



**Environmental  
Sustainability Report  
2007**

# Environmental Sustainability Report

## 2007

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#### About editing

The Sumitomo Heavy Industries Group (Sumitomo Heavy Industries, Ltd. and group companies) Environmental Report was issued in 2001 and the report's [PF1] scope was expanded to include a social aspect and became the Environmental Sustainability Report from 2005. This report refers to the Environmental Report Guidelines (2003 version) of the Japanese Ministry of the Environment.

#### Report Target

Sumitomo Heavy Industries, Ltd. and group companies

#### Target Period

April 1, 2006 — March 31, 2007

## Company Outline

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Company Name:  **Sumitomo Heavy Industries, Ltd.**

Founded: November 11, 1888

Incorporated: November 1, 1934

Head Office: Think Park Tower, 1-1, Osaki 2-chome, Shinagawa-ku, Tokyo

Employees: 12,561 consolidated 2,752 non-consolidated

Net Sales: consolidated: 600,256 million JPY

non-consolidated: 259,423 million JPY

## Sumitomo Heavy Industries Group Main Business Areas

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### **[Mass-produced Machinery]**

Power Transmission and control, Plastic Injection Molding Machines, Film forming machines, Cryogenic Equipment, Stage systems, Transfer Molding Press Machines, Laser Processing Systems, Forklifts, Precision Forgings & Castings, Iron and Steel products, Defense Equipment, Cyclotrons for Medical Use, Ion Accelerators, Plasma Coating System for FPDs (Flat Panel Displays),

Sumitomo NACCO Materials Handling Co., Ltd., Seisa Gear, Ltd., SEN Corporation — an SHI and Axcelis Company, Sumitomo Heavy Industries HIMATEX Co., Ltd., SHI Plastics Machinery, Ltd., Sumitomo Heavy Industries Finetech, Ltd., Sumiju Precision Forging Co., Ltd., Sumiju Techno Center Co., Ltd., Sumitomo Heavy Industries PTC Sales Co., Ltd., Sumitomo Heavy Industries Mechatronics, Ltd. Sumitomo Machinery Corporation of America (SMA), Sumitomo (SHI) Cycle Drive Germany GmbH, Sumitomo (SHI) Cyclo Drive China, Ltd., SHI Plastics Machinery, Inc. of America, Sumitomo (SHI) Plastics Machinery Mfg. (USA), LLC, Sumitomo (SHI) Plastics Machinery Mfg. (America), LLC, Sumitomo (SHI) Cryogenics of America, Inc. Sumitomo (SHI) Cryogenics of America, Inc.

### **[Environmental Protection Facilities, Plants & Others]**

Power Generation Systems, Water and Sewage Treatment Systems Facilities, Landfill Leachate Treatment Systems, Air Pollution Control Plants, Municipal Solid Waste Incineration Plants, Chemical Process Equipment & Plants, Food Processing Machines, and Software

Sumitomo Heavy Industries Environment Co., Ltd., Sumitomo Heavy Environmental Engineering Inc., Sumiju Environmental Technology Co., Ltd., Sumiju Plant Engineering Co., Ltd., Lightwell Co., Ltd., Izumi Food Machinery Co., Ltd., Nihon Spindle Mfg. Co., Ltd.

### **[Ship, Steel Structure, and Other Specialized Equipment]**

Ships, Marine Structures, Material Handling Systems, Bridges & Steel Structures, Pressure Vessels, Mixing Reactors, Turbines, Pumps

Sumitomo Heavy Industries Marine & Engineering Co., Ltd., SHI Mechanical & Equipment Inc., S. H. I. Examination & Inspection Ltd.

### **[Industrial Machinery]**

Logistics & Handling Systems (Automated warehouse system, Automatic high-speed sorting system & Others), Parking systems, Moving walkways, Forging Presses, Material handling systems (Continuous unloaders, container cranes & Others), Turbines, Pumps

Sumitomo Heavy Industries Engineering & Services Co., Ltd., Sumitomo Heavy Industries Techno-Fort Co., Ltd., Shin Nippon Machinery Co., Ltd. Sumitomo Heavy Industries Technology (Hong Kong) Co., Ltd.

### **[Construction Machinery]**

Hydraulic Excavators, Mobile Cranes, Road Construction Machinery

Sumitomo Construction Machinery Co., Ltd., Hitachi Sumitomo Heavy Industries Construction Crane Co., Ltd.

## A company that makes valuable contributions to the continuous development of our society

### Introductory Message

As a company, our mission is to contribute to building, and making a reality, a continuously developing society. As such, it is natural that a deep concern for solving our environmental problems is a large part of that mission.

In particular, global warming is perhaps the most serious of all environmental problems facing us today. Therefore, in our efforts to combat global warming as a company, in August 2005 we instituted a Sumitomo Heavy Industries group-wide sweeping commitment to strive to reduce carbon dioxide emissions, the main cause of global warming.

Three of our company-wide goals are to "Reduce electronic device use," "Reduce paper use" and "Promote green distribution," and we have been seeing strong progress in reaching these goals. In terms of our efforts to reduce use of electronics, despite the fact that our production has increased, we saw a 1.6% decrease in the total amount of electronic device use from 2004 to 2006. Also, in 2007 there is a good chance that we will be able to achieve a 10% reduction from 2004 levels.

We have long had a deep consciousness of the role we as a company must play, in terms of our products and production activities, in reducing the environmental burden and protecting our environment. We are devoting our efforts to more than meeting the environmental protection demands of society by making our products lighter and smaller and reducing energy use as we continue to offer products of superior functionality and quality.

In terms of products, we started with environmental systems such as municipal garbage incinerators, recycling systems, water treatment and air purifying systems and have moved on to things such as semiconductors for injection molding machines, XY stage systems and laser processing systems. We also make digital devices for home electronics, automatic parking systems for cars, moving sidewalks and distribution systems among other things that support local municipalities as they work to protect the environment. In addition, we also make various kinds of multipurpose machines like construction machinery, conveying and loading machinery, metal processing machinery and cyclo drive machinery, which combined with our marine products, gives one an idea of how far and wide our contribution to societal and environmental protection extends.

In terms of production, all of our manufacturing facilities and our important group companies participate in the ISO 14001 management system. Also, the entire Sumitomo Heavy Industries Group is strongly committed to continuously minimizing waste, reducing carbon dioxide emissions and reducing hazardous chemicals and has made significant progress in all areas. In terms of preventing environmental pollution, we are also committed to working our hardest to avoid potential environmental risks by taking preventative steps in advance.

As for protection of local environments, as we have long been doing, we are actively involved in holding conferences and consultations with local citizens about environmental preservation. This report is a continuation of our 2006 report and is a summary of our environmental efforts. We welcome opinions, comments and advice and will take them into consideration in our ongoing efforts to sustain and preserve our environment.

President and CEO

中村 吉伸

(Yoshinobu Nakamura)



## Sumitomo Heavy Industries Group Environmental Policy

We will always work to achieve the following as we ensure that each Sumitomo Heavy Industries Group company has a strong and abiding consciousness of their social obligation to preserve and protect the environment in our circular economic activities.



Our determination to strictly adhere to all legal restrictions is one of our core concerns, and our environmental risk management has developed as part of that commitment. In September 1999, when our "Sumitomo Heavy Industries Environmental Policy" was enacted, the idea of consciously considering the environmental impact of our businesses was clearly stated and became one of our core principles.

Enacted November 1, 1999

## Environmental Management

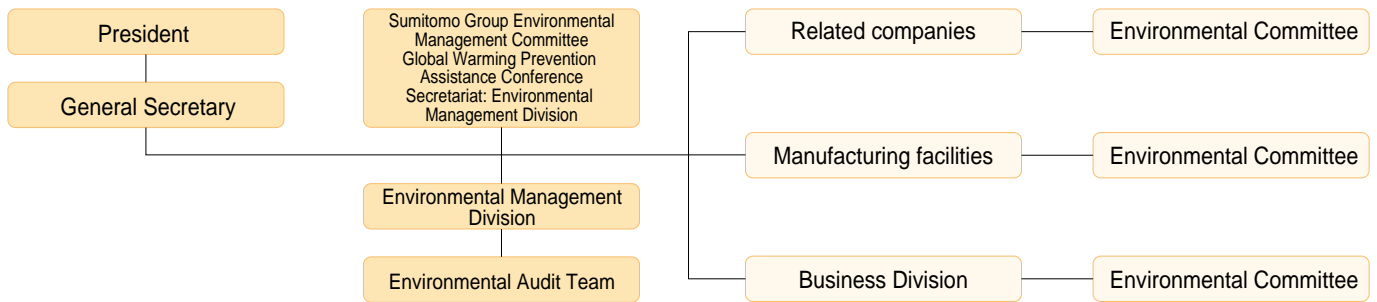
Each manufacturing facility (including local area group companies) within our manufacturing area has enacted this environmental policy, while environmental management systems in keeping with ISO 14001 standards are being promoted at all our manufacturing facilities. Firstly, any and all elements that could potentially have an environmental impact are inventoried, and then an environmental impact evaluation is undertaken and any applicable legal restrictions are made clear and faithfully observed. We've improved our management system and made PDCA an essential part of our system by requiring that environmental goals be

set, an environmental program created and put into practice and then audited and finally evaluated. At group companies outside our manufacturing area, the environmental policy enacted by our president is in effect. In particular, we have made carrying out our environmental program a main theme of both our products and production activities. To ensure that our management system is being fully implemented and to facilitate continuous improvement, the Environmental Management Division at our head office conducts internal audits and supervises an external auditing organization in conducting audits once a year.

## Environmental Management Organization

In order to ensure that our environmental protection activities continue to be effective and productive, all of our manufacturing facilities and business units as well as our main group companies have received ISO 14001 certification. Our manufacturing facilities and business units are actively conducting their environmental management activities and working towards continuous improvement in keeping with ISO 14001 standards. The group company inside each manufacturing area is actively conducting their environmental management within their respective organization. As for companies that are outside our manufacturing area, they are conducting their ISO 14001 environmental management activities in a similar fashion but within their own independent organizations.

As the entire Sumitomo Heavy Industries Group (Sumitomo Group) continues to work towards further development and ever more improvement, the General Secretary under the auspices of the Environmental Management Division conducts environmental management planning, carries out plans and also conducts periodic audits. The Sumitomo Group Environmental Management Committee also monitors the environmental activities throughout the group to ensure that they are thoroughly implemented in accordance with our environmental policy. With the prevention of global warming being such a critical issue to all of us, we are working particularly hard on this problem through our Global Warming Prevention Assistance Conference.



### Group companies and manufacturing facilities and businesses that have received ISO 14001 certification and are working within the certified range.

The date noted below is the date of certification

Tanashi Works, August 1998	Sumiju Plant Engineering Co., Ltd. Sumiju Business., Ltd. Sumiju Tokki Service Co., Ltd.
Chiba Works, April 1994	Sumitomo Construction Machinery Co., Ltd. SHI Plastics Machinery, Ltd. Sumijyu Platec Co., Ltd. Sumiju Logitech Co., Ltd.
Yokosuka Works, February 1992	Sumitomo Heavy Industries Marine & Engineering Co., Ltd. Sumiju Precision Forging Co., Ltd. Sumiju Techno Center Co., Ltd. Sumiju Yokosuka Kogyo Co., Ltd. Sumiju Kankyo Analysis Service Inc.
Nagoya Works, January 1999	Hitachi Sumitomo Heavy Industries Construction Crane Co., Ltd. Sumiju Tomita Machinery Co., Ltd. Sumiju Technos Co., Ltd. Sumitomo Heavy Industries PTC Sales, Co., Ltd.
Okayama Works, March 2003	Sumitomo Heavy Industries Finetech, Ltd.
Ehime Works (Niihama Factory), November 1999	Sumitomo Heavy Industries Techno-Fort Co., Ltd. Sumitomo Heavy Industries Engineering & Services Co., Ltd. Sumitomo Heavy Industries HIMATEX Co., Ltd. Sumiju Techno Craft Co., Ltd.
Ehime Works (Saijo Factory), February 1999	SHI Mechanical & Equipment Inc. S.H.I. Examination & Inspection, Ltd.
- Energy & Environment Group - Water & Wastewater Engineering Group (presently, Sumitomo Heavy Industries Environment Co., Ltd.), November 2002	Sumiju Environmental Technology Co., Ltd.

