001 certification in May 1997.

Environmental Topics

■ **Recycling of Plastic**

Until 2003, this facility was unable to recycle waste plastic generated during purge processing (where residual plastic in the injection equipment is purged out using other materials). In FY2003, however, the site set up operations to recycle such plastic, and succeeded in recycling 32 tons during the year. As a result of this change, the site is now able to recycle 100% of its waste plastic.

■ **Sorting and Collection**

Empty chemical bottles are discarded into special bins for collection by recycling companies. Toxic waste, and rags contaminated with chemical materials, are also separately sorted and collected.

▲Waste Plastic from Purge Process

▲Waste Container

▲Collection Bin

Being a Good Corporate Citizen

The SII Group is cognizant of our responsibility to do business as a good corporate citizen and to provide true benefits to society of which we are a part. Below we for the first time explain how we approach our societal role, and some of the activities and efforts we pursue in order to serve our community.

■ Compliance Committee

We enacted our "SII Conduct Code" in October 2001. This is a common set of standards that all employees must follow, intended to help ensure that we carry out our business operations in a manner that complies with the needs of society that we serve. The SII Conduct Code sets forth criteria for determining our responsibilities in our business and daily activities, together with guidelines that help keep our operations in compliance with societal requirements. At the same, we also established our Compliance Committee. The committee promotes activities aimed to establish and maintain effective compliance management throughout the Group. Specific committee activities include (a) promoting awareness of the need for compliance, including full compliance with the SII Conduct Code, (b) proposing policies for dealing with whatever problems may arise, and (c) consulting with employees about compliance issues.

▲Compliance Activities via the Intranet

■ Incentive-based Compensation System

Our group-wide incentive-based compensation system took effect in FY2003. This new system is intended to foster human resources development by rewarding employees for specific jobs and job performances. It is part of a restructuring of our personnel management, under which we promote individual responsibility, promote each employee's awareness of what he or she should do and strive to achieve self-actualization, and encourage a cycle of *creating* and *challenging* that fosters an encouraging and stimulating environment. This new compensation system entirely eradicates the older approach, where compensation was in part tied to personal status, seniority, and regular pay raises. It encourages employees to set their goals high, and fosters a better work force throughout the Group.

■ Respect for Individuals

We recognize our obligation to respect the rights and individuality of every person. To this end, we have established rules to promote respect for each person's independence, and have worked to eradicate the possibilities for defamation, breaches of trust, violations of privacy, harassment, and other violations of individual rights. We also understand that our entire group has an obligation to protect the privacy of all personal information that we gather. For this reason, we have set up a privacy protection policy and various related rules, and we operate in accordance with these rules whenever we handle personal information.

▲Group Rules Accessible via the Intranet

■ Product Quality and Safety

Our group supplies customers in Japan and throughout the world with a wide variety of products ranging from watches and electronic dictionaries to electronic parts to analytical and measuring equipment to IT terminals, and much more. In providing these products, our goals are to satisfy customer needs and to give customers with true value. To achieve these goals, we carry out quality assurance activities aimed at ensuring that we provide high quality (value creation), cost effectiveness, reliable delivery, safety, and service. We also understand the need for "safety first," and our basic policy in this regard is that we must continually "earn the customer's trust by providing safe products and reliable service."

To raise employees' quality consciousness, we hold a Quality Forum once each year.

▲Quality Forums Help to Raise Consciousness

■ Worksite Environment, Safety, and Hygiene

To ensure a safe working environment, we have implemented many worksite rules and safety regulations, and we provide appropriate accident-prevention guidelines. At the same time, we have also organized a group-wide safety and hygiene management system. All of these efforts are designed to prevent worksite accidents and to promote an optimal work environment that protects and promotes the health and well-being of all of our employees.

In October 2003, our Tochigi quartz crystal plant (previously SII Quartz Techno Ltd.) received a Tochigi Labor Bureau Incentive Award for its safety and hygiene management. The award was presented at the Tochigi Regional Production Safety Convention, sponsored by the Tochigi Association for Labor Standards.

