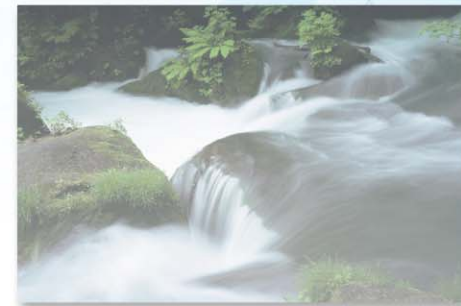


Hitachi Air Conditioning Systems Co., Ltd



**ENVIRONMENTAL  
REPORT 2005**

# Pursuing positive environmental activities to achieve a sustainable society

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This report was drawn up in order to report the results and the details of the environmental activities of Hitachi Air Conditioning Co., Ltd.; as well as future activity plans.

### Report period

FY2004 (April 01, 2004 to March 31, 2005)

### Scope of report

We investigated the activities of three factories (Shimizu Works, Taiwan Hitachi and Hitachi Air Conditioning Products Europe) that have the largest environmental impact in Hitachi Air Conditioning Systems and the affiliated and subsidiary companies.

### Reference Indicators

Environmental Report Guideline (Ministry for the Environment)

### Next issue

Around June 2006

### Our Web page

<http://www.hitachiacs.com/>

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## Message from the President

### Hitachi Air Conditioning Systems Group as a Global Citizen

Our present lives, within a rich environment surrounded by greenery, air, and water, are surely very enjoyable. It is our duty to hand on such bounty to children in future.

In this context, we have to achieve two purposes simultaneously. The first is to cherish our global environment to an ever-greater extent and the second is to achieve a more comfortable life.

We, Hitachi Air Conditioning Systems Co., Ltd., are engaged in business dealing with air conditioning products and services and as such, are directly concerned with two themes, namely, the global environment and the aforementioned comfortable life. As an enterprise targeting a comfortable environment for our customers, we have been conducting positive activities while advocating the concept, "Taking harmony with the environment into consideration in all fields, and promoting forward-looking activities for the future of the planet", in the interests of environmental preservation.

This means that we are manufacturing efficient eco-friendly products, using safer and cleaner materials, more quickly and with less energy. We hope that such products can be used for a long time and then be recycled when reaching the end of their lifespan.

We have every confidence in our ability to meet the challenge to provide consistent support in areas of manufacturing, sales, installation and service.

As of April 2004, we have two domestic and seven overseas manufacturing sites, promoting corporate activities on a global scale. While developing global environmental activities as a global citizen, we are also participating and will continue to participate actively in regional social contribution and environmental preservation activities as a prominent regional resident.

We have positive roles in saving the natural environment and constructing a sustainable society as a single entity; the Hitachi Group. However, we at Hitachi Air Conditioning Systems are not only members of a business, but also members of society, and are striving to foster global citizens to which the future will be entrusted.



*Naozumi Ishizu*  
President and Director

# Environmental Report 2005

### Reduce the Environmental Impact and Contribute to Global Environmental Preservation

Our products are environmentally aware and highly rated by many customers for their ability to provide a comfortable living environment and improve the product storage environment.

On the other hand, we must admit that the products' manufacturing and use inevitably has an impact on our irreplaceable global environment and must thus ensure due consideration is made to reducing this impact.

Responsibility is also demanded from enterprises for the whole of the product life cycle. We are facing a test in terms of our attitude and management responsibility. We acknowledge the importance of establishing an environmental CSR response for surveys, data collection and management, and utilization concerning chemical components of products.

With due recognition of these responsibilities, we will challenge the development of new technologies and business innovation to reduce environmental impact as well as contributing to environmental preservation as one of Earth's citizens.

As for "reduction of the environmental impact during product manufacturing", we will continue striving, domestically and overseas, toward energy conservation and waste reduction in plants and the adequate management of chemicals.

As for "reduction of the environmental impact of usage", we will strive to offer a range of eco-friendly products, namely, those friendly to the global environment and human health. For this purpose, we use advanced technology to ensure energy conservation and industry leading noise reduction and try to use refrigerants free from ozone-depleting substances and other harmful material.

Furthermore, in order to "reduce the environmental impact of logistics and disposal", our design gives due consideration to the life cycle from the developing/planning stage up to the product itself. There are also efforts to ensure compactness and improved recycling efficiency by reviewing the packaging, providing resin material marking, and understanding and managing the chemical components of products, etc.

Finally, we believe it important to establish a good relationship with the stakeholders around us through regional environmental preservation activities and communications with regional residents.

As a member of the Hitachi Group, we will take a leading role in environmental activities.



Haruki Yamamoto  
Director

### Environmental Protection Action Guidelines

#### “Environmental Activity Concept”

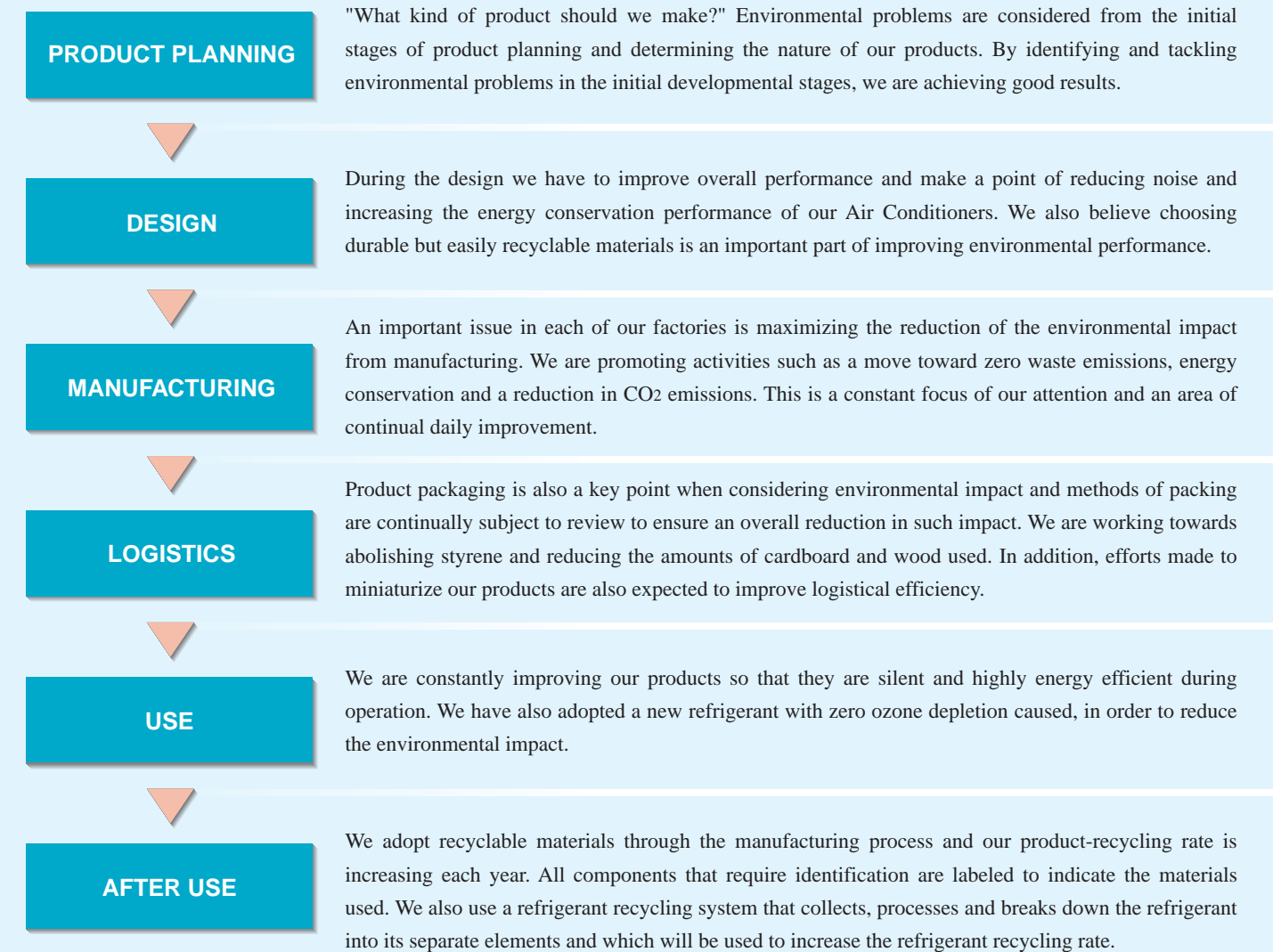
For the future of the planet, we promote forward-looking activities and consider harmony with the environment in everything we do.