Note: Where a group company has more than one manufacturing facility only one will be listed as a representative.

### Group companies that have independently received ISO 14001 certification

The date noted below is the date of certification

Sumitomo NACCO Materials Handling Co., Ltd. March 2003
Shin Nippon Machinery. Co., Ltd. February 2002
Izumi Food Machinery Co., Ltd. June 2002
SEN Corporation - an SHI and Axcelis Company October 2002
Sumiju Environmental Engineering Inc. October 2002
Lightwell Co., Ltd. May 2002
Nihon Spindle Mfg. Co., Ltd. March 2006
Japan Irradiation Service Co., Ltd. February 2007



## Environmental Objectives (medium term plan) and Results

All of our activities are conducted based on our environmental objectives (medium term plan). Our results for 2006 are listed below.

● Areas in which we reached our target are the following: reduction in the amount of waste disposed (amount of landfill), reduction in the amount of water used, management of PCB (polychlorinated biphenyl) and expansion in the number of ISO certifications.

● Areas in which we reached over 80% of the target are the following: zero emissions, control of the discharge of ozone layer depleting organic chlorine chemical substances, controls placed on the discharge amounts of VOC (volatile organic compounds) substances, promotion of green procurement,

expansion of the range of related environmental activities including maintenance and renewal of ISO 14001 certifications.

● Areas in which we reached less than 80% of the target include the following: reduction in the amount of electricity use as related to the emissions of carbon dioxide, reduction in the occurrence and amount of waste, reduction of hazardous chemicals that cause soil contamination due to the discharge of ozone layer depleting organic chlorine chemical substances. We will be working harder than ever in 2007 to reach our targeted goals in the areas in which we fell short in 2006.

Evaluation: ● Reached the target, ○ Reached over 80% of the target, △ Reached less than 80% of the target

Barometer	Item	Medium term plan	2006 Results	Evaluation	2007 Plan
Global Warming Prevention	1) Reduce carbon dioxide emissions and electricity use in both factories and offices	By 2010, reduce carbon dioxide throughout the entire group to 18% below 1990 levels (electricity use as of 2007 has been reduced by 10% compared to 2004 levels)	Reduce carbon dioxide by 4.4% compared to 1990 levels (As of 2004 we have already reduced electricity use by 1.6%)	△	Reduce electricity use in 2007 by 10% compared to 2004 levels
	2) Encourage green transportation reduce carbon dioxide emissions in our transportation activities	Reduce carbon dioxide per transportation unit to 10% less than 2006 levels by 2010 Transportation unit = amount of energy used / total transportation volume (tonnage)	Total transportation volume of 31,560,000 kilometer tons Transportation unit 0.025 (t-carbon dioxide/t)	—	Using 2006 as a standard, reduce 2007 transportation units by 2% (Amended Energy Conservation Law stipulates a 1% reduction)
Save resources, promote recycling	1) Reduce the occurrence of waste and waste disposal	2010, - Amount produced 21,000 tons (32% reduction compared to 2001) - Amount disposed 2,000 tons (77% reduction compared to 2001 levels)	Amount generated: 27960t (9.2% reduction compared to 2001 levels). Amount disposed of: 3007t (66% reduction compared to 2001 levels)	△ ●	- Amount generated 24,300 tons (21% reduction compared to 2001 levels) - Amount disposed 2,300 tons (74% reduction compared to 2001 levels)
	2) Achieve zero emissions	- Achieve more than a 95% recycling rate in all divisions by 2010 - Achieve a 95% recycling rate by 2007 and then aim for zero emissions	Recycle rate of 89.2%. Achieve a greater than 95% rate at 5 locations (last year 3 locations succeeded)	○	Achieve a greater than 95% recycling rate (Sumitomo Group average)
	3) Reduce paper use	- By 2008 reduce by 30% compared to 2005 levels - Continue to promote paperless work	Reduce by 5.8% compared to 2005 levels (started as of October 2006)	—	Using 2005 as a standard, reduce by 15% in all divisions
	4) Reduce water use	By 2010 reduce by 14% compared to 2005 levels	Reduce by 13% compared to 2005 levels	●	Reduce by more than 13% compared to 2005 levels
Promote the prevention of environmental pollution	1) Control the discharge of ozone layer depleting organic chlorine chemical substances (Soil Contamination Countermeasures Law, Montreal Protocol)	1) In accordance with Soil Contamination Countermeasures Law, completely eliminate the use of hazardous chemical substances, dichloromethane, tetrachloroethylene, trichloroethylene by 2010. 2) By 2010 reduce ozone layer depleting substances HCFC-141b, HCFC-225 to 50% of 2006 levels	2005 Comparative Standard 1) Respective reductions: dichloromethane 35.2%, tetrachloroethylene 81.9% and trichloroethylene 6.3% 2) Respective reductions: HCFC-141b 11.2%, HCFC-225 55.2%	△ ○	1) Reduce dichloromethane, tetrachloroethylene and trichloroethylene by more than 50% compared to 2005 levels 2) Reduce ozone layer depleting substances HCFC-141b by more than 20%
	2) Control the release of VOC substances (Air Pollution Control Law))	Control the emissions of painting solvents (mainly toluene, xylene and ethylbenzene). By 2010 reduce by 30% compared to 2006 levels	Handled amount for 2006: 1090t (1100t in 2005)	○	Reduce the amount of emissions of these 3 substances by more than 10% compared to 2006 levels - Control the amount of emissions by changing and rebuilding equipment - Expand the use of low solvent paint products
	3) Management of PCB's: eliminate all contaminated equipment (In accordance with the Law Concerning Special Measures Against PCB Waste)	By 2010 completely eliminate the use of lighting equipment stabilizers, transformers and capacitors containing PCB s. 1) Investigation into high concentrations has been completed 2) Investigation into low concentrations will be completed in 2008 and renewed in turn based on our plan	1) Equipment with high concentrations of PCB s has been registered 2) Investigation for low concentrations is ongoing	●	1) We have already registered our equipment with high concentrations of PCB s with the Japan Environmental Safety Corporation. After receiving an okay for disposal notification we will dispose of the items as directed 2) Our investigation into low concentrations is proceeding according to plan
Expand our products that take the environment into consideration	Promote green procurement (raw materials or parts purchases)	- Based on customer basic expectations: Guarantee to ship no products with harmful substances - Ensure that our suppliers make a guarantee to supply parts and products with no harmful substances included	Activities underway Green procurement guidelines are currently being written	○	- Distribute Green procurement guidelines to all relevant parties - Explain the planned activities to each manufacturing area and relevant companies and suppliers
Environmental Management	1) Maintain and renew ISO 14001 certification	Zero environmental accidents (Violations of the law)	Three incidents of verbal guidance	○	Zero legal ordinances water quality violations (Including verbal guidance)
	2) Expand the number of group companies that receive ISO 14001 certification	Expand the number of domestic businesses that receive ISO 14001 certification (particularly factories and related companies)	One related company has received certification and two are in the process of preparing for certification	●	Two related companies are in the process of preparing for certification (and expect to be certified by 2008)
	3) Expand the targeted range of connected environmental management activities	Expand to our important overseas production facilities. In 2007, investigate the environmental risk at three of our Chinese factories and then expand to other regions after that	We have been begun an investigation of relevant legal ordinances at three Chinese factories	○	Currently undertaking an environmental management investigation (a survey) at three Chinese factories

## Global Warming Prevention Activities

### Full participation activities

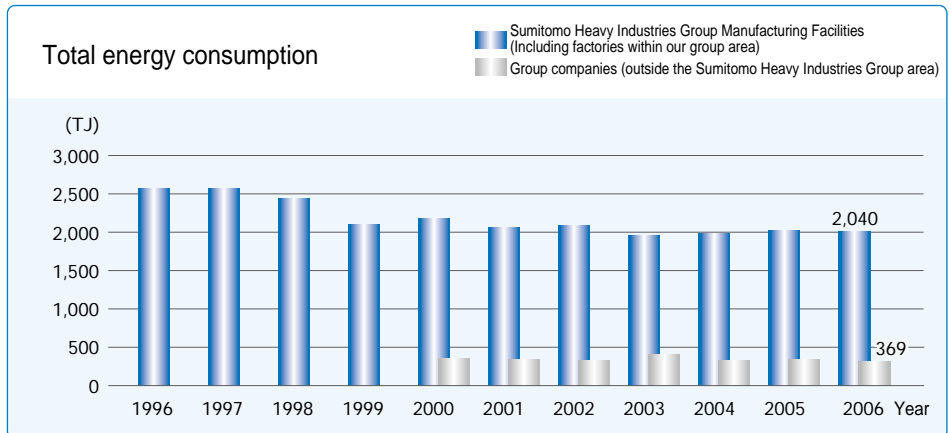
At the Sumitomo Group we strongly encourage each and every one of our employees to take the initiative and personally tackle the issue of global warming. We want every single Sumitomo Group employee to take actions to protect our natural environment as we strive for a commitment to environmental preservation that permeates the entire company. With the goal of full participation of every employee of both the Sumitomo group and our associated companies in our environmental activities, we have created a character, "Eco Marukun," to symbolize the growth and development of our environmental movement. Eco Marukun will be seen on posters, stickers and folding fans as a way to deepen our consciousness of the environmental issues we face and to spur us on to further action.



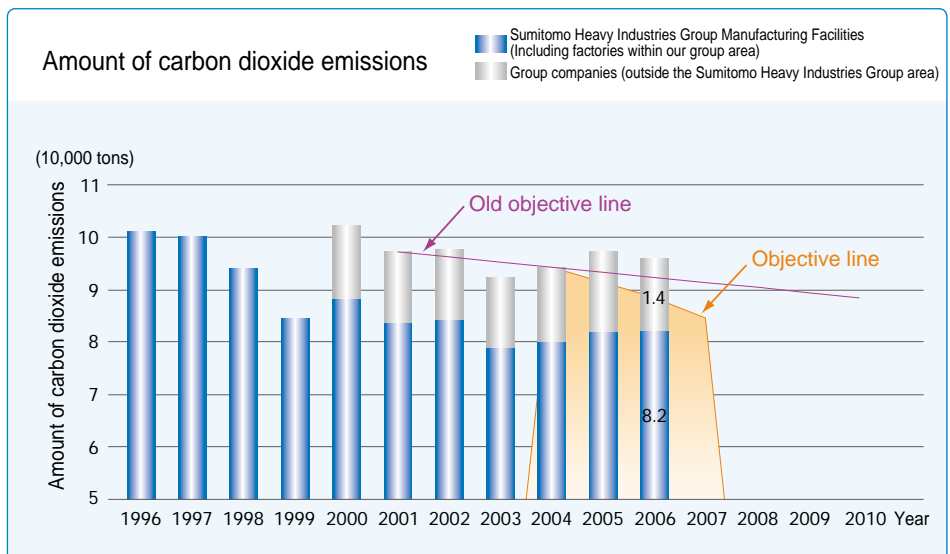
Eco Marukun poster

### Energy reduction - Carbon dioxide emissions reduction

In 2001 we set a goal of realizing a 9% reduction (the old objective line) in carbon dioxide emissions throughout the entire Sumitomo Group by 2010. In August 2005 we began our global warming prevention activities and committed ourselves to reducing our electricity usage. Our efforts to reduce electricity usage will directly aid us in our efforts to reduce carbon dioxide emissions. As such, we have decided to set the bar higher for ourselves, and we have now resolved to achieve a reduction by 2007 to 10% less than 2004 levels. In 2006 the Sumitomo Group used 2,410 tera joules (compared to 2,460 tera joules in 2005), of energy (electricity and fuel), and carbon dioxide emissions amounted to 9.67 million tons (compared to 9.79 million tons in 2005), which is 2.2% better than 2005 and a 1.2% reduction. Notwithstanding our production increases, we have had successes in our energy reduction efforts as we have seen both a reduction in energy use and in carbon dioxide emissions. Starting this year we will be working harder than ever on promoted reduced energy use and carbon dioxide emissions through proper usage management and reduction in wasteful usage of everything from power machinery to air conditioning to lighting, reduced machine energy use and efficient usage of equipment through use of inverters.