▲Receiving the Labor Bureau Incentive Award at the Tochigi Plant

■ Communication with the Community

We understand the importance of communicating with the people in the localities where we work and we actively participate in community-sponsored cultural events. Our Miyakubo unit (Chiba prefecture) offers its parking lots for community use during local festivals. And our Ohno business unit (Chiba prefecture) makes its field available so that local children can do exercises to the radio during summer vacation.

▲Local Residents Exercising to the Radio at Our Ohno Business Unit

At all of our sites, we offer factory tours and we work to explain to the community what it is that we do.

▲Factory Tour

Environmental Activities That Tie Us to Our Communities

q At each business unit, we engage in regular local cleanup activities.
w Our Makuhari head office participates in the annual EcoMesse Chiba Fair.* We provide the fair with meeting facilities, and we furnish questions for environmental quiz competitions.

* Started in 1996 and sponsored in part by Chiba prefecture, the fair—held in Makuhari City—brings together citizens, businesses, and government administrators for the purpose of working towards solutions of environmental problems.

Communication and Social Contribution

The SII Group is actively working to communicate effectively with our many stakeholders about our environmental activities. We are continuously seeking the ways in which these efforts are actually serving our community.

■ Environmental Reporting

We have been publishing Environmental Reports since 1996, with the aim of periodically apprising the community of our environmental activities. We also post recent information on our website, and work to publicize our activities through newspapers, magazines, and other such outlets. In FY2003, we updated the displays in our headquarters showroom so as to provide more specific information about our environmental efforts.

Showroom ▶
"Environmental Corner" at Our Headquarters Showroom

■ Communication

To promote two-way communication, our website invites comments and requests for information and for questionnaires. While many respondents indicated that they felt our 2003 report was "easy to understand," others indicated that they wanted "more specific information." For this reason, we have worked to provide more detailed information in this year's report.

Questionnaires Returned	12
Requests for Information	780
Queries through Website	24

■ Participation in "Think the Earth"

Think the Earth is a nonprofit project whose theme is the "coexistence of ecology and economy." *Think the Earth* provides a mechanism for businesses to contribute to society, and it promotes new concepts of production with the aim of inspiring people to think about the Earth. The project receives a portion of the revenues generated by sales of related products and services, and uses these funds to support its own operations and to contribute to NGOs and NPOs.

We fully support the project's goals, and we actively participate in it. We are pleased to have developed the project's kickoff product: the "wn-1 Earth Watch," a dome-shaped watch with a three-dimensional model of the northern hemisphere as its face. We have also produced a southern-hemisphere version, the "ws-1."

The wn-1 Earth Watch

The "Earth Watch" sports a 24-hour dial and an impressive 3D model of the northern hemisphere (model wn-1) and the southern hemisphere (ws-1). The product plays on the double meaning of the word watch. It is hoped that the watch will inspire the wearer to think more, and more often, about the Earth.

Visit the Think the Earth website at:
www.thinktheearth.net

■ Cultivation of Ambary Hemp

Since 1998, our Oyama unit (Shizuoka prefecture) has been cultivating ambary hemp—an annual plant that is known for its high CO_2 absorption. In FY2003 the garden produced a harvest of 70 kg, with maximum plant height reaching 3.85 meters (12.6 feet). The harvest is donated to local welfare homes, where residents use the stalks to produce picture frames, the sheaths to produce fancy writing paper, and the pigments to produce dyed shawls. The garden is fertilized with compost by processing of the business unit's cafeteria waste.