#### “Environmental Activity Guidelines”

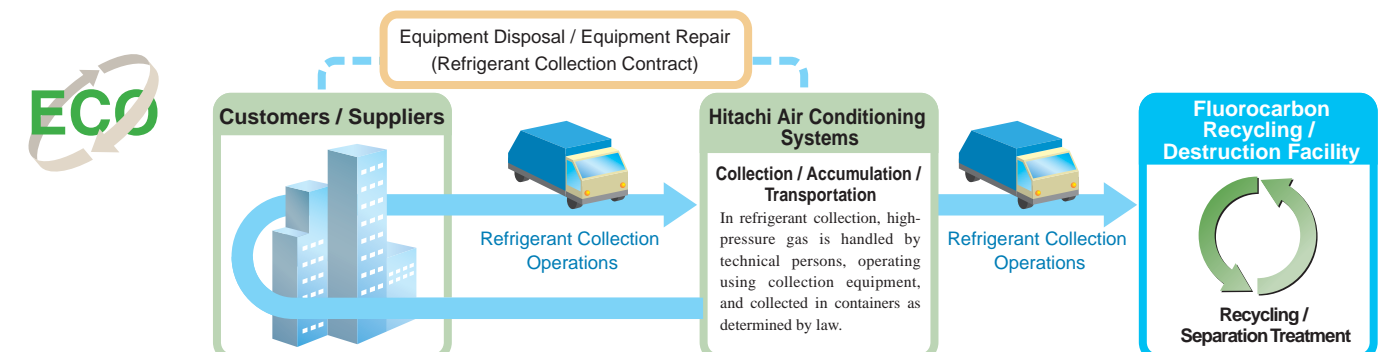
- 1 We promote environmental activities which focus on society, considering the health of the population and the preservation and harmony of the global environment, to enable us to pass on the irreplaceable global environment to the next generation.
- 2 We are conscious of our influence on the global environment and striving to provide advanced products, systems, and services.
- 3 We promote activities that take recycling, resource and energy conservation, waste reduction and pollutant management into consideration. These activities are implemented in every stage of the manufacturing process from research and development, design, and manufacture, sales and installation to after sales service.
- 4 We conform to all environmental regulations. In addition, we have self-imposed rules; based on a forward-looking attitude to minimize environmental impact.
- 5 We use an environmental management system and promote environmental education in order to implement continual improvement in environmental activities.

### Hitachi Air Conditioning Systems considers the environment through all stages of product development and manufacture to after sales service.

Hitachi Air Conditioning Systems feels it is the responsibility of the manufacturer to promote a reduction in environmental impact through all stages of the manufacturing process. From product planning, the adoption of materials, and energy conservation during use to the recycling of used products.



### Environmental Measures Implemented beyond compare by Hitachi Air Conditioning Systems The Refrigerant Recycling System



Activity Evaluation: ○; Achievement, △; Improvement, Needs Improvement

Category	Action Plan	Contents	Target Values in FY2004	Activity Evaluation	Final Target Value	Final Target Date		
Eco-Management	Promotion of Environmental Management	- Develop the environmental information transaction system company-wide and with associated companies.		○	—	—		
		- Strengthen and promote a management system for environment-related businesses.		○	—	—		
		- Fact-finding survey of environmental activities in overseas plants (Information collection)		○	—	—		
	GREEN21 Ver 2	Improve the green point level	- Promote continuous improvement activities to achieve a 640 GP in FY2005. - Implement improvement based on the results of FY2003 activities. - Strengthen guidance to improve GP in overseas plants.	533GP	○	640GP	FY2005	
Environmental Management System	Improve and expand the internal environmental audit	- Train (add) internal environmental auditors and enhance the level of existing auditors.		○	—	—		
		- Eliminate the gap in activity level between activity sections/divisions through environmental training.		○	—	—		
		- Support efforts to acquire ISO certification of overseas plants	applicable to HAPG	○	—	—		
Environmental Accounting	Establish environmental accounting and positive promotion of environmental management	- Aggregate of environmental accounting in FY2004		○	—	—		
	Promote internal utilization of environmental load reduction efficiency indices	- Review and evaluate internal utilization of the environmental load reduction efficiency indices.		△	—	—		
Eco-Products	Expanding eco-products	- Promote according to the development master plan (air conditioning products, etc.)		○	Application rate: 60%	FY2005		
		- Develop and promote the development master plan (electric heating equipment)		○	Application rate: 70%	FY2005		
		- Promote registration of the eco mark (extension to cover low-temperature and electric heating equipment)		○	—	—		
	Nature-Friendly Products	Abolish totally harmful chemicals (substances covered by RoHS)	- Collect information from the Hitachi Group, competitive and parts manufacturers, and review substitutes - Promote substitution of substances subject to regulations		○	—	—	
		Compatibility with WEEE Directives	- Provide the WEEE information in Japan (applicable to HAPE)		○	—	—	
	Promote green procurement and purchase	Promote substitution of chemicals used (substances to be reduced)	- Promote substitution of chemicals used (substances to be reduced)		△	—	—	
			- Purchase eco-conscious products positively (purchase products, stationery)		○	—	—	
			- Proper understanding and response to market trends and customer response concerning use of R-22-containing products (refrigerator)	5 types	○	156 types	March, 2006	
	Promotion of Modal Shift	Promote to reduce the environmental impact (CO <sub>2</sub> , NO <sub>x</sub> , PM (Particulate Substance) and other emissions) from the transportation of products	- Reduce CO <sub>2</sub> and other emissions through improvement in the transport/loading efficiency of load-bearing trucks and their fuel economy - Continuously promote a shift in the mode of transport from long-distance truck to transport by sea or rail		○	—	—	
		Promote the internal utilization of transport efficiency indices	- Reduce emissions by using joint transport services with other companies		○	—	—	
Prevention of Global Warming	Continue the reduction in the amount of energy per unit of sales by 1%	- Continue activities based on the energy conservation plan until 2010	1% reduction in energy specific consumption	○	5% reduction as compared to FY2003	FY2008		
	Reduce CO <sub>2</sub> emissions per unit		—	○	25% reduction as compared to FY1990	FY2010		
	Reduce the emissions of greenhouse gases other than CO <sub>2</sub>	- Continue to promote the reduction of refrigerant emissions		○	Leakage 0.02%	FY2010		
Eco-Factories	Waste Reduction	Achieve zero-emission factories	- Continuously promote the zero-emission plants	Final disposal volume: 4.2t Final disposal rate: 0.1%	○	Final disposal volume: less than 5t Final disposal rate: 1% or under	FY2005	
				—	—	Abolish prohibited substances	FY2005	
	Chemical Substance Management	Strengthen chemical substance management and reduce the amount of emissions	Prohibited substances : abolishment by FY2005		—	—	Reduce the substances for reduction by 30%	FY2005
			Substances for reduction : 30% reduction by FY2005	- Steadily promote the reduction according to the plan of substances for reduction		△	—	—
PCB Management	Strict storage management of electrical devices using PCBs, such as transformers and capacitors	- Continue adequate storage, management, and report		○	End of processing	FY2012		
Industrial Waste Water and Water Quality Management	Strengthen accident prevention in waste water treatment facilities	- Continuously promote daily inspection activities		○	—	—		
	Respond to regulations to combat soil pollution			○	—	—		
Eco-Mind	Environmental training	Create Eco-Mind among all employees and their families	- Disseminate Eco-Mind to employees and their families by means of the plant news release	○	—	—		
		Improve and expand training for employees and legally qualified personnel	- Increase the attendance ratio for the e-learning course	Attendance ratio concerned: 30%	○	—	—	

Activity Evaluation: ○; Achievement, △; Improvement, Needs Improvement

Category	Action Plan	Contents	Activity Evaluation	Final Target Value	Final Target Date		
Stakeholder Collaboration	Environmental Communication	Implement communications with stakeholders					
		- Information disclosure through PR and advertising activities	- Positive PR of eco-products (provision of the Hitachi eco-mark)	○	—	—	
		- Periodic release of information about production sites through the publication of environmental reports and our web site	- Prepare the (Hitachi Air Conditioning) environmental report (shown on the main Hitachi home page) to disclose environmental information	○	—	—	
		- Active participation in a variety of environmental activities outside the company, from presentations and lectures, to regional activities	- Obtain information by active participation in lectures and environmental seminars	○	—	—	
		- Conduct meetings with stakeholders and local communities	- Improve and expand the risk communication response system and develop the response comment	△	—	—	
	Global Citizen Activities	Become involved activities that contribute to society by planning volunteer activities and by encouraging the active participation of employees	- Opinion exchanges through questionnaires, surveys, and study tours	- Participate positively in regional environmental preservation activities and plant tours	○	—	—
				- Ensure rapid reply to external inquiries	○	—	—
					△	—	—
					○	—	—
					○	—	—
Sustainable Business Models (Continuous Business Models)	Release domestic information in line with the European WEEE Directive	Review the product recycling system in Japan		△	—	—	
		Active development of eco-products		○	—	—	
				○	—	—	

### My ECO



The principal task of my division is to evaluate the development of air conditioning products that use considerable amounts of HFC refrigerant. Although this type of refrigerant has the potential for ozone depletion, it is also known to affect global warming. Our daily attention is therefore directed toward preventing its leakage into the atmosphere, which is most often due to faulty piping work. Efforts are made to ensure the improvement and awareness of individual workers as well as through checking and recycling. A numerical control of refrigerant leakage is conducted monthly.

Hiroaki Kato  
Air conditioning products Quality Assurance Group, Quality Assurance Department

Our department is in charge of designing scroll and screw compressors to be installed in the refrigerator. These compressors use R410A and R407C; namely HFC refrigerants with zero ozone depletion potential. The most important task performed by this compressor is in enhancing the efficiency to conserve energy. Note that a 3% increase in compressor efficiency results in a reduction in overall consumption of electrical energy or a 10% reduction in terms of CO<sub>2</sub> emissions generated by the power generating plant. The compressor works tirelessly to provide a comfortable space while reducing levels of CO<sub>2</sub>.

Shigekazu Nozawa  
Scroll Development Design Group, Compressor Department



If environmental activities are to achieve a firm objective, it is essential to establish more specific and effective targets. By setting up an eco-management system allowing individual workers to recognize the environment in their individual positions, workers can be motivated to more positive, smoother actions, paving the way for substantial achievements.

**Environmental Management Structure**

We have established an Environmental Specialties Committee; led by the General Manager of the Environmental Division, who was appointed by the President. As overall policy, Hitachi Air

Conditioning Systems Group positively promotes wide-ranging environmental activities based on policies and measures decided by the committee.