We do not have data for the quantity of fuel used from 1996-1998. Therefore, we have calculated the average of the quantity used between 2000-2002.

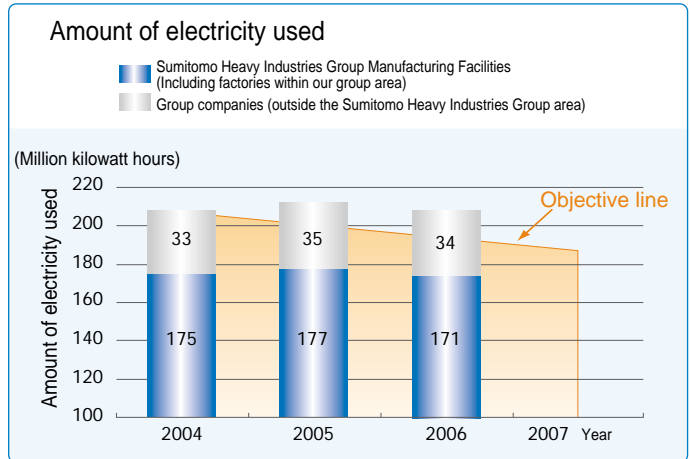


We do not have data for the amount of carbon dioxide emissions or amount of fuel consumed from 1996-1998. Therefore, we have calculated the average of the quantity used between 2000-2002.



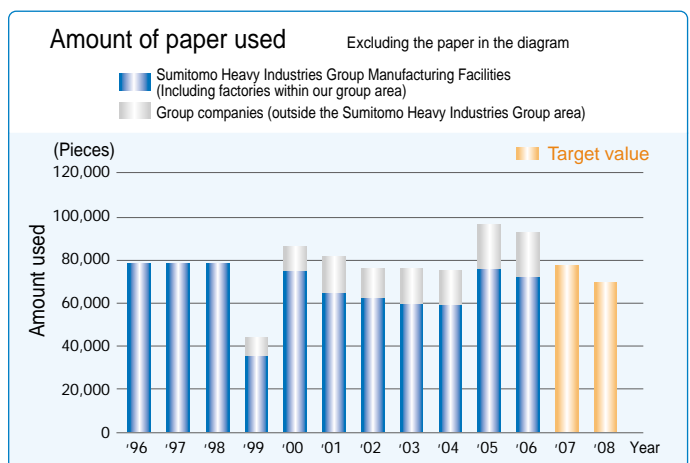
## Reducing electricity usage

Using 2004 as a standard, we have set ourselves a goal of reducing electricity usage in 2007 by 10% compared to 2004 levels. In 2006 we achieved a reduction of 1.6% compared to 2004 levels. In the manufacturing division, the energy saving effects of reduced stand-by power, more energy-efficient lighting, and a lights-off policy have exceeded the amount of energy used in increased production. In the Office Division, we have seen great results by our efforts in promoting a lights-out policy and Cool Biz, among other things. Our efforts to reduce electricity usage are closely linked to our ISO 14001 environmental management system, and both are moving forward enthusiastically.



## Efforts to Reduce Paper Usage

Our efforts to reduce the amount of paper we use and the shift to a mind-set of reducing resource usage are inevitably connected to efforts to reduce carbon dioxide emissions and the nationwide global warming prevention campaign. The Sumitomo Group is working hard to reach our goal in 2008 of a reduction of 30% compared to 2005 levels. In 2006 we were able to realize a reduction of 5.8% from 2005. With ongoing efforts to reduce waste - like printing two-pages-per sheet, making double-sided copies, utilizing the opposite side of a piece of paper and using projectors in meetings - we fully expect to see even greater reductions in the future.

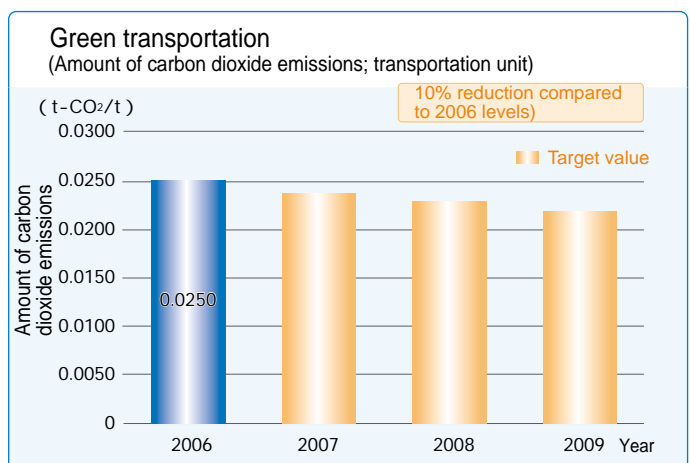


## Promoting Green Transportation

Based on the Amended Energy Conservation Law that came into effect in April 2006, we have calculated our transportation kilo tonnage. Our actual kilo tonnage for 2006 was 31,560,000 kilo tons of special freight. By 2009 our goal is to reduce the basic unit of carbon dioxide emissions by 10% compared to 2006. As part of our efforts, a person has been assigned at each business unit to be responsible for eliminating wasteful shipping and increasing shipping efficiency. Both the 2006 basic unit and the 2009 goals are displayed on the list and diagram to the right.

2006 amount of carbon dioxide emissions (transportation unit)

Kilotons (thousand kilotons)	Energy (GJ)	Carbon dioxide emissions amount (t-carbon dioxide)	Carbon dioxide emissions amount (transportation unit) (t-carbon dioxide/t)
31,556	56,404	3873	0.0250



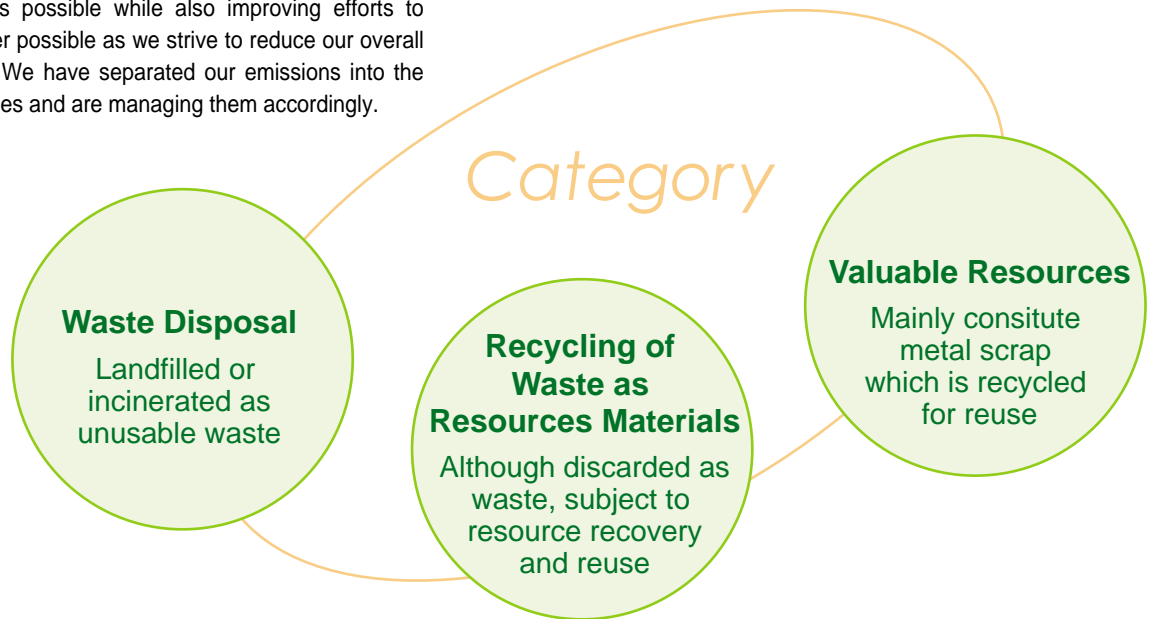
## Promoting Green Procurement

From our products to our production, we are committed to reducing the environmental impact of our activities. This means that we must reduce the environmental impact at all stages, from initial procurement to waste disposal. We have stressed our commitment

to green procurement efforts by presenting to all our business partners our "Sumitomo Heavy Industries Group Green Procurement Guidelines."

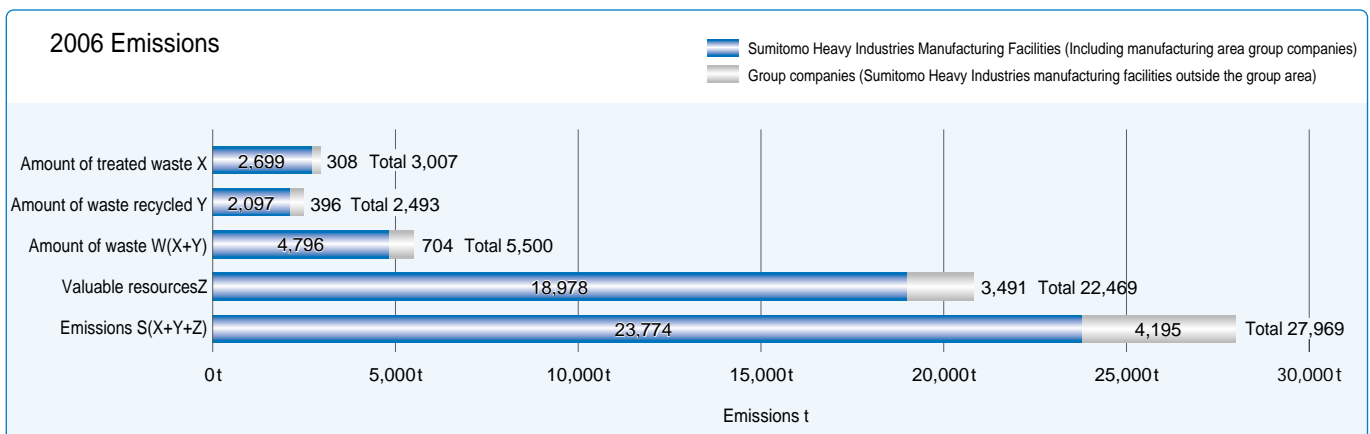
## Activities Directed toward the Recycling - Based Society

Building a resource recycling oriented society, allowing for unlimited development potential, is one of the most important issues we face. All of our business units have set goals to reduce emissions as much as possible while also improving efforts to recycle waste whenever possible as we strive to reduce our overall environmental impact. We have separated our emissions into the following three categories and are managing them accordingly.