▲Ambary Hemp

Timelines: Company History and Environmental Activities

Company History		Environmental Activities	
1881	Kintaro Hattori established K. Hattori & Co., Ltd. (presently Seiko Corporation), a watch and clock retail store.		
1892	K. Hattori & Co., Ltd. established Seikosha Co., Ltd. (presently Seiko Clock Inc. and Seiko Precision Inc.) and began production of clocks.		
1937	Daini Seikosha Co., Ltd. (presently SII) was established as the watch manufacturer for the SEIKO Group.		
1964	Reflecting its rapid progress in enhancing the accuracy and reliability of timekeeping instruments, SEIKO products were selected as the official timekeeping instruments for the Tokyo Olympics.		
1967	SEIKO products captured all higher awards in the wrist chronometer class of the Observatoire Cantonal de Neuchatel contest held in Switzerland.		
1969	The SEIKO Group introduced the world's first quartz watch.		
1970	The Company launched its product diversification activities.		
1983	Daini Seikosha Co., Ltd. officially changed company name to Seiko Instruments & Electronics Ltd.		
1985	Completed the world's top automated assembly system for multipurpose, small-lot production of outer watch parts.		
1987	Seiko Instruments & Electronics Ltd. officially renamed Seiko Instruments Inc.		
1988	Completed the world's first automated assembling system for multipurpose, small-lot production of watch movements.	Dec.	Established "Fluorocarbon Countermeasures Promotion Committee."
1990	Introduced new corporate trademark SII for the Seiko Instruments Group.		
1992	SII Group eliminated use of chlorofluorocarbons. SEIKO products were selected as the official timekeeping instruments for the Barcelona Olympics.	Aug. Dec.	Abolished usage of CFCs. Established Environmental Administration Office (now called the Corporate Environmental Administration Group).
1993	Completed the SII Makuhari Building and transferred head office, sales, and development operations to the new building.	Apr. Aug. Nov.	Established Environmental Protection Plan,"SII Green Plan." Introduced the "Clean Arrow" used-paper collection truck. Abolished usage of trichloroethane.
1994	SEIKO products were selected as the official timekeeping instruments for the Lillehammer Olympics.	Apr.	Began monthly management of energy, paper use, and waste.
1995		Aug.	Executive council kicked off on Environmental Management System (based on ISO 14001).
1996		Aug. Nov.	Started publication of our annual Environment Report. Takatsuka unit (Chiba) became the first SII Group business unit to receive ISO 14001 certification.
1997	Sun Street retail complex opened in Kameido, Tokyo.	Dec.	Began our "Idling Stop" campaign.
1998	SEIKO products were selected as the official timekeeping instruments for the Nagano Olympics.	Feb.	Published our "SII Chemical Management Guides."
1999		Mar. Oct.	Completed acquisition of ISO 14001 certification for all of our 11 major business units in Japan. Abolished the use of chlorine solvents (trichloroethylene, methylene chloride). Issued "SII Group Green Purchasing Standards."
2000		Feb. Nov.	Began environmental accounting. Ohno unit achieved Zero Emissions.
2001		Oct. Dec.	Makuhari head office (Chiba) earned ISO 14001 certification. Introduced SII "Green Products" labeling system.
2002	SEIKO products were selected as the official timekeeping instruments for the Salt Lake City Olympics.	Jun. Sep.	Prepared the "SII Green Gas Reduction Scenario." Western Japan Business Unit earned the business unit's first ISO14001 certification.
2003		Jul. Oct.	Guangzhou Seiko Instruments Inc. (Guangzhou, China) earned ISO14001 certification. Domestic units eared ISO14001 (certification of Western Japan unit was extended).
2004	The company's official Japanese name was changed to "Seiko Insutsuru Kabushiki Kaisha."	Mar.	Major business units in Japan achieved Zero Emissions.

■ Environmental Awards

Oct.	1996	6 Chiba Keiyo business units received Recycling Promotion Committee's Chairman's Award for paper recycling activities.
Jun.	1998	SII Microtechno Inc. received Akita prefecture's "Best Environmental Activities" award.
Jun.	1998	Morioka Seiko Instruments Inc. received Iwate prefecture's award for "Excellence in Environmental Protection."
May	2000	Makuhari head office received the Chairman's Award from the Chiba City Building Conference.