**Environmental Management System**

We have organized an environmental management system based on ISO 14001 as one of our environmental activities. We acquired ISO 14001 Certification for both our domestic sites and three of the seven overseas sites. To confirm the implementation of the environmental management system and the results of the environmental performance based on ISO 14001, we are assessed yearly by an accredited external organization. Furthermore, an

environmental audit is carried out by internal auditors who are certified both inside and outside the company.

In FY2004, Hitachi Air-Conditioning and Refrigerating Products (Guangzhou) of China newly obtained environmental ISO certification. Certification is ongoing in production sites in Japan and overseas.

**Acquisition of ISO 14001 Certification**

**<Domestic>**

Certified Site	Certified Organization	Date of Acquisition
Shimizu Works	JACO	October 1997

**<Overseas>**

Certified Site	Certified Organization	Date of Acquisition
Taiwan Hitachi	BSMI	August 1997
Hitachi Air Conditioning Products (Europe)	AENOR	May 1999
Hitachi Air-conditioning & Refrigerating Products (Guangzhou)	Mainly China Quality Assurance Association	June 2004

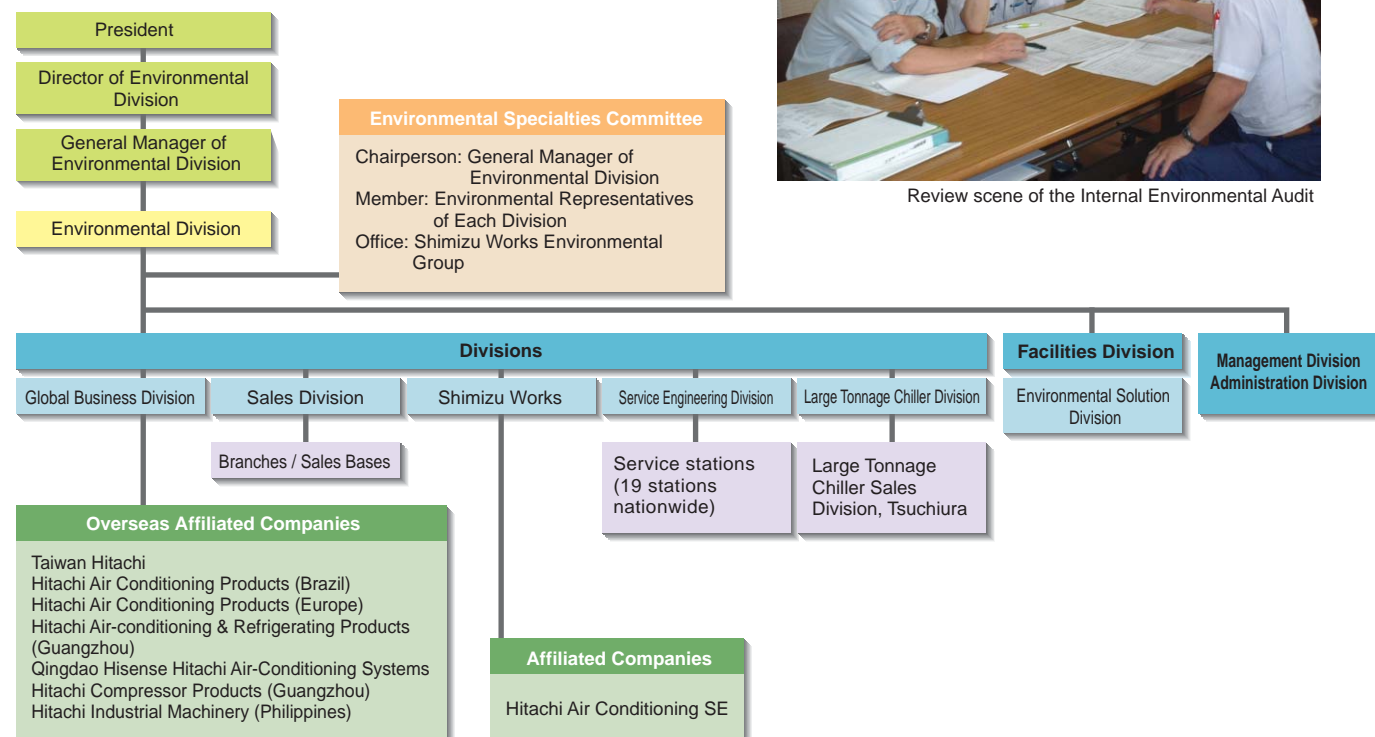
**Members of the Internal Environmental Auditor**

	Auditors
Shimizu Works	23
Taiwan Hitachi	49
Hitachi Air Conditioning Products (Europe)	3
Hitachi Air-conditioning & Refrigerating Products (Guangzhou)	22
Total	97



Review scene of the Internal Environmental Audit

**Environmental Management Structure in Hitachi Air Conditioning Systems (as of April 2005)**



**GREEN21 Ver2**

Continuing from the previous year, GREEN 21 Ver 2 has been implemented. The evaluation criteria of GREEN 21 Ver. 2 are Eco-Management and Eco-Mind, Eco-Products, Eco-Factories, Stakeholder Collaboration, and Sustainable Business Models. We classified the criteria into eight categories to evaluate the activity level of the fiscal year concerned.

FY2004 saw top rated achievements in GP categories (GP = green point), namely, 533GP. However, activity evaluation showed low levels of points in the categories of Eco-Products and Sustainable Business Model; both in Japan and overseas. In addition, due to differing legal regulations among countries, a difference in points among sites is evident, particularly in terms of Eco-Factories/prevention of global warming.

The activity levels are evaluated with ratings of 0 to 5. Level 4 is the target achievement level specified in the environmental action plan of the Hitachi Group in FY2005, while level 5 is an activity level exceeding the action plan.

Since achievement of the FY2005 target (640GP) is extremely difficult simply by maintaining the current activity level, the promotion of activities exceeding this latter is essential.

**“GREEN21 Version 2” Activities**

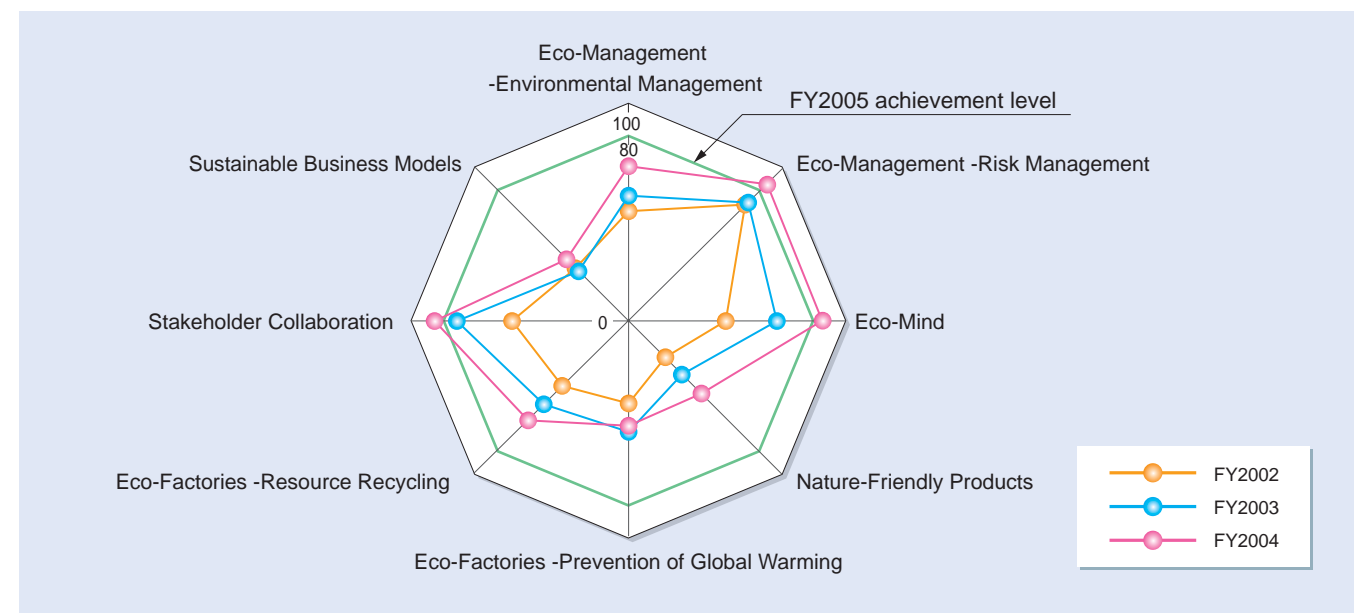
- Site concerned: Shimizu Works, Taiwan Hitachi, Hitachi Air Conditioning Products (Europe)

● Targets and Results in Green Points GP= Green Points

Fiscal Year	2002	2003	2004	2005
Target GP	320	426	533	640
Result GP	363	461	535	—

- Evaluation Criteria (8 categories / 53 performance indicators)

Category	Main Contents of Evaluation	Shimizu Works	Taiwan Hitachi	Hitachi Air Conditioning Products (Europe)	Average
Eco-Management — Environmental Management	Environmental Management, Action Plan, Environmental Accounting	70	68	70	69
Eco-Management — Risk Management	Set Own Standard, Statute Compliance	84	96	80	87
Eco-Mind	Training for Employees	87	81	93	87
Nature-Friendly Products	Products / Service Assessment, Green Purchasing, Measure for Logistics	60	42	54	52
Eco-Factories — Prevention of Global Warming	Energy Conservation in Offices and Factories	80	39	26	48
Eco-Factories — Resource Recycling	Waste Reduction, Chemical Substance Management	84	59	59	67
Stakeholder Collaboration	Information Disclosure, Communication Activities, Community Activities	94	96	66	85
Sustainable Business Models	Promotion of Sustainable Business Models	45	43	28	39
Total		604	524	476	535



**Environmental Accounting**

As a key element of our management system, we introduced an environmental accounting system in FY2001. We disclose the cost of environment preservation activities, and the economic and distribution effects in the form of environmental management information. We aim to let others have an understanding of our perspective toward the environment.