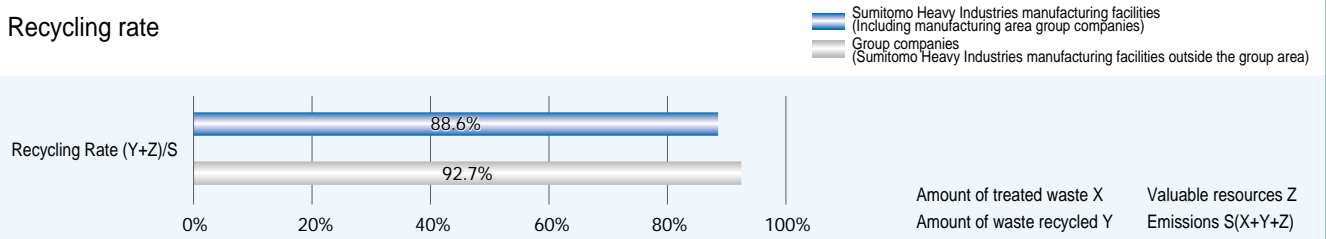


Controlling emissions (= treated waste + recycled waste + valuable resources) and reducing treated waste are critically important issues. Reducing the emissions caused by our production activities is connected to our efforts to save resources and reduce energy use, and also helps preserve our environment as part of our mission to control our overall level of emissions. The standards used by waste treatment facilities regarding the items they will accept are becoming increasingly stringent, making it ever more critical that we reduce our amount of waste. In addition to controlling emissions and reducing waste treatment, we must also reduce wastefulness on the production side while controlling emissions and striving to recycle waste whenever possible. While continuing with our efforts at sorting rubbish, we are also promoting the complete recycling of resources by using recycled paper (made from chip material), low grade scrap metal (raw metal material) and packaged wood (made from chip material, construction pressboard). We recognized that we must improve our recycling

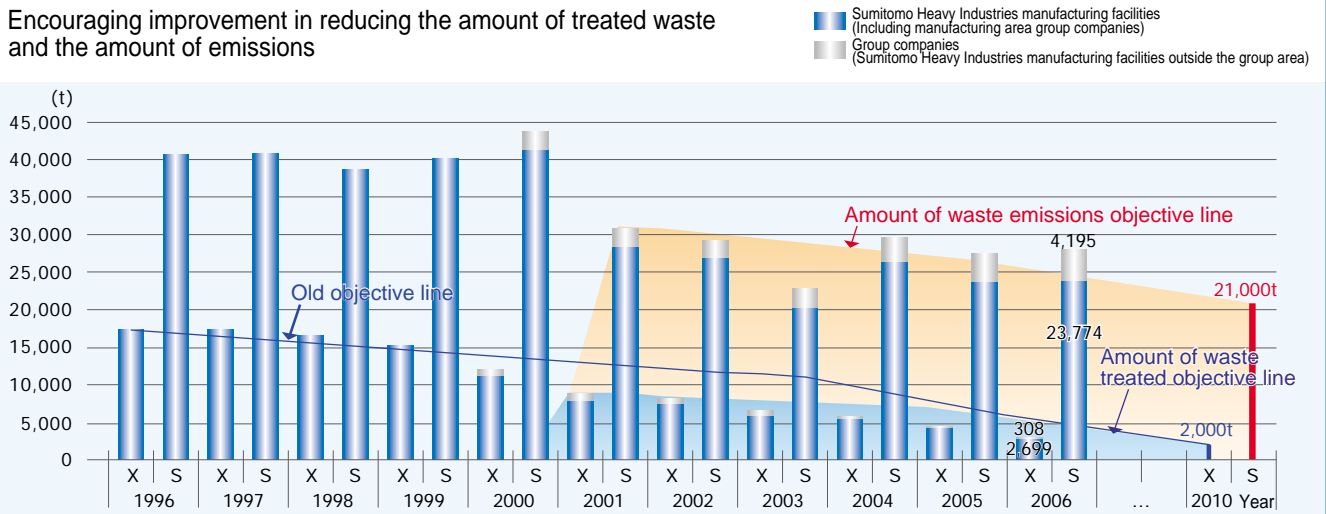
efforts and have expanded into recycling casting waste grit (paving aggregate), waste paint and sludge. From 1996 to 2001 we paid particular attention to our specific goals of reducing the amount of our treated waste and increasing our recycling. In 2001 our results actually exceeded our target, so we used 2001 as a new baseline and set even higher goals for ourselves in terms of controlling emissions and the amount of treated waste (including reclaimed waste and incinerated waste). In other words, our new goals mean that by 2010 we will be aiming to have reduced emissions by 32%, and the amount of treated waste by 55% compared to 2001 levels. In 2005, our production increased, and our emissions of 27,969 tons were 10% over our goal of 25,400 tons. Even so, we were able to exceed our goal in the amount of treated waste of 5,100 tons as we produced only 3,007 tons. Currently, the recycling rate throughout the entire group is 89%. We plan to increase this rate to 95% by the end of 2007. Our next goal will be to achieve zero emissions.



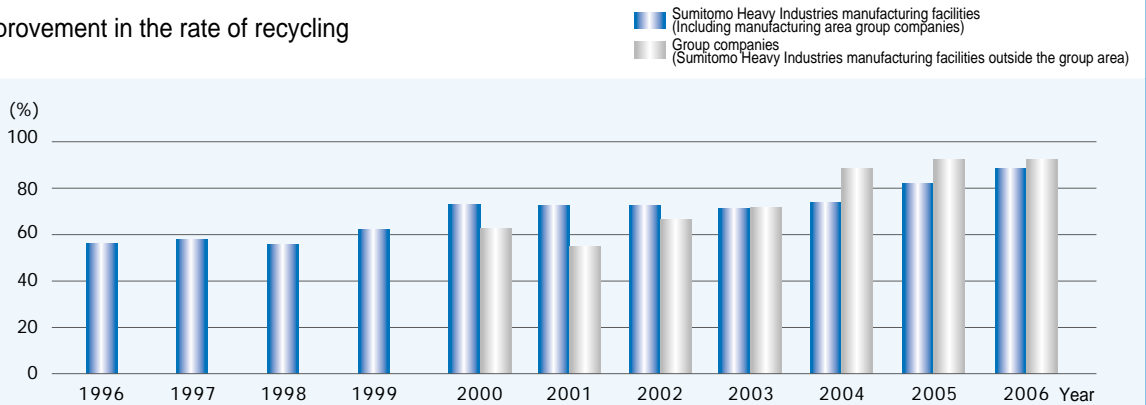
### Recycling rate



### Encouraging improvement in reducing the amount of treated waste and the amount of emissions



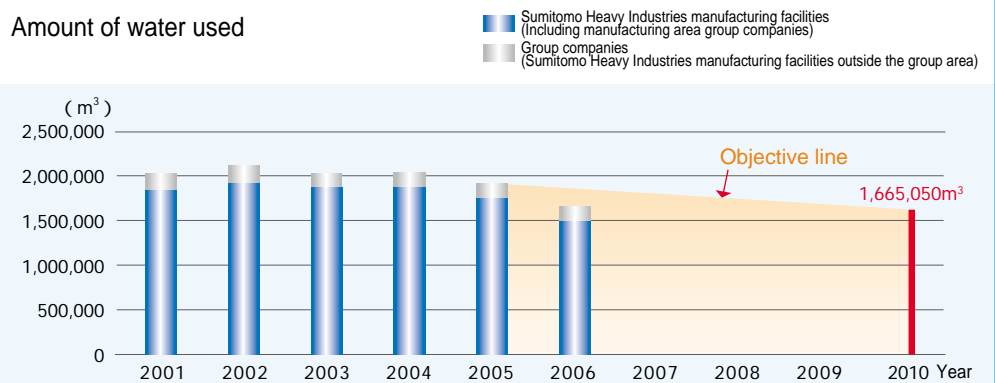
### Encouraging improvement in the rate of recycling



### Reducing the Amount of Water Used

We have set ourselves a goal of reducing our water use in 2010 to 14% less than the amount used in 2005. In 2006, thanks to our efforts to make our water pipes visible (above ground) we have been able to eliminate water leaks and reduce our water usage by 12%.

### Amount of water used



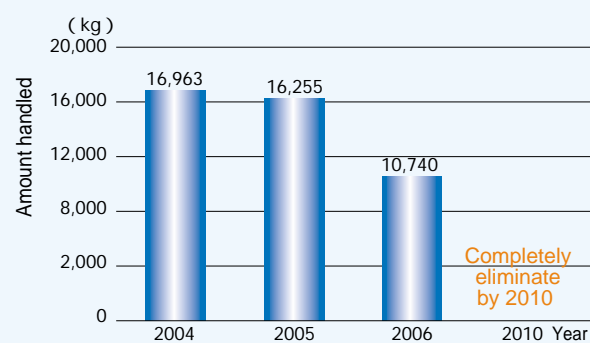
## Chemical Substances Management Activities

The following four issues are of critical importance to us in our effort to effectively manage chemical substances and work towards preventing environmental pollution.

### ● Controlling the emissions of organic chlorine compounds

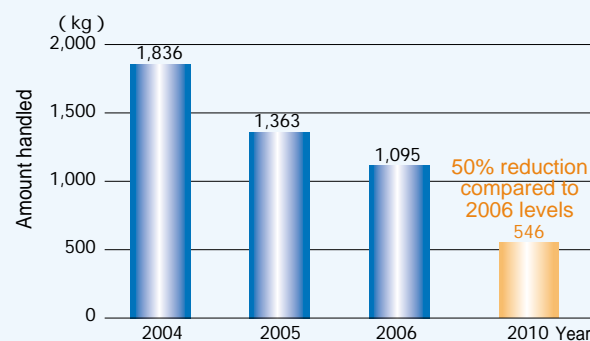
1) We have set ourselves a goal to completely eliminate by 2010 the use of dichloromethane, tetrachloroethylene and trichloroethylene, the substances targeted by the Soil Contamination Countermeasures Law. Through our efforts at utilizing alternative substances, we were able to reduce our emissions of dichloroethylene by 35.2%, tetrachloroethylene by 81.9% and trichloroethylene by 6.3% compared to 2005 levels. The figure to the right shows our actual results for all three substances from 2004 to 2006. 2006 shows a 37% decrease in emissions compared to 2005.

Soil Contamination Countermeasures Law targeted substances (dichloromethane, tetrachloroethylene and trichloroethylene)



2) We have set ourselves a goal of reducing our emissions of ozone layer depleting chemicals HCFC-141b, HCFC-225 by 50% in 2010 compared to 2006 levels. In 2006, thanks to our use of alternative substances, we were able to reduce our emissions of HCFC-141b by 11.2% compared to 2005. We were also able to reduce our emissions of HCFC-225 by 55.2%. As the diagram to the right indicates, we succeeded in reducing our emissions of ozone layer depleting chemicals in 2006 by 40% compared to 2004 levels.

Ozone layer depleting substances (HCFC-141b, HCFC-225)



### ● Control of the emissions of VOC targeted substances

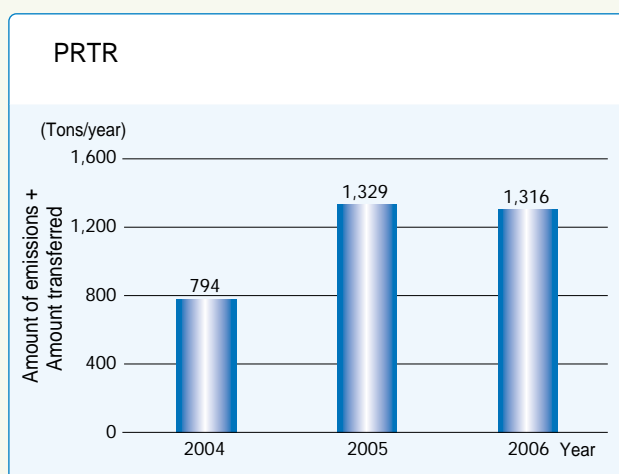
More than 90% of the targeted substances we are using are paint solvents such as toluene, xylene and ethyl benzene. We have set ourselves a goal to reduce our emissions by the year 2010 by 30% compared to 2006 levels. We have installed removal equipment for the large-scale painting facilities that were the target of the legal regulations that came into effect in 2006. We fully expect to achieve a reduction in 2007 of 10% compared to 2006 levels.