In FY2004, we continued investment, as planned, to cope with an

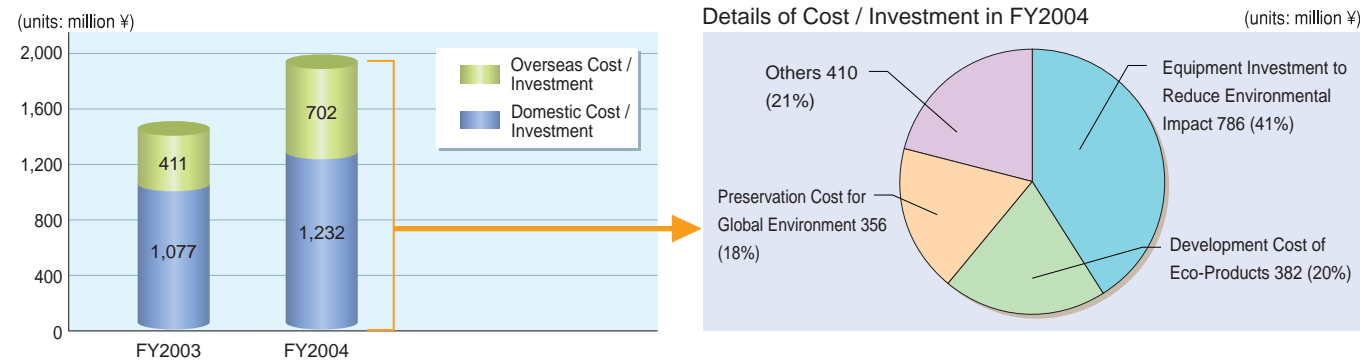
increase in the development cost of eco-friendly products and the preservation of the global environment as well as for the recycling of products, the collection of refrigerant (Freon) and the prevention of ozone layer depletion.

Note that the aggregate was obtained from one domestic and two overseas sites (Taiwan Hitachi and Hitachi Air Conditioning Products (Europe)).

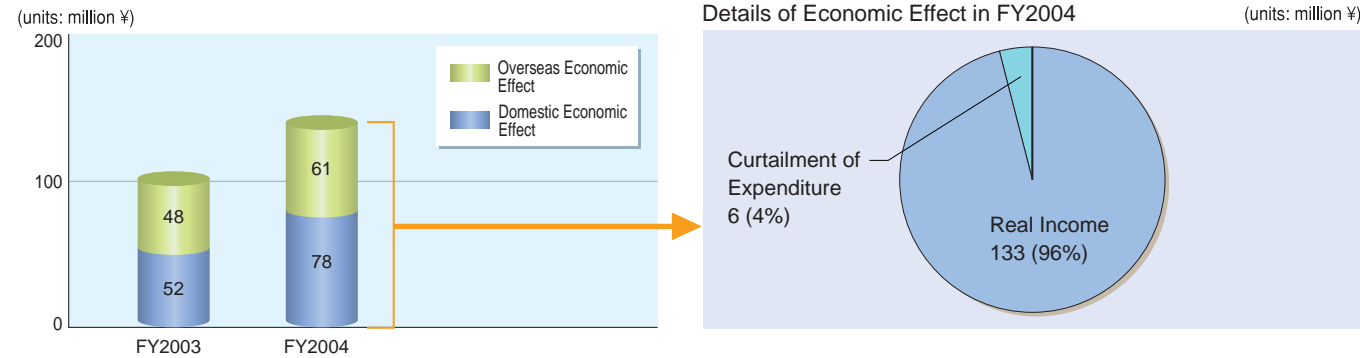
**Hitachi Air Conditioning Systems Environmental Accounting Standard**

- Cost of Environmental Preservation Activities**  
Environmental preservation accompanied with business activity, outlay expense for reducing environmental impact (personnel expense, material cost, depreciation charge, general expenses) and investment value (e.g. fixed assets comprising facilities, equipment)
  - Equipment investment to reduce environmental impact
  - Development cost of eco-products (except subsidy income, sales income)
- Environmental Preservation Effect**  
Economic Effect
  - Real income effect: profit from the classification and recycling of valuable materials
  - Cost reduction effect (curtailment of expenditure effect): reduction in the component costs incurred from changing the manufacturing process, profit from the use of substitute substances

**Cost**



**Economic Effect**



**Distribution Effect**

- Calculate the amount of the reduction in activity (measures) for the environmental impact in manufacturing
- Products Environmental Effect (Items 4, 5, 6, 7 below): Calculate the reduction in the environmental impact by the number of annual sales based on the standard operating condition of our eco-products

**Distribution Effect (amount of reduction)**

Distribution Effect (Domestic and Overseas)	FY2003	FY2004	Main Contents
1. Reduction in the Amount of Energy Used in Manufacturing	107Mwh	173.6Mwh	Reduction in the Amount of Energy Used by the Adoption of an Energy Conservation Transformer
2. The Final Disposal Volume of Waste in Manufacturing	77t	84t	Management and implementation of segregated disposal (increase in the disposal amount along with a production increase)
3. Reduction of HCFC in Manufacturing	2t	0.4t	Reduction by Switching to Substitute Refrigerants
4. Reduction of the contents of product chemicals (HCFC refrigerant)	77t	229t	Reduction by Switching to Substitute Refrigerants
5. Reduction of Energy Consumption in Product Use	30,557Mwh	62,211Mwh	Reduction of the energy consumption during use by the customer
6. Product recycling amount	3140t	6043t	Increase in the product recycling rate
7. Reduction of Styrofoam used in packing	2.97t	8.19t	Reduction once the use of Styrofoam has been abolished

As well as switching to new refrigerants with zero depletion potential, resource saving, energy conservation, simplified disposal, and reduction in the chemicals used, etc. were all implemented as far as possible to reduce environmental impact. We intend to contribute to the environment through further creative design.

**Switch to New Refrigerant**

We are switching from HCFC refrigerant, which destroys the Ozone layer, to HFC refrigerants with zero Ozone depletion potential. In FY2004 we completed 96% of this changeover and we will finish

by FY2005.  
\* HCFC refrigerant (R22)  
\* HFC refrigerant (R134A, R407C, R410A, R404A)

**Eco-Products**

We have introduced the Design for Environment assessment; based on the concept of DfE (Design for Environment) for product development. This is intended to reduce the environmental impact of the product throughout its life-cycle and during each individual stage, namely: (material, production, distribution, use, recovery, decomposition, and adequate disposal). We implement such assessment for each product development and define products complying with the certification criteria (product whose respective

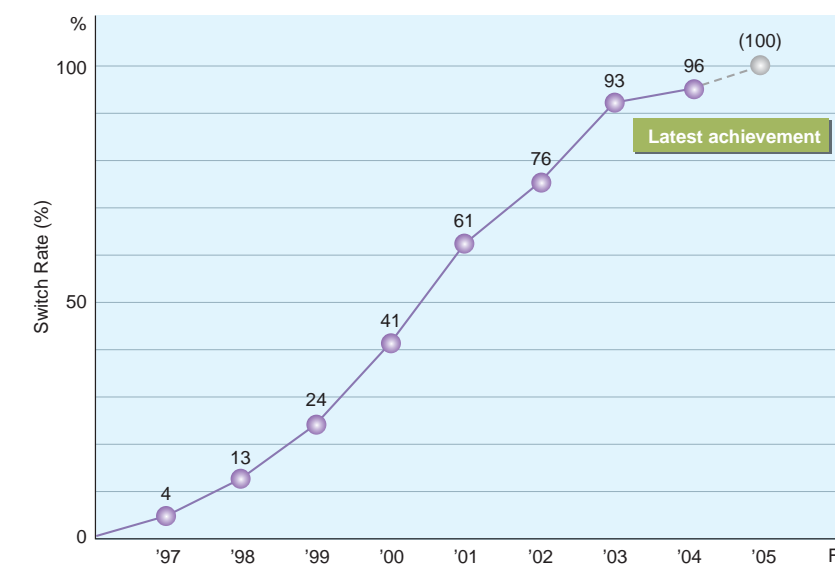
items have got two of a possible five perfect points and whose overall average is 3 points or more, and which is determined to represent superior environmental consciousness) as Eco-Products. Currently, a total of 111 product types are registered as Eco-Products. In future, this number will further increase to account for over 60% in terms of the percentage-of-sales until the end of FY2005.

**Reduction of Chemical Substances Used in Products**

Components of the product do not use chemicals whose use is prohibited in Japan. As regards hexavalent chrome, lead, mercury, cadmium, bromine flame retardant (PBB, PBDE), whose use is expected to be prohibited in Europe, a content survey was started

and efforts toward total abolishment will commence in FY2005. On the other hand, because of the introduction of lead-free solder (solder that does not contain lead); electronic boards produced in the plant have been manufactured using entirely lead-free solder.

**Progressive Switch Rate to New Refrigerant**



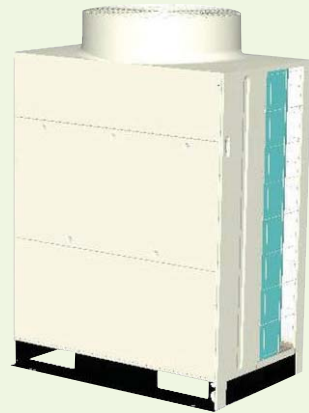
The next-generation high-COP compressor compatible with R410A presented as Eco-Products 2004

**Design for Environment Assessment System Criteria**

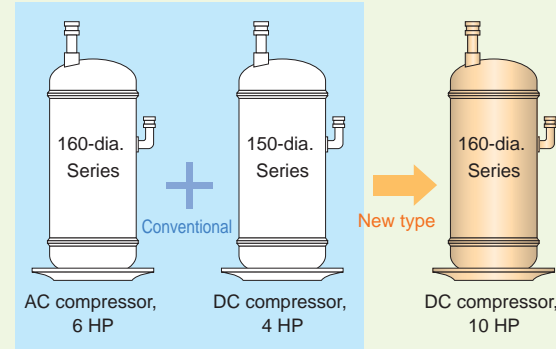
Category	Life Cycle Stage	Assessment Criteria
1. Resource Reduction	Selection of Component Materials, Production, Distribution	Resource Conservation, Compactness, Lightweight, Conformity, High Yield, Standardization
2. Product Longevity	Usage	Ease of Upgrade, Ease of Repair and Maintenance, Durability, Reliability
3. Resource Recycling	Reuse, Recycle, Distribution	Reusability, Conformity of Component Materials, Use of Recycled Materials, Promotion of Resource Recycling, Labeling of Materials
4. Ease of Disassembly	Disassembly	Ease of Disassembly, Selection of Component Materials, Ease of Sorting, Labeling of Materials
5. Ease of Processing	Production, Distribution, Disassembly	Crumbing, Fragmentation, Disassembly and Separation, Ease of Processing
6. Environmental Preservation	Selection of Component Materials, Production, Distribution, Usage, Disassembly, Disposal	Potential Toxicity, Potential Harmfulness, Explosiveness, Potential for Implosion, Potential Hazard
7. Energy Conservation	Usage, Production	Energy Conservation, Longer Durability, Energy Efficiency
8. Provision of Information	Usage, Disassembly	Provision of Information Regarding Processing, Provision of Information Regarding Product Disposal

Development of Eco-Products

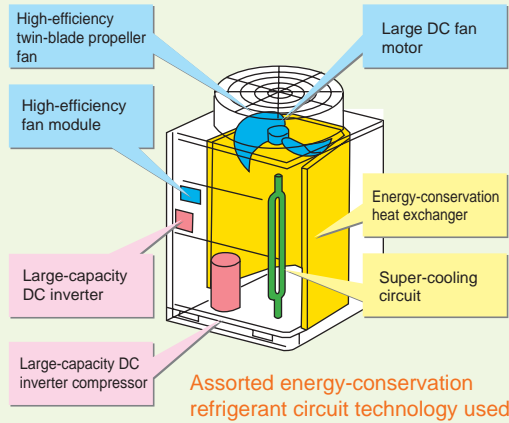
Package air conditioning product outdoor units



RAS-NP280HVR  
Marketed in January FY2005



Substantial weight reduction achieved by decreasing the number of compressors



Assorted energy-conservation refrigerant circuit technology used

<b>Energy Conservation</b>	<ul style="list-style-type: none"> <li>● Annual average heating/cooling COP: 3.78 (industry leading figure)</li> <li>● Annual electric fee reduced by 55% (as compared with a constant-speed compressor)</li> </ul>
<b>Resource Conservation</b>	<ul style="list-style-type: none"> <li>● Product weight reduction (270kg → 225kg)</li> <li>● An increase in the capacity of the installed compressor leads to a reduction in compressor weight (reduction of 30%)</li> <li>● Packing without Styrofoam</li> </ul>
<b>Easy recycling</b>	<ul style="list-style-type: none"> <li>● Readily recyclable PP resin used for the cabinet</li> <li>● Recycle efficiency 87%</li> </ul>
<b>Environmental Preservation</b>	<ul style="list-style-type: none"> <li>● HFC refrigerant used (zero depletion potential)</li> <li>● Lead-free solder used for main boards</li> </ul>

Chiller Units <High Performance (AH) Series>

We target miniaturization but with high performance and energy conservation

We have sharply improved the energy conservation of chiller units used as heat source machines throughout industry and in air conditioning. We have adopted a new refrigerant, R407C, that does not destroy the Ozone layer, and achieves reduced CO2 emissions, and are hence taking full consideration of environmental performance.



RHUP1800AHZ  
Registered in 2005 as Eco-products

<b>Energy Conservation</b>	<ul style="list-style-type: none"> <li>● Achieved the worlds highest level COP4.1/3.7 for full air cooling (60 horse power, 50/60Hz, at the time of rated cooling operation) investigation carried out by our company (at the end of June/2005)</li> <li>● Outstanding partial load characterization                     <ul style="list-style-type: none"> <li>- Exercises high efficiency COP5.1 ~ 4.6 (50Hz) in a partial load range of 50% ~ 70% which is considered normal operation</li> <li>- Efficiency is increased by 26% when the compressor is run at a load of 50% compared with a 100% load</li> </ul> </li> <li>● Installation of a high performance screw compressor                     <ul style="list-style-type: none"> <li>- Internal leakage is reduced by using a high precision rotor and efficiency is improved by matching the internal volumetric ratio</li> </ul> </li> <li>● Develop the Inverness fan and the long duct bell mouth                     <ul style="list-style-type: none"> <li>- Miniaturization, high air capacity and reduced power consumption all achieved with the adoption of the newly developed two sheet wings propeller fan</li> </ul> </li> </ul>
<b>Response to the Environment</b>	<ul style="list-style-type: none"> <li>● Reduce CO2 emissions by 14%, electric method and high energy conservation (Compared with our product 15 years ago)</li> <li>● Adopt a new refrigerant, R407C, which does not destroy the Ozone layer, and reduce the amount of filling by 15% (when compared with the average series value of our product of 15 years ago)</li> </ul>
<b>Resource Conservation</b>	<ul style="list-style-type: none"> <li>● Made more compact through improved layout of heat exchanger and refrigerant cycle parts, installation space reduced by 25% (when compared with our product of 15 years ago)</li> </ul>

Eco-Products (as of July 2005)

Registration year	No. of types
FY2000	20 types
FY2001	22 types
FY2002	18 types
FY2003	22 types
FY2004	23 types
FY2005	6 types
Total	111 types

Product classification	No. of registered units
Package air conditioning products	101 types
Scroll refrigerator	2 types
Chiller unit	1 types
Electric water heater	4 types
Spot air conditioner	3 types



Hitachi Group Eco-mark

Registration Example of Eco-Products

Inverter-Driven Outdoor Units  
<Hi-Inverter IXV 15 models registered>

RAS-NP50HVR  
Registered in 2003 as Eco-products



<b>Energy Conservation</b>	<ul style="list-style-type: none"> <li>● Achieved COP4.85 (2 horse power), an industry-leading figure</li> </ul>
<b>Resource Conservation</b>	<ul style="list-style-type: none"> <li>● One of the smallest and most lightweight in the industry</li> <li>● Weight 69kg (conventional model) → 47kg, volume 0.214m<sup>3</sup> (conventional model) → 0.142m<sup>3</sup></li> </ul>
<b>Recycling Ability</b>	<ul style="list-style-type: none"> <li>● Styrene foam-less packing</li> <li>● Reduce the corrugated cardboard used for packing</li> <li>● Adopt recyclable PP plastic</li> <li>● Indicate and label plastic materials</li> </ul>
<b>Environmental Preservation</b>	<ul style="list-style-type: none"> <li>● Reduce the amount of refrigerant</li> <li>● Styrene foam-less packing</li> <li>● Adopt substitute refrigerant R410A</li> </ul>

Constant Speed Type Outdoor Units for Shops  
<Highly Efficient Type 3 models registered>

RAS-P140HGR  
Registered in 2002 as Eco-products



<b>Energy Conservation</b>	<ul style="list-style-type: none"> <li>● Exceeded the reference value of green purchasing laws COP2.43 (conventional model) → 3.12 (60Hz)</li> </ul>
<b>Resource Conservation</b>	<ul style="list-style-type: none"> <li>● One of the most compact units in the industry</li> </ul>
<b>Recycling Ability</b>	<ul style="list-style-type: none"> <li>● Styrene foam-less packing</li> <li>● Reduce the corrugated cardboard used for packing</li> <li>● Adopt recyclable PP plastic</li> <li>● Indicate and label plastic materials</li> </ul>
<b>Environmental Preservation</b>	<ul style="list-style-type: none"> <li>● Styrene foam-less packing</li> <li>● Adopt substitute refrigerant R407C</li> </ul>

Spot Air Conditioner  
<Floor-Mounted Type 3 models registered>

SR-20YE1  
Registered in 2002 as Eco-products



<b>Energy Conservation</b>	<ul style="list-style-type: none"> <li>● Reduce power consumption by 30% (Compared with conventional model)</li> </ul>
<b>Resource Conservation</b>	<ul style="list-style-type: none"> <li>● Reduce product mass by 20% (the lightest in the industry)</li> </ul>
<b>Recycling Ability</b>	<ul style="list-style-type: none"> <li>● Recyclable ratio of 88%</li> </ul>
<b>Environmental Preservation</b>	<ul style="list-style-type: none"> <li>● Styrene foam-less packing</li> </ul>

Electric Hot Water Heater  
<Full-Automatic Type 1 model registered>

BEB-4670BFAWU  
Registered in 2002 as Eco-products



<b>Energy Conservation</b>	<ul style="list-style-type: none"> <li>● Reduce power consumption of a re-heating bath by 40% (by equipping with a re-heating heat exchanger)</li> </ul>
<b>Resource Conservation</b>	<ul style="list-style-type: none"> <li>● Saving an additional 1200 liters of hot water for bathing / month (by the re-heating function)</li> </ul>
<b>Recycling Ability</b>	<ul style="list-style-type: none"> <li>● Recyclable ratio of 82%</li> </ul>
<b>Environmental Preservation</b>	<ul style="list-style-type: none"> <li>● Styrene foam-less packing</li> <li>● Supply hot water by electricity without emitting polluted air</li> </ul>

A product group with various considerations made for environmental preservation; they are produced in the production site with maximum environmental preservation with measures for energy conservation, zero-emission and against global warming.