VOC



## ● Emissions and transfer amount of PRTR Targeted Substances

About 90% of PRTR (pollutant release and transfer register) targeted substances are painting materials (epoxy resin) and solvents (toluene, xylene and ethyl benzene). While continuing to maintain the highest quality, we are increasing our use of appropriate low solvent paints while also expanding the setting up of removal equipment as we work towards reducing our emissions and transfers.



### PRTR 2006 Results

(Unit: kg)

Chemical Substances Issue Number	Chemical Substance Name	Amount of emissions + Amount transferred	Chemical Substances Issue Number	Chemical Substance Name	Amount of emissions + Amount transferred
30	Bisphenol A type epoxy resin	163,978	200	Tetrachloroethylene	0
40	Ethyl benzene	239,543	211	Trichloroethylene	8,560
43	Ethylene glycol	45	227	Toluene	272,631
63	Xylene	566,348	230	Lead and its compounds	2,437
68	Chrome and chrome trivalent compounds	350	231	Nickel	92
132	1,1 dichloro-1-fluoroethane	1,056	304	Boron and its compounds	4,543
145	Dichloromethane	1,531	311	Manganese and its compounds	14,079
177	Styrene	2,177	346	Molybdenum and its compounds	30
				Total	1,315,845

The total of the amount of emissions + amount transferred for Sumitomo Heavy Industries and its group companies

## ● PCB Management and Equipment Removal

By 2010 we will completely eliminate the use of lighting equipment stabilizers, transformers and capacitors containing PCB's. We have completed our investigation of equipment containing high concentrations of PCB's and registered this information with the Japan Environmental Safety Corporation. Our investigation of equipment containing low concentrations of PCB's will be completed in 2008, and we will immediately develop a plan to handle the early stages of treatment.



## Environmental Accounting

Environmental accounting is one of the yardsticks by which environmental activities are measured. Sumitomo Heavy Industries has conducted environmental accounting in accordance with the "Environmental Reporting Guidelines, 2006 Version" issued by the Ministry of the Environment. The total cost of environmental protection for FY2006, which includes a combination of investment and various costs, came to 2,895 million yen, a sharp increase over the 1,940 million yen of the previous year. This marked change reflects the increase in the cost of efforts designed to reduce the Company's electric power consumption. Sumitomo Heavy Industries intends to utilize environmental accounting as an effective tool in promoting its various corporate environmental activities.



### Environmental Preservation Cost

Accounting base: (Sumitomo Heavy Industries Group)

Accounting Term: April 1, 2006 to March 31, 2007

(Unit: million yen)

Category		Environmental Preservation Cost	Investments	Costs
(1) Costs Within Business Areas (sites)		Various costs incurred for handling or processing water, air, noise, vibration, chemical substances, and waste materials, for reducing energy and resource consumption and for recycling materials.	1,095	924
Breakdown	(1)-1 Pollution Prevention Cost	These include the cost of upgrading wastewater treatment facilities, installing dust collection systems, implementing measures to deal with substances containing volatile organic compounds (VOCs), removing asbestos, conducting inspections to detect traces of PCBs, operating and maintaining water treatment facilities, measuring and analyzing water quality, exhaust emissions, noise and vibrations and ensuring conformance with various regulatory limits.	103	228
	(1)-2 Global Environment Preservation Cost	These include investment in energy saving measures and measures for monitoring electric power demand.	974	93
	(1)-3 Resource Recycling Cost	These include the costs incurred for recycling waste products, including wood, plastic, paper, oil products, thinner, and raw garbage, creating landfill areas and implementing steps to reduce the volumes of waste collected, transported, processed and otherwise disposed of.	18	602
(2) Upstream and Downstream Costs		These include adopting measures to switch to low-sulfur fuel oil and adopt green procurement approaches to purchasing office supplies.	0	12
(3) Management Activity Costs		Costs in this category include administering and maintaining ISO14001 standards, providing education and training (general, specialized, screening panel training, internal auditing, etc.), supervising and monitoring various action plans, holding regular screening, sessions expanding and maintaining green areas and providing training for and maintaining the Pollutant Release and Transfer Register (PRTR).	35	109
(4) Research and Development Costs		Expenditures in this area cover the cost of developing equipment for incinerating, gassifying and breaking down exhaust gases, when processing urban and industrial waste products, developing ash melting furnaces, water and sewage system facilities, implementing noise reduction measures for cyclo-reducers and new types of tube heat exchangers.	124	589
(5) Environmental Damage Control Costs		These include the cost of conducting assessments of levels of atmospheric pollution and the amounts regional corporations should contribute for creating green areas and compensation to be paid when deemed for responsible pollution.	0	6

(Unit: million yen)

Item	Description	Amount
Total Investment	Investments are for upgrading wastewater treatment facilities, installing dust collection systems, implementing measures to deal with substances containing volatile organic compounds (VOCs), and implementing energy conservation measures.	1,254
Total Fee Costs	These include the costs incurred for recycling, collecting, transporting, processing and disposing of waste products, conducting inspections to detect traces of PCBs, operating and maintaining water treatment facilities, measuring and analyzing water quality, exhaust emissions, noise and vibrations, administering and maintaining ISO14001 standards, providing education and training, monitoring the implementation of action plans and holding regular screening sessions.	1,641
Total Research and Development Costs	Expenditures in this area cover the cost of developing equipment for incinerating, gassifying and melting down ash when processing urban and industrial waste products, developing water and sewage system facilities (or processing sludge, dioxins, compost, etc.), building exhaust gas collection and processing systems (for collecting dust and removing sulfur, nitrates and dioxins), implementing noise reduction measures for cyclo-reducers and developing new types of tube heat exchangers.	713
Proceeds from Salable Items	These can include such leftover materials as scrap metal that are still usable.	282
Total Cost of Environmental Preservation Activities		2,895

## Company Products that Contribute to Environmental Preservation

Sumitomo Heavy Industries, Ltd. and the various other members of the Sumitomo Heavy Industries Group have supplied the market with a wide range of facilities and equipment that have contributed to environmental preservation over the years.

### Sumitomo W+E Rotary Kilns

Energy & Environment Group

JFE Materials Co. Ltd. has adopted the W+E rotary kiln for use in the roasting process of its rare metals recovery operation. The roasting process differs from incineration in that the minerals are heated to temperatures below their melting point to induce both chemical and physical changes as part of a process that requires advanced temperature control technology. The JFE Materials process in question is used to roast such industrial waste materials as the ash taken from boilers of thermal power generation stations. The ash is roasted at approximately 900 degrees Celsius to remove the oils and sulfuric elements contained in the industrial waste material, prior to sending it on to the electric furnace of the next process, where it is melted and the rare metals extracted. The rare metals are finished in the form of a ferrous alloy in a finery furnace. Before delivering the W+E rotary kiln to JFE Materials, Sumitomo Heavy Industries conducted an extensive program of tests on the kiln at the testing plant located in the Niihama Factory at Ehime Works. The purpose was to confirm the kiln was fully able to perform the required roasting operations, in addition to its standard incinerating and melting functions. Sumitomo Heavy Industries aims to move quickly forward by applying its current rotary kiln technology to development of new technology that will enable it to bring ash melting furnaces, furnaces for recovering metals from steel dust and roasting furnaces of the type delivered to JFE Materials to the market.



### Biomass Power Generation

Energy & Environment Group

With growing demand in recent years to reduce the CO<sub>2</sub> emissions responsible for global warming and make more efficient use of waste materials as effective ways to preserve the environment, SHI has taken the initiative to develop and commercialize a biomass power generation system based on circulating, fluidized-bed boilers. Fueled by a combination of biomass, tire chips and plastic, there are currently 15 such power plants in operation or under construction in Japan and at overseas locations. The new energy boiler that came online in May 2006 at the Nichinan Mill of Oji Paper Co., Ltd. uses discarded tires and wood chips as its main source of fuel but uses no coal or other fossil fuels. The plant also processes the gases it discharges, and recycles part of the incineration ash. An added benefit to the savings in energy costs at the mill is the biomass power plant's very tiny environmental footprint.



### High Efficiency Motor

Power Transmission & Control Group

With approximately 70% of the electric power consumed in industrial plants being used for driving electric motors, simply enhancing the efficiency of motors can go a long way towards reducing power consumption. SHI contributes to environmental preservation through marketing a varied range of high-efficiency direct-drive type gear motors and speed reducers, as typified by the Cyclo series speed reducers. The high-efficiency motors feature high-grade electromagnetic steel plate materials and advances in wound coil design that reduce power consumption, conserve energy and drive overall efficiency. Compared with conventional motors, the SHI high-efficiency motors feature far less damage or breakdowns. The resulting longer operating life and greater product economy is calculated to reduce operating costs by approximately 414,300 yen per year (\*). The reduction in generation of temperatures in the higher range also extends product life and reliability.



\* Calculation based on a scenario where 50 units of conventional motors with ratings of 4P, 2.2kW, 220V, and 60Hz, operating at 100% load capacity for 4,000 hours per year (at 17 yen per kWh) are replaced by equivalent SHI motors.

## High Efficiency Hyponic Reduction Gear

Power Transmission & Control Group

Hyponic reduction gears are direct-drive gear motors, used to power conveyors and elevators, that feature space-saving design as a key feature. Worm, bevel and hypoid are the three gear types most commonly used in reduction type, direct-drive gear motors. The hypoid gear used in hyponic gear motors offers higher efficiency than worm gears and generates lower noise than bevel gears. The Hyponic gear motors have also enjoyed wide recognition for their environmentally-friendly design ever since their market launch in 1988. Originally designed for industrial use, ongoing reductions in both size and operating noise have led to a broadening of applications in non-industrial sectors.



## Ultra-Compact HN-7 Cyclotron for PET

Quantum Equipment Div.

Positron emission tomography (PET), a new diagnostic imaging technique used in the field of medicine, is now coming into standard use. This amazing new medical imaging technique is capable of quickly scanning the entire body for tumors and other signs of cancer. SHI currently manufactures and sells cyclotron systems that synthesize the radiopharmaceutical agents used in positron emission tomography or "PET scans," as they are more commonly known. Cyclotrons are basically designed to manufacture radioactive substances and until now have been large, cumbersome machines that consumed power on the order of heavy machinery. SHI's new ultra-compact HN-7 Cyclotron system incorporates advanced new technology that has redrawn the landscape for cyclotron systems. The HN-7 is only about half the size of its predecessors and can make significant environmental contributions to hospitals in terms of reduced power consumption and waste reduction.



## Semiconductor Encapsulating Systems

Electro - Mechanical Div.

SHI manufactures and sells the "semiconductor encapsulation machines" used on semiconductor production processes to encapsulate IC chips using thermosetting resin. This resin differs from thermoplastic resin in that the chemical reaction involved prevents it from being recycled. With the conventional transfer molding method, resin is channeled through paths referred to as "culls" and "runners" to package the IC chips. However, the resin that flows to culls and runners where there are no IC chips simply becomes waste material. SHI's new pressure molding technique is designed to supply thermosetting resin directly to the product mold. This ensures that the resin utilization rate is close to 100%, thereby significantly reducing the resin from the cull and runner approach that ended up as industrial waste. The Company is currently working to expand the lineup of systems employing this pressure molding technique and broadening the range of products to which they can be applied.