**Energy Conservation (Prevention of Global Warming)**

To prevent global warming, in accordance with the targets set by the Kyoto Protocol of Japan, we have to conserve energy and reduce emissions of greenhouse gases by 6%. In the Shimizu Works, all employees actively promote energy conservation using guidelines set by the Energy Conservation Measuring Group. The guidelines are (1) Rationalization of energy usage, (2) Introduction

of new energy conservation systems, and (3) Changing manufacturing process to conserve energy. In FY2004, we achieved a specific consumption reduction target by implementing improvements in the energy conservation aspects of air consuming equipment. This was done by incorporating inverters in pumps.

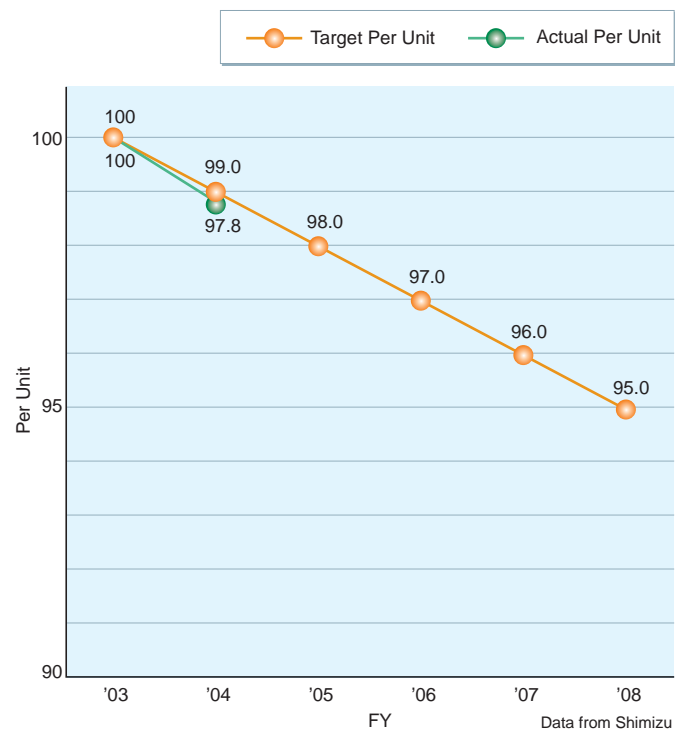
**Target of Energy Conservation**

- Amount of energy per unit of sales: Based on the FY2003 standard → 5% reduction in FY2008
- CO<sub>2</sub> emissions per unit of sales: Based on the FY1990 standard → 25% reduction in FY2010
- CO<sub>2</sub> emissions reduction: Based on the FY1990 standard → 7% reduction in FY2010

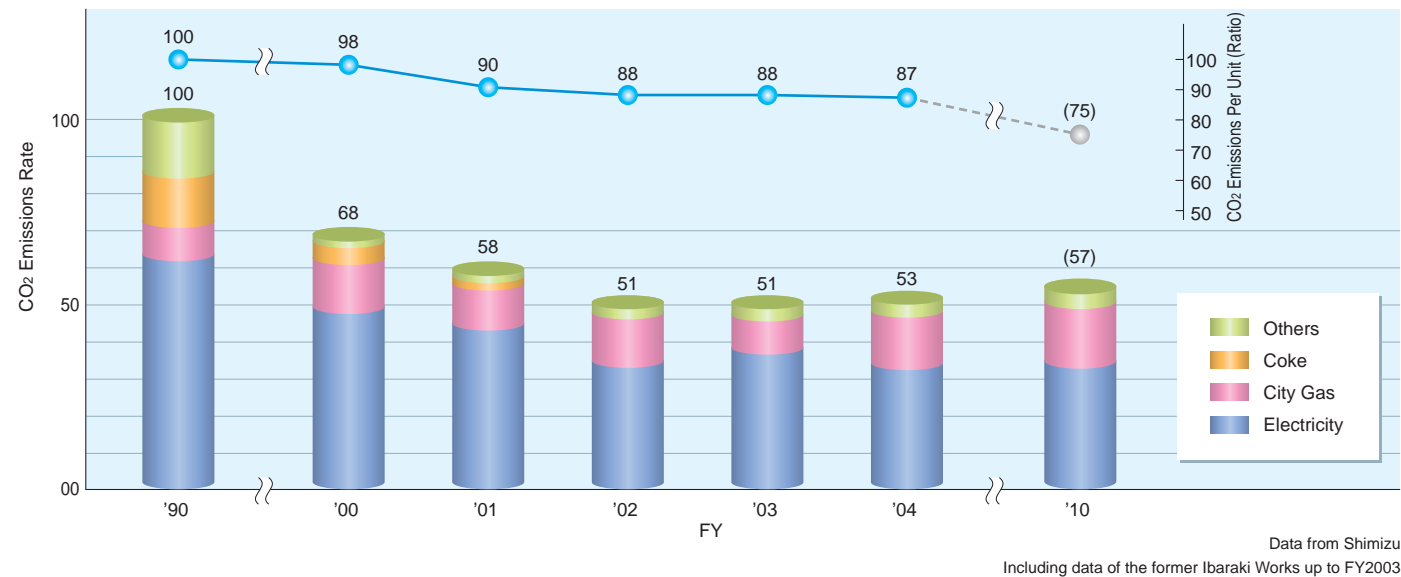
**Main Measures for Energy Conservation**

Category	Main Measures for Energy Conservation
Transformer	- Centralization of Transformer - Introduction of Energy Conservation Type Amorphous Transformer
Machine Tool	- Improvement of Linked Operation with Dust Catcher Machines - Improve the Control System of Machine Tools to Reduce Wasted Energy
Lightning	- Set Up Motion Detection Sensor Lights - Switch to Inverter Lightning in the Offices
Compressor	- Control the Number of Air Compressors - Improve Air Blow and Air Piping Loss
Pump	- Switch Fan Pumps to Inverters
Others	- Eliminate the Needless Use of Electricity

**Plan and Result of Energy / Reduction Per Unit of Sales**



**Plan and Result of CO<sub>2</sub> Emissions / Reduction in the Amount Per Unit of Sales**



**Zero-Emission**

When we received ISO 14001 Certification, we established the following environmental guideline: "To reduce industrial waste, we promote recycling and zero-emission factories". We worked to the target set by the Hitachi Group of zero-emission by FY2004 and in fact, Shimizu Works achieved this zero-emission target in FY2002, two years ahead of schedule. However, in FY2003 products such as the electric hot water heater were transferred to Shimizu Works;

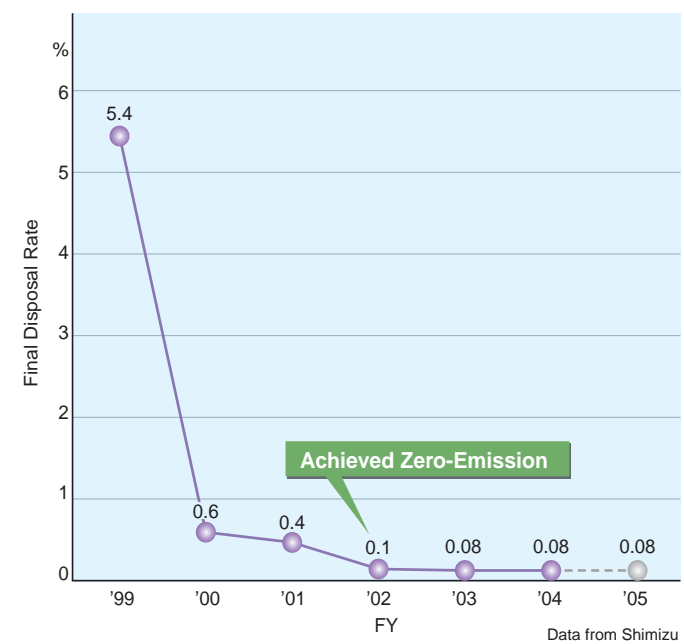
increasing the amount of industrial waste emissions to over 300t / year, of which some was reprocessed and reused. For example waste rubber was processed into an alternative to coal and chloride material has been produced from waste plastics. As a result, we reduced the final disposal volume to 4.1t / year, namely less than the FY2002 total, enabling us to maintain our status as a zero-emission factory.

**Hitachi Group Definition of "Zero-Emission"**

Final disposal rate is under 1% and final disposal volume is less than 5t / year

- Final disposal rate = Final disposal volume / Amount of emissions
- Final disposal volume = Disposal without treatment + Disposal after intermediate treatment

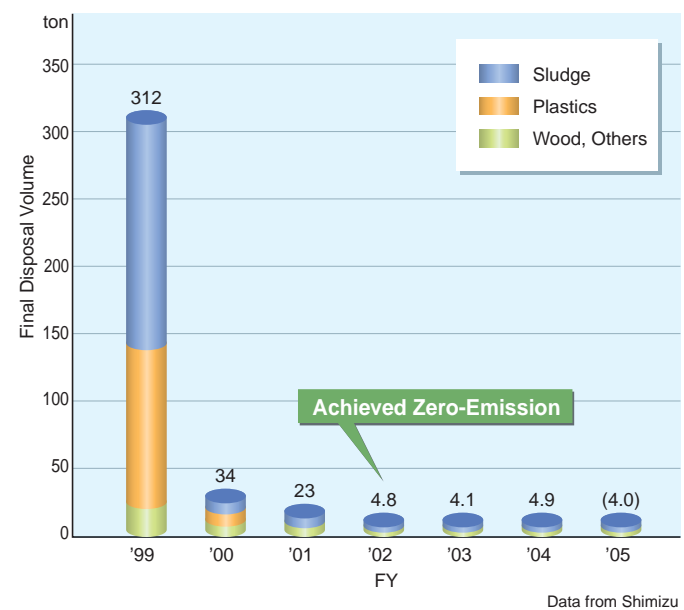
**Final Disposal Rate**



**Main Measures to Reduce Industrial Wastes**

Category	Main Measures to Reduce Industrial Wastes
Sludge	Formation of Cement Materials from Waste Water Treatment Sludge, Formation of Roadbed
Waste Oil	Reuse as Reclaimed Oil
Plastic	Use in the Recycling Process at the Steel Works Blast Furnaces Coal Alternative from Cement Calcination, (Coal Alternative from Waste Rubber) Waste Plastic Refined and Reused as Reclaimed Oil Chloride Materials from Vinyl Chloride System Waste Plastic
Paper	Improved Recycling Rate by Detailed Waste Classification Computer-controlled Emissions by promoting Office Automation Insulation Material Exfoliate Paper to Recycled Paper Materials
Wood	Recycled into Paper Materials, Formation of Plywood Control Use in Factories Waste Oil, Paint Adherence Wood Chips for Thermal Recycling Wood Cuttings in Factories used for Tree Fertilizers in Factories
Glass	Formation of Glass Cullet Materials

**Final Disposal Volume**



**My ECO**



My section is mainly in charge of the assembly of air conditioning products. In the production site, the major focus is placed on reducing Freon gas leakage into the atmosphere and minimizing the consumption of electrical energy consumption to protect the ozone layer and prevent global warming. Specifically, we perform regular maintenance of the commercial testing couplers (cause of Freon leakage) and make it a rule to turn lights OFF out of hours. As an activity proceeding all around us, we are proceeding with the sorted collection of waste, and this is now filtering through to employees as quite natural behavior.

Takahiro Nishigaya  
Air Conditioning Product Manufacturing Section



**Chemical Substances Management**

Hitachi's chemical substances management system CEGNET is responsible for monitoring and also trying to reduce the use of chemical substances used in the manufacturing process and that could possibly effect the environment and human health.

**Prohibited Chemical Substances - 103 substances specified by Hitachi Group**

We do not use any prohibited chemical substances during the production process.

**Specified Chemical Substances for Reduction - 274 substances specified by Hitachi Group**

- 30% reduction until in FY2005 (based on the FY2000 Standard)
- Shimizu Works uses 12 of the chemical substances specified for reduction.
- We use (Xylene, HCFC-22, HFC-134a, Toluene, and others)

**Report to PRTR (units: kg)**

Contents of Report in FY2003 and FY2004 (1t or more)

		Toluene		Xylene		HCFC-22	
		2003	2004	2003	2004	2003	2004
	Volume Handled	2,144	2,786	6,633	7,160	54,824	52,968
Emission	Into Air	2,114	2,721	6,547	7,051	880	417
	Into Public Areas and Sewers	0	0	0	0	0	0
Transfer	as Waste	30	65	30	109	0	0
	Externally	0	0	0	0	81	681
Others	Amount of Consumption	0	0	56	0	53,863	51,638
	Reprocessed and Eliminated	0	0	0	0	0	32
	Recycled	0	0	0	0	0	200

\* By law the target of the report was changed from 5t/year to 1t/year as stated by the PRTR in FY2003

Data from Shimizu

**ECO COLUMN**



Hitachi Air-Conditioning and Refrigerating Products (Guangzhou) of China obtained the Environment ISO certificate in June 2004. Furthermore, following an inspection, we were granted both a quality ISO and Labor Health and Safety Certificate.

Recently in China, where environmental regulations are being strengthened, the acquisition of quality and labor health/safety certificates, along with the Environment ISO certificate, has taken on increasing significance. This has had a substantial impact on enterprises in the neighboring districts and provided Hitachi Air Conditioning's affiliated companies and China-based sites with useful information for the future.

**Liu Shiling**  
Quality Assurance Department  
Hitachi Air-Conditioning and Refrigerating Products (Guangzhou)

**Pollution Control Measures**

In our domestic and overseas manufacturing sites, we operate a self-imposed standard stricter than Japanese National Regulations to reduce the environmental impact.

We regularly monitor water, air, noise, vibration and odors to promote a nature-friendly factory.

**Water Pollution Prevention**

There are 21 water-related law notification facilities.  
Implementation of drainage analysis every 2 weeks (bimonthly)

Results of Measurement in FY2004 (The Water Pollution Control Law) Unit: PPM for others than PH

	PH	COD	SS	Copper	Iron
Regulation	5.8~8.6	25	70	3.0	10.0
Self-Imposed Standard	6.2~8.2	15	30	0.9	2.45
Result (peak level)	8.1	15.2 *1	6.0	0.3	0.54

\*1 Data exceeding the voluntary standard values was obtained at the drainage outlet in the plant. Monitoring is presently under way. Data from Shimizu

**Air Pollution Prevention**

There are 10 air pollution control law notification facilities.  
Implementation of smoke analysis every 6 months (twice a year)  
Measures to Reduce Air Pollution  
- Change boiler fuel (from refined kerosene to city gas)  
- Exclusion of energy loss by recording boiler operation

Results of Measurement in FY2004 (Air pollution control law)

		A Section	B Section	C Section
Dust (g/m <sup>3</sup> N)	Regulation	0.10	0.10	N/A
	Self-Imposed Standard	0.01	0.05	0.15
	Result (peak level)	ND*1	ND*2	ND*3
NOx (cm <sup>3</sup> /m <sup>3</sup> N)	Regulation	150	150	N/A
	Self-Imposed Standard	75	75	90
	Result (peak level)	69	80*4	70

Data from Shimizu

ND\*1: less than the detection limit (0.06)  
ND\*2: less than the detection limit (0.23)  
ND\*3: less than the detection limit (0.54)  
\*4: exceeds the reference value in terms of soot produced by combustion (Countermeasure taken on the spot)

**Noise pollution prevention**

There are 374 noise-related facilities.  
Implementation of noise measurement at 12 points on the factory boundary (twice a year)

**Vibration Pollution Prevention**

There are 136 vibration-related facilities.  
Implementation of vibration measurement at 12 points on the factory boundary (annually)  
→ Under the self-imposed standard (less than the detection limit)

**Smell Pollution Prevention**

Implementation of periodical measurement at 7 points on the factory boundary (annually)  
→ Under the self-imposed standard (less than the detection limit)

**My ECO.....**



In our section, environmental preservation began with elimination of the trash box provided for each member and all members are engaged in thoroughly sorting items for disposal.

When left mixed, waste remains waste. When sorted, however, it can be recycled. Individual separation may be considered troublesome, but will be no hassle at all when we perform it as a matter of course. Separated disposal is the first step toward preserving the global environment.

**Yoshimi Fukazawa**  
Accounting Department

## GLOBAL ECO

Hitachi Air Conditioning Systems has factories in many parts of the world; promoting environmental activities with regional situations in mind. For the future and in the interests of global protection, each member of this global enterprise is acting with a common awareness of environmental measures.

**Hitachi Air Conditioning Products Europe S.A.**

Corporate Name: Hitachi Air Conditioning Products Europe S.A.  
 Head Office: RONDA SHIMIZU, 1-Polig. Ind. Can Torrella, 08233 Vacarisses (Barcelona), Espana  
 Incorporated: November 1991  
 Main Products: Package Air Conditioning, Chiller Units



**Hitachi Air-conditioning & Refrigerating Product (Guangzhou) Co., Ltd.**

Corporate Name: 广州日立冷機有限公司  
 Head Office: 广东省广州从化市鳌头镇棋杆  
 Incorporated: March 1998  
 Main Products: Water Cooling chillers and Air Cooling Chillers and Package Air Conditioning



**Hitachi Compressor Products (Guangzhou) Co., Ltd.**

Corporate Name: 广州日立压缩机有限公司  
 Head Office: 广东省广州从化市鳌头镇棋杆  
 Incorporated: October 2003  
 Main Products: Scroll compressor



**Qingdao Hisense Hitachi Air-Conditioning Systems Co., Ltd.**

Corporate Name: 青岛海信日立空调系统有限公司  
 Head Office: 中国青岛经济技术开发区团结路18号海信信息产业园 (266510)  
 Incorporated: January 2003  
 Main Products: Package Air Conditioning



**Hitachi Air Conditioning Products Brazil S.A.**

Corporate Name: Hitachi Ar Condicionado do Brasil S.A.  
 Head Office: São José dos Campos City-São Paulo, State-Brasil  
 Incorporated: April 1972  
 Main Products: Package Air Conditioning and Chiller Units