## SAT Low Concentration Anaerobic Wastewater Treatment Facility Sumitomo Heavy Industries Environment Co., Ltd.

The SAT type, low-concentration, anaerobic wastewater treatment facility was jointly developed by three companies, including Asahi Breweries, Asahi Beer Engineering, and Sumitomo Heavy Industries. Compared with traditional activated sludge processing facilities, the super anaerobic treatment (SAT) facility uses approximately 40% less motive power and can generate more than 60% less sludge, thereby contributing significantly to energy conservation and reduction in CO<sub>2</sub> emissions. Biogases generated by the facility are burned in the boiler and can even be recovered in vapor form. The reactor vessel used is less than the size of conventional treatment facilities and takes up much less installation space. Anaerobic treatment was traditionally not suited to processing low concentration wastewater. However, the unique new structure of the reactor vessel settler device has now made this possible. The very first SAT type low-concentration anaerobic wastewater treatment facility was installed at the new Asahi Breweries Ibaraki Plant where it is operating smoothly as it gathers a broad range of useful data.



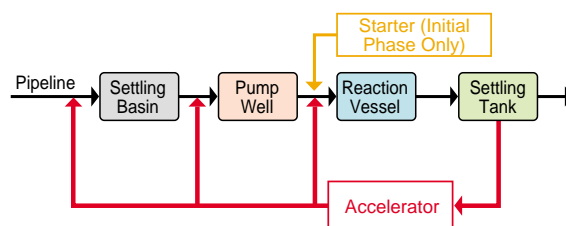
## Floating Type Flocculator Sumitomo Heavy Industries Environment Co., Ltd.

The floating type flocculator is a horizontal shaft agitator designed for use in water system applications. Specifically, it is designed to slowly stir raw water into which flocculating agents have been added as part of a process designed to promote the growth of small particles in turbid water into large aggregate flocs or flakes. A large diameter, hollow, floating shaft that floats on the water minimizes the load that applies to underwater bearings, thereby significantly reducing bearing wear. Sumitomo Heavy Industries Environment has recently redesigned the flocculator and re-examined the basic materials, as well as the bearings, to create a system that features much longer product life and lower lifecycle cost. It is also largely maintenance-free. Several dozen of the new floating type flocculators are already in operation throughout the Kansai region.



## Deires Sludge Reduction System Sumiju Environmental Engineering Inc.

The conventional methods for processing excess sludge discharged from environmental facilities involve dewatering then incinerating, composting or simply using it for landfill. The cost of disposal and the burden on the environment (CO<sub>2</sub> emissions) associated with these approaches account for a significant portion of the operating and maintenance costs of such environmental facilities. This has led to the launch of various new initiatives to find ways to reduce costs. The Deires is designed to process excess sludge sourced mainly from large agricultural sewerage systems. Rather than relying on large facilities and the use of chemical compounds, the Deires employs microorganisms (bacilli bacteria), and operating techniques that stimulate the function of such bacteria, to greatly reduce the volume of sludge generated. It is a system that requires very little initial outlay or operating costs, as it is designed to serve as an upgrade to existing facilities. Records show that it is capable of reducing the annual output of sludge by over 40%. Another important feature of the Deires system is its powerful deodorizing capability that is effective in lowering operating costs and reducing the environmental burden (CO<sub>2</sub> emissions) of existing deodorizing facilities.



The red lines indicate the new pipelines installed in an existing facility to reduce the volume of sludge.

Note: A specialized starter agent is applied when system normal operation commences. An accelerator unit is also provided to stimulate microbial reaction.



## Pelletizing Recycling System

Sumitomo Heavy Industries Modern, Ltd.

Over the course of producing and working with plastic film, waste is generated in the form of various leftover cuttings. These include the trimmings from either edge of the sheet, leftover cuttings from the center of the sheet when cutting out pieces of specific sizes for special applications and the occurrence of defective, either too-thin or thick, sections at system startup. Now the leftovers that were formerly incinerated as waste can now be pelletized and recycled by mixing them in with new plastic materials. The Company now manufactures and sells machines for pelletizing these recycled pieces of plastic film, in addition to the extrusion molding machines used to make the film. Pelletizing machines are divided into two series based on the way they cool the plastic after the hot cutting process. One uses air cooling and the other uses water cooling, depending on the type of plastic being pelletized. Pellet sizes can also be adjusted to suit the application.



Pellex PX Series

## Ion Implantation System

SEN Corporation - an SHI and Axcelis Company

Ion implantation systems are designed to implant ions during the semiconductor transistor forming process by accelerating ions and shooting them into silicon wafers. They perform a key function in the semiconductor production industry. SEN Corp., a leading manufacturer of ion implantation systems in Japan, now supplies high-performance, highly reliable systems tailored to the ongoing miniaturization needs of the most advanced semiconductor elements. The Company's systems contribute to reductions in both voltage and current consumption in the production of semiconductor elements. SEN Corp. also implements a policy of using energy-conserving components and devices in order to ensure its systems are energy efficient. A good example is the vacuum pump rotation control system that effectively reduces energy consumption by switching rotation speeds when no-load conditions occur.



LEX3 High-Current Ion Implantation System

## Electric Forklifts

Sumitomo NACCO Materials Handling Co., Ltd.

The AC current model of the electric forklift is a Company product that contributes to environmental preservation by significantly conserving on the energy it consumes. The reach forklifts, which account for half of the Company's forklift demand, are all feature-enhanced, energy-conserving AC models. Models in this line range from 0.9 tons to 3 tons. In response to popular demand, new energy-conserving AC models offering equivalent performance are increasingly being provided as substitutes to the engine type in the counter-balanced forklift class. Models are unavailable for the full line, ranging from 0.9 tons to 7 tons. The Company is focusing efforts on expanding its range of electric forklift models in the future to meet broadening customer demand.





## Kurieko II

Nihon Spindle Mfg. Co., Ltd.

The Kurieko offers precision air conditioning control while consuming very little power. The Company's unique control system is capable of regulating temperature to within  $-1$  degree Celsius and humidity levels to  $-5$  of the selected setting. Both temperature and humidity control are key functions, in addition to dust particle control used in clean rooms employed in semiconductor manufacturing applications. The Kurieko II has successfully reduced power consumption to only 40% (based on Company comparisons) of conventional levels through introducing the inverter type refrigeration unit and the Company-unique VIOS control system. Operating costs have also been reduced.



## Continuous Unloader

Sumitomo Heavy Industries Engineering & Services Co., Ltd.

The continuous unloader, with its advanced environment-friendly design, has become the leading system used in unloading bulk materials, such as iron ore and coal, from ships. The structural design of the conventional grab bucket type unloaders, with their inability to effectively close the material transport mechanism, are limited in their ability to control dispersal of dust and powder. The digging implement aside, the Company's continuous unloader systems completely close off the material transport route. And a water garden type dust control unit is also used to ensure that very little dust or powder is dispersed into the air by the digging implement. Other improvements over conventional unloaders include switching from hydraulic oil to an electric powered system for driving the main unloader components. This move effectively reduced power consumption by 30% and lowered the flow of polluting oil that would normally enter the oceans. As a leading manufacturer of unloading systems, the Company is proud to be able to supply unloading systems friendly to the environment.



## Steam Turbines

Shin Nippon Machinery Co., Ltd.

The Company's steam turbines are now widely used in biomass power generation facilities designed to promote use of renewable energy sources, as a way to reduce CO<sub>2</sub> emissions and preserve the environment. Markets include Asia and North, Central and South America. They are also used in waste disposal site power generation facilities in Japan. Other applications for the Company's steam turbines include cogeneration power generation facilities, used to promote energy conservation by using energy more efficiently, and various types of mechanical drive systems.



The new application SNM axial exhaust steam turbine.

## Wet Clutch and Braking Systems for Forging Presses

Sumitomo Heavy Industries Techno-Fort Co., Ltd.

The Company manufactures and sells large forging presses (1,600T to 2,500T) equipped with wet clutch and braking systems. The new clutch and braking systems significantly reduce the noise (from approx. 90 to 95 dB down to 80 to 82 dB) generated by the traditional air-driven, dry type systems. This improvement has been widely appreciated by customers for improving the working environment around forging presses. Introduction of a new type of brake lining extends brake life, and reduces maintenance and operating costs by better conserving energy compared with the air-type system.



## High Speed Roll Centrifugal Casting

Sumitomo Heavy Industries HIMATEX Co., Ltd.

SHI is a specialty steel manufacturer that produces and sells rolled steel products. These products used in hot environments must be wear-resistant, surface abrasion resistant, heat cracking resistant and tough all-round. The standard steel roll production method is stationary roll casting involving the use of only one type of material. However, only limited improvements can be made with this method because wear-resistance and toughness characteristics are reciprocal. With centrifugally cast rolls, however, the more expensive, highly wear-resistant hard material is used for the outer shell layer and the tougher ductile cast material is used for the inner core of the layer. This type of composite roll offers an economic casting method at a time when prices for raw materials used in ferrous alloy metals have skyrocketed. The Company launched an aggressive effort to research and install equipment designed to develop the material for the centrifugally cast high-speed steel roll in 1992. This type of roll features high speed roll production of the leading wear-resistant material. The Company succeeded in developing and mass-producing this material and is now focusing on expanding sales. This new type of steel roll offers wear-resistant and surface abrasion-resistant characteristics several times that of conventional steel rolls, while conserving on both materials and energy. This highly functional material has become very popular with customers.



Centrifugal Casting High Speed Roll for Section Steel

## SH200-5 Hydraulic Excavator

Sumitomo Construction Machinery Co., Ltd.

The Company has launched sales of the SH200-5 Hydraulic Excavator, which conforms with Japan's Tier III emission regulations. The new hydraulic excavator utilizes the Sumitomo-unique "Space 5" engine system that combines the common rail, high-pressure, direct fuel injection system (Note 1) and the cooled EGR (Note 2) system. Teaming the new engine system up with the perfectly matching "CAES" hydraulic control system ensures maximum power output while reducing fuel consumption by 20% (compared with conventional models). As before, the unit can still operate for 10,000 hours between oil changes, and a new precision return filter has been added to further improve system economy. The new hydraulic excavator reduces the burden on the environment while offering advanced maneuverability, driving quality that emphasizes safety and overall economy of operation.

Note 1: The common rail high-pressure direct fuel injection system is designed to keep the fuel under high pressure and distribute it evenly to the injectors. Using electronic control to fine-tune the fuel injection pressure, timing and interval (volume) offers the ideal fuel supply conditions.

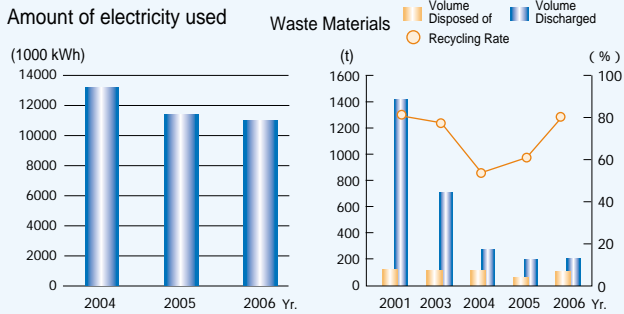
Note 2: The cooled EGR (exhaust gas recirculation) system is designed to recirculate the exhaust gas and use its lower combustion temperature using a water cooling device in a configuration that reduces Nox emissions.



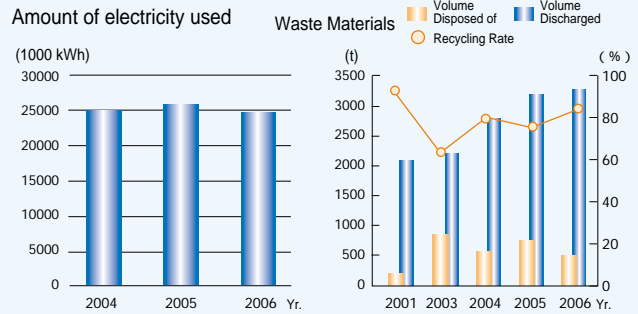
SH200-5 LEGEST

## Environmental Impact Data on Manufacturing Facilities

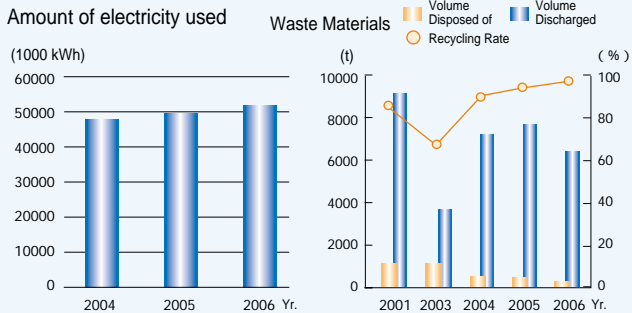
### Tanashi Works



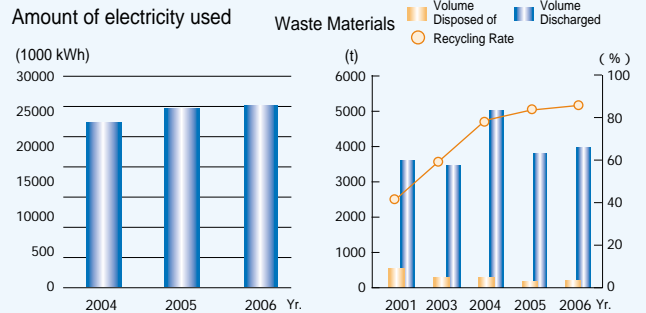
### Chiba Works



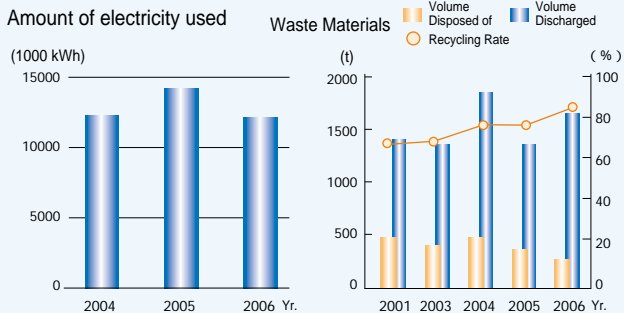
### Yokosuka Works



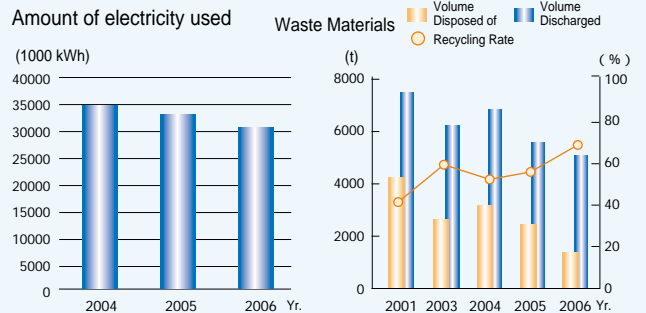
### Nagoya Works



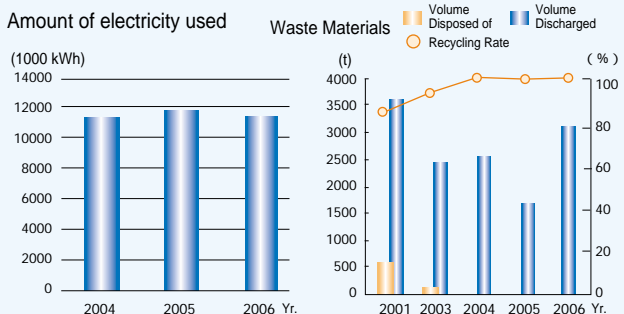
### Okayama Works



### Ehime Works (Niihama Factory)

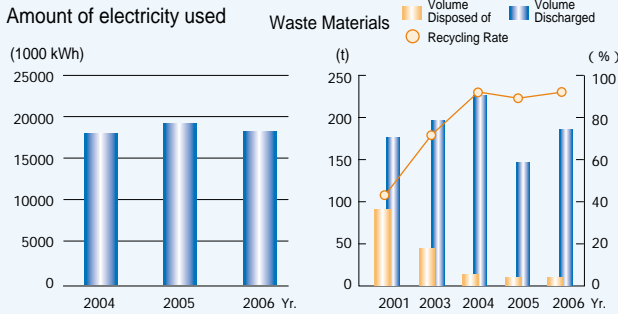


### Ehime Works (Saijo Factory)

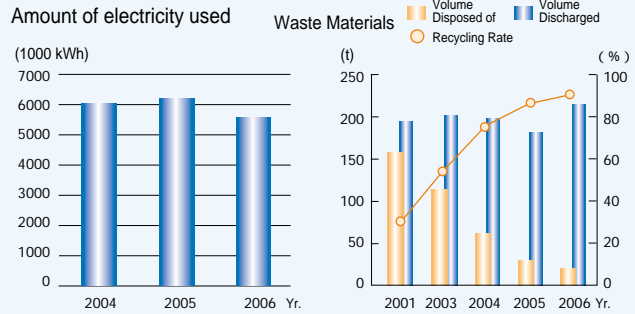


## Environmental Impact Data on Related Companies

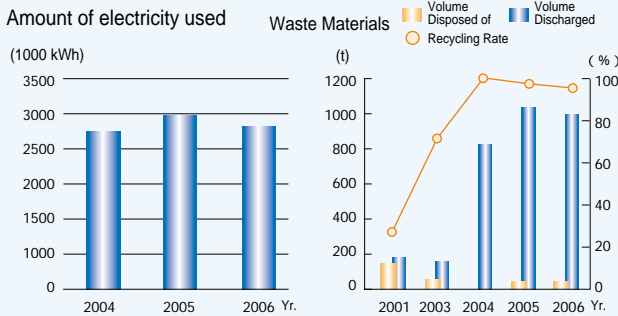
### SEN Corporation - an SHI and Axcelis Company



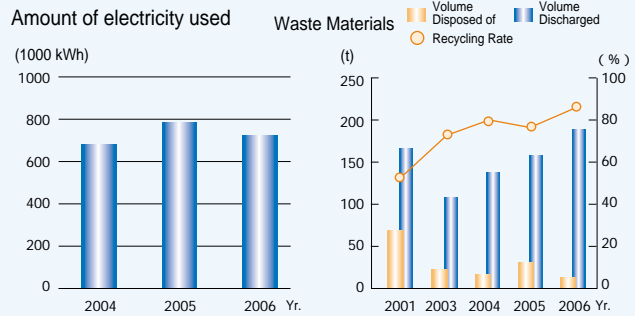
### Shin Nippon Machinery Co., Ltd.



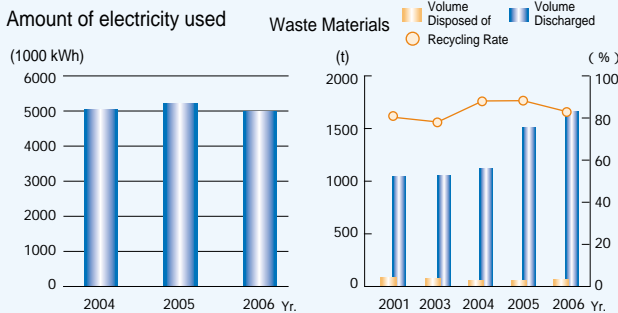
### Nihon Spindle Mfg. Co., Ltd.



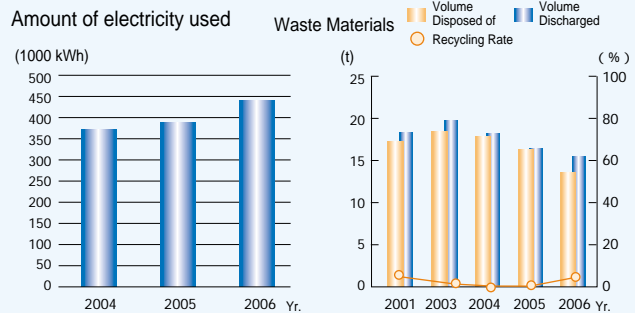
### Izumi Food Machinery Co., Ltd.



### Sumitomo NACCO Materials Handling Co., Ltd.



### Lightwell Co., Ltd.





## Social Contribution Activities

### Activities in the Community

#### 1 Activities in Regional Communities

Part of the Tanashi Factory was made into a park called the "Forest of Inspiration" and opened to the general public in 1995. Rather than simply opening the gates, SHI commissioned a local social welfare institution to manage the park. Proceeds from such things as sales of compost created from the fallen leaves and other natural items in the park and from the sale of drinks from automatic vending machines placed in the park go to the welfare institute for its upkeep. About 50,000 square feet in size, the park offers nature trails that can be easily navigated, even by visitors in wheelchairs. Park benches are located throughout the park and there is a welcoming atmosphere for everyone. The park is populated by many older trees that offer a habitat for various types of insect life that visitors come to admire, including the ever popular rhinoceros beetle in summer. Acorns from the park are supplied to local elementary schools for use as nature teaching materials. SHI strives to make maximum use of the attractions of this little forest as it strives to contribute to regional communities.



Forest of Inspiration

#### 2 The Family Council

##### Family Visit to the Yokosuka Factory in 2007

A family visit to the Yokosuka Factory took place on the day of the Star Festival (Saturday, July 7) in 2007. Although the day began with a light sprinkling of rain, a total of 1,600 factory employees and employees of affiliated companies and their families braved the fickle elements to converge on the factory for a visit to the various factory departments. The event included a variety of traditional dishes made at concession stands set up by the employees of the various departments. The delicacies on offer included yakitori (chicken and other foods broiled on skewers), hot pot dishes, sweet and refreshing piles of shaved ice flavored with fruit cordials and

others treats. Entertainment activities included blowing up balloons, putting on a blindfold and finding and smashing the cabbage (substitute for the traditional watermelon), an African drum recital and Hawaiian music accompanied by a hula dance. As part of an ongoing effort to make the Yokosuka Factory a greener environment, the group called the "Forest of a Thousand Years Society," a local civic organization active in the city, attended also. They had been planning to plant 2,100 trees on factory property and so took this opportunity to encourage members of the family to plant a few. Those few eventually grew to 600 trees on the day.



The Forest of a Thousand Years Society began gathering acorns, part of the region's natural flora, in 2001. The acorns they planted have grown to seedlings that they are now planting, as part of their quest to "Grow From a Small Forest." So far, they have planted 6,500 trees in the Yokosuka area. The Society holds that rich, green forests help to foster healthy and vibrant seas. Building healthy forests makes for healthy rivers, and oceans and can even translate to richer thickets around sacred village shrines and even help local people to a healthier and more rewarding existence. Strong forests also play an important role in reducing the effects of global warming, and preventing natural disasters. Contributions from employees last year were used to plant Ginkgo trees as part of the many ways employees at the Yokosuka Factory actively involve themselves in local and environmental activities.



### Nagoya Factory Environmental Event (Family Day)

The Nagoya Factory held Stop Global Warming Day on Saturday, August 26 of last year. This environmental event was intended to educate families on how the effects of global warming will be felt even in the home through a program of fun but educational activities. Attending the event were company employees and their families. The regional power utility, Chubu Electric Power Co., participated by giving a presentation using moving models to explain how power generation works and how we can all help to conserve energy resources. There were also classes on power generation geared to both children and grown-ups. The various exhibit models and the

"delivered to your door" energy classes were great fun for the children and took in quite a few adults as well. A contest was held for visitors to create their own posters for the Stop Global Warming Day. Winning posters were selected and displayed and awards presented to those whose works qualified. Those admiring the display of posters, some of which featured text as well as objects, inspired animated discussion among the viewers about how truly important it is to prevent global warming. This type of event is important in that it helps raise awareness of global warming and encourages people to make environmental concerns part of their daily life.



### 3 Disaster Preparedness

In accordance with the Disaster Prevention Law, the various business sites affiliated with the petroleum complexes in the Niihama district joined together in setting up a joint disaster prevention organization. The organization holds annual joint disaster prevention drills six times a year. SHI participates in the drills once a year in May. This is a large and carefully planned drill that includes training for sending important disaster bulletins, fighting fires, and providing first aid to the injured. Participating in the drill are the Niihama City fire Department, the joint disaster prevention organization, and the Sumitomo Chemical Co. Ltd. self-defense and fire brigade. The drill includes visits to the various participating business sites. SHI has three affiliated companies in the Niihama district that participate in the drills on a rotating basis once a year each. The photograph shows representatives from Sumitomo Heavy Industries HIMATEX Co., Ltd. participating in a drill last year.



### 4 Local Cleanup Operation

#### Saijo City, Ehime Prefecture

Dubbed the Refresh Setonai Area Project, this volunteer activity was conducted with the participation of approximately 60 employees from the SHI group. The activity was conducted Sunday July 8 beginning at 8 a.m. and ending at 9:30 a.m. The event is held annually at same time of year. The Saijo City Maritime Promotion Association sponsors and funds this event, which takes place at the last remaining sandy beach area along the Takasu coastline in the Toyo district. The local businesses listed on the next page also participated in the event.



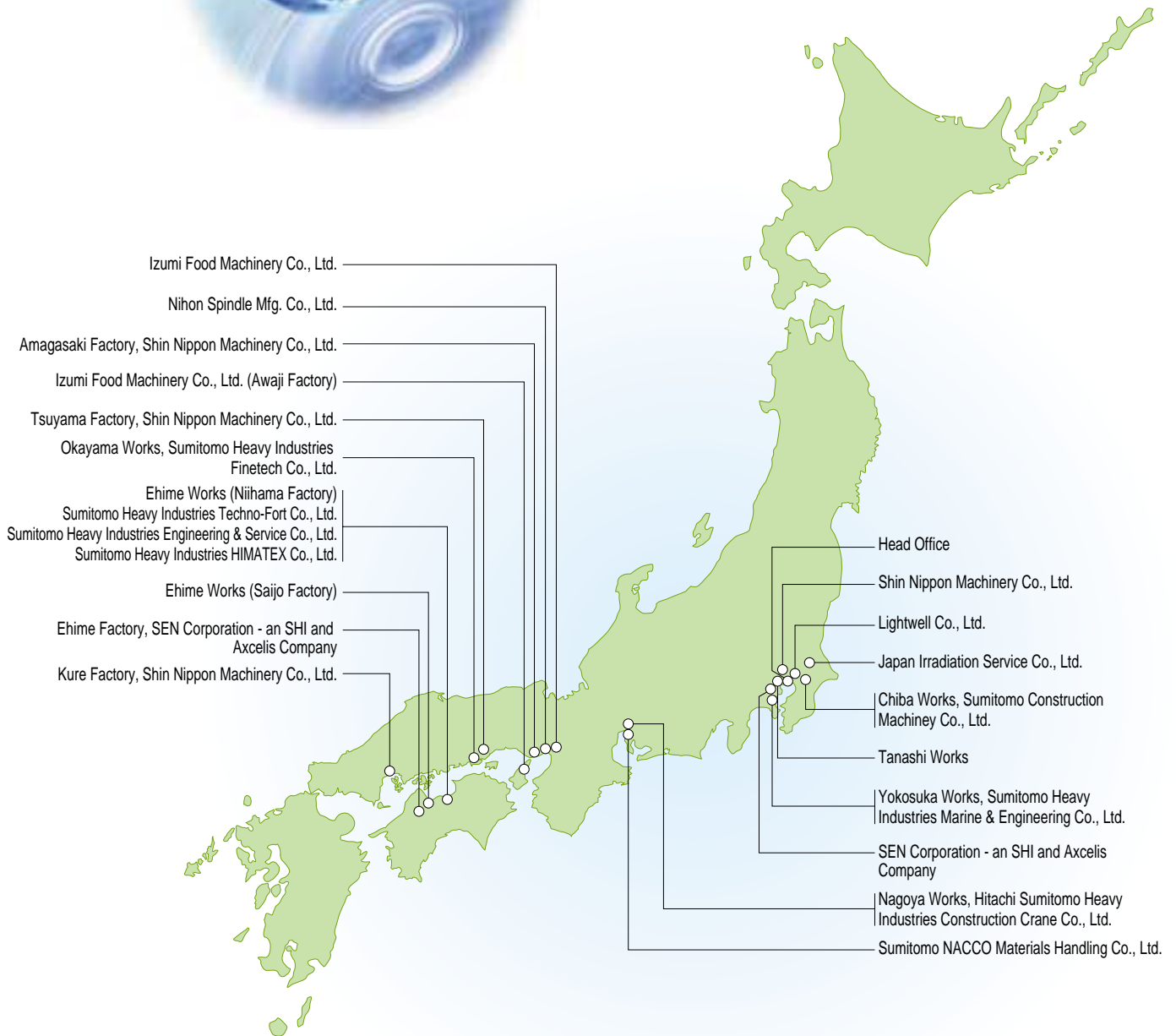
## Environmental Activities

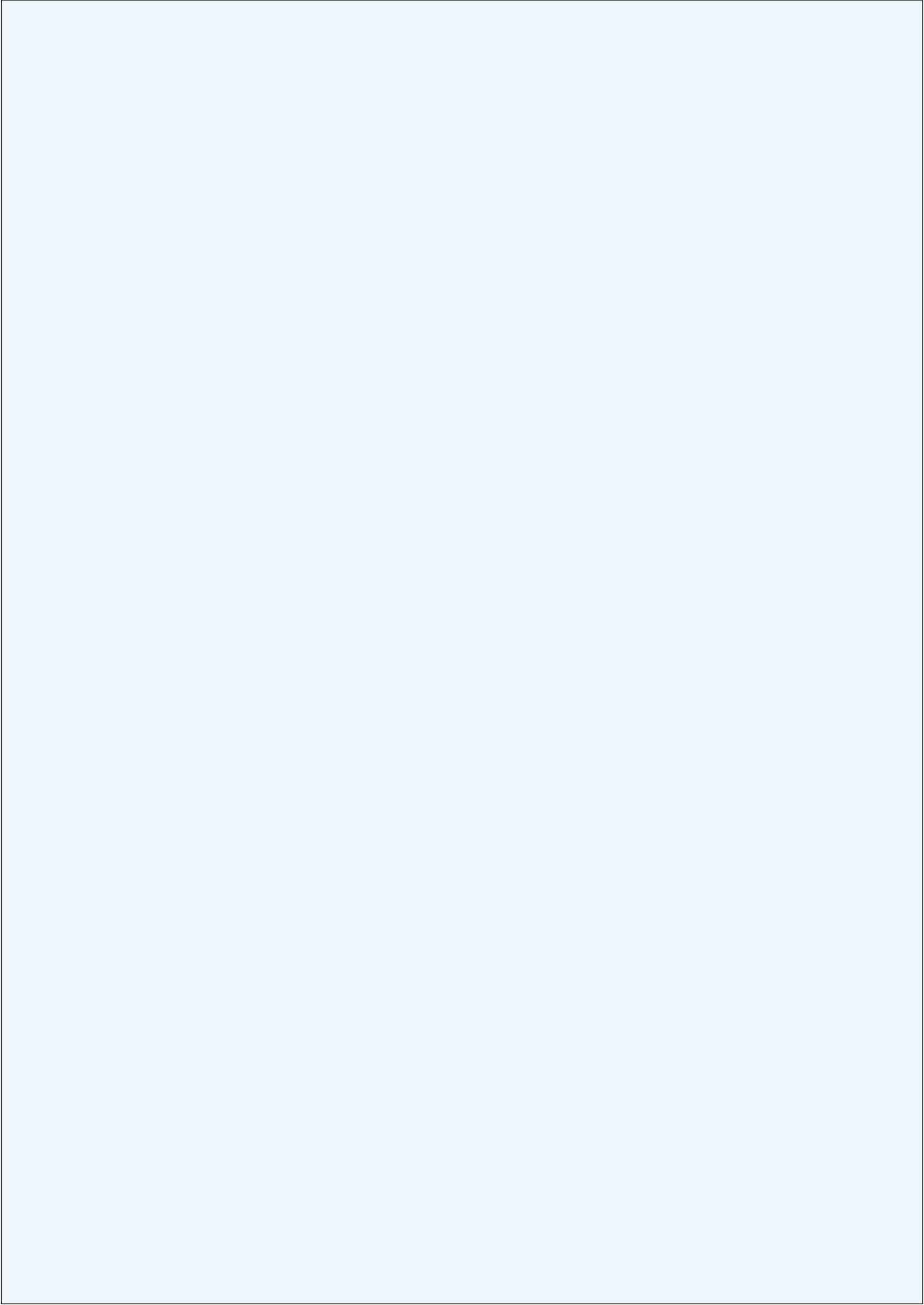
SHI is committed to complying with all laws, regulations and agreements relating to occupational health and safety and the environment. Overseeing these duties are SHI's safety-related departments, facilities departments and the General Affairs Department. The Company first established environmental management sections at each business site in the early 1990s as part of an effort designed to contribute to environmental preservation through various corporate activities. The environmental management sections are responsible for introducing environmental management systems in their jurisdictions and taking the initiative in conducting various environmental activities. The SHI Group environmental policy was established in 1999. It is in accordance with the tenets of this policy that the SHI Group conducts its various environmental activities. The SHI Group issued its global warming prevention declaration in August 2005 and has launched an proactive program of activities designed to help prevent global warming.



Year	Environmental Activities Conducted by the SHI Group
January 1992	Environmental Conservation Committee is established. (Measures, including a blanket ban on the use of CFCs, are introduced to deal with substances detrimental to the ozone layer. Waste recycling and energy conservation activities are also initiated.)
October 1993	The "SHI Environmental Protection Plan" is established.
April 1994	The Technology Headquarters Environmental Group is formed.
April 1997	The Environmental Management Guidelines are drawn up.
June 1997	Internal organizational changes result in the Environmental Group name being changed to Administrative Headquarters Environmental Division.
September 1997	The SHI Environmental Policy is established.
August 1998	The Company registers for certification under the ISO 14001 management system.
November 1999	The SHI Group Environmental Policy is established.
February 2000	Registration for certification under ISO 14001 is completed for all SHI sites.  The companies concerned complete registration for certification under the ISO 14001 management system. The companies concerned include Sumitomo NACCO Materials Handling Co., Ltd., Shin Nippon Machinery Co., Ltd., Izumi Food Machinery Co., Ltd., SEN Corporation — an SHI and Axcelis Company, and Sumiju Environmental Engineering Inc.
November 2002	The Water & Environment Group, Energy & Environment Group and Lightwell Co., Ltd. complete registration for certification under ISO 14001. The various SHI manufacturing facilities and business sites, and the various companies concerned establish their own targets and action plans for conducting environmental activities.
April 2005	Internal organizational changes result in the Environmental Management Division being renamed the General Affairs Headquarters Environmental Management Division.
August 2005	The SHI Group issues the "Global Warming Prevention" declaration.
March 2006	Nihon Spindle Mfg. Co., Ltd. completes registration for certification under ISO 14001. All key SHI group divisions complete registration for certification under ISO 14001.
February 2007	Japan Irradiation Service Co., Ltd. completes registration for certification under ISO 14001.

**Environmental Management Network** (Comprised of Facilities and Related Companies With ISO14001 Certification)





 **Sumitomo Heavy Industries, Ltd.**  
<http://www.shi.co.jp>

Contact Information

Environmental Management Division  
Think Park Tower, 1-1, Osaki 2-chome, Shinagawa-ku  
Tokyo, Japan 141-6025  
Phone (03) 6737-2325 Fax (03) 6866-5104



Sumitomo Heavy Industries is an active participant in Team Minus 6%, a national campaign to reduce greenhouse gases by 6%.