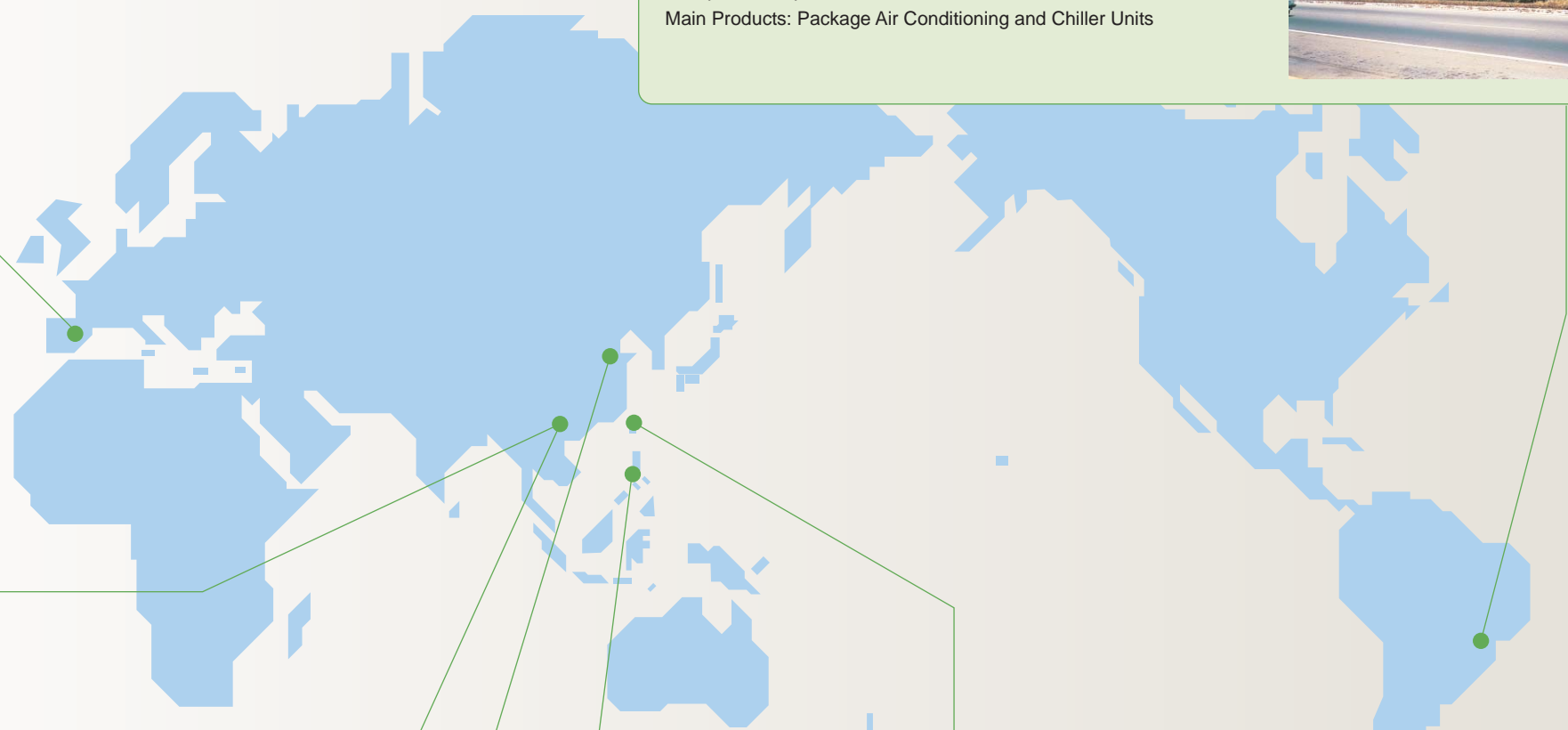
**Taiwan Hitachi Co., Ltd.**

Corporate Name: 台湾日立股份有限公司  
 Head Office: 桃園縣蘆竹鄉內厝村內溪路29號  
 Incorporated: April 1965  
 Main Products: Room Air Conditioning, Package Air Conditioning, Chiller Units, Refrigerator, Dehumidifier and Air Cleaner



**Hitachi Industrial Machinery Philippines**

Corporate Name: Hitachi Industrial Machinery Philippines Corp.  
 Head Office: Peza Drive First Cavite Industrial Estate Dasmarina Cavite Philippines  
 Incorporated: May 1995  
 April, 2004; Transferred Large Tonnage Chiller Division from Hitachi Industries to Hitachi Air Conditioning Systems  
 Main Products: Small Absorptive Cooling and Heating Machine, Turbo

Hitachi Air Conditioning Systems takes a leading position in environmental education so that members in each job site or at each level can implement specific environmental preservation actions. We also provide more professional programs for environment-related workers and are engaged positively in high-level environmental activities as well as emergency responses.

**Environmental Education**

The awareness and practice of every employee is important in order to promote environmental preservation. Also important for continuous improvement are repeated training and exercises.

As part of the environmental management program to enhance awareness, we hold lecture meetings during an annual environmental event held in June every year on energy conservation and waste in the work place and home, in addition to training at each level. Furthermore, we register employees who are engaged in work that may influence the environment as "Environment-Related Workers." We provide them with the necessary education as well as exercises simulating emergency cases.

**Environment-Related License Holders**

We nurture and educate environment-related license holders like Pollution Control Managers with highly specialized knowledge. Our domestic sites have the legally required number of environment-related license holders.

**Training programs and Target Employees**

No	Program	Target Employees
1	General Employee's Program	All Employees, New Employees (Including Transfers and Loan Employees)
2	Manager's Program	More than General Managers
3	Administrator's Program	Managers, Chiefs, Each Site Leaders
4	Environment-Related Worker's Program	Environment-Related Workers (Design, Production Engineering, Direct Operation and Analysis)
5	Environment-Related License Holder's Program	Environment-Related License Holders, Employees who Schedule License Acquisitions
6	Internal Auditor's Program	Internal Environmental Auditors
7	Affiliated Companies Employee's Program	Affiliated Companies' Employees in Each Site and Employees of the Subcontracting Companies

**e-Learning (Environmental Education System)**

We have an e-learning environmental education system, as a tool of environmental education, accessible by any individual employees during their free time on the Internet. Activities in FY2004 includes the introduction of the English version of e-learning in overseas factories to promote its utilization.



e-Learning screen

Starting with immediate daily matters relating to the global environment. We collaborate with the residents in the vicinity of our plants and production sites aiming to preserve the environment.

We receive many observation groups and hold information exchange meetings with the stakeholders to help them understand about our environmental preservation activities. In the Shimizu Works, we explain about our environmental preservation activities such as cleaning around the factories

and disclose air and water measurement data to the local communities. Also in Taiwan Hitachi and Hitachi Air Conditioning Products Brazil, our environmental activity is not limited to the factories, but also includes promoting rich exchanges with the local communities and administration.

**The holding of a plant tour and information gathering with the chairperson of the residents' association**



The Shimizu Production Headquarters holds an annual information gathering session with the neighboring chairperson of the residents association while providing them with the opportunity to participate in the plant tour. Taking this opportunity, we explain the environmental impact state and environmental activities in plants in order to elicit their understanding. During the information exchange meeting at this year's gathering, there was no improvement request presented concerning the environment. During the environment-related facilities tour in the plant, participants were interested in discharge into rivers around the plant and asked many questions concerning the wastewater plant facilities and management method.



**Distribution of flower seeds**  
We distribute flower seeds during the monthly environmental event.

**Paper pressing course**  
A paper pressing course was held using milk cartons for employees' families.



**Activities in overseas plants**



Information exchange meeting with the personnel in charge of the environment of local enterprises in Hitachi Air Conditioning Products Brazil S.A.

**Continuous enforcement of cleaning activities in the local area**



Cleaning activity in the notable site, Miho Beach, in Shizuoka City



Annual cleaning activity around Shimizu Works



Environmental learning opportunity provided to local elementary school pupils in Taiwan Hitachi

Our environmental activities in various fields and regions are highly rated. We will endeavor to be a company harmonizing with the environment and not rest on our laurels.

**Awards History of Hitachi Air Conditioning Systems**

- August, 1997 Acquired ISO Certification in Taiwan Hitachi Co., Ltd.
- October, 1997 Acquired ISO Certification in Shimizu Works
- November, 1998 Acquired ISO Certification in former Ibaraki Works
- May, 1999 Acquired ISO Certification in Hitachi Air Conditioning Products Europe S.A.
- May, 1999 Prize from Shizuoka Prefecture Governor (Proper Treatment of Industrial Waste)
- May, 1999 Agency for Natural Resource and Energy Director General's Prize (ECO-ICE mini)
- May, 2000 Special Prize from Shizuoka Prefecture CFC Recovering Business Association
- June, 2000 Contribution Prize from former Shimizu City Environmental Preservation Cooperation Society (Award by local contribution and regular volunteer activities)
- February, 2001 Chairperson's Prize from Energy Conservation Center, Japan (Gas Absorption Type Large Temperature Difference System)
- January, 2002 Minister of Economy, Trade and Industry Prize (CO<sub>2</sub> Heat Pump Hot Water Supply Machine)
- May, 2003 Contribution Prize from Shimizu Environmental Preservation Cooperation Society (Achievement of zero-emission factory)
- May, 2003 Technology Prize from JSRAE\*1 (Energy Conservation and Low-Noise Inverter Package)
- December, 2003 Industrial Waste Treatment and Recycling Excellent Factory Grand Prize in Taiwan Hitachi
- February, 2004 Excellent Energy Conservation Chairperson's Prize from Japan Machine Industry Union (Hi inverter IVX)
- June, 2004 Acquired Environmental and Quality ISO and OHSAS 18001 certificates in Hitachi Air-Conditioning and Refrigerating Products (Guangzhou)

\*1 JSRAE: Japan Society of Refrigerating and Air Conditioning Engineers

Systems  Products  Activities

**ECO COLUMN**



**Releasing of firefly larvae**

In the Shimizu Production Headquarters, about 50 firefly larvae were released in streams flowing around the plant as a continuation of the rich natural environmental protection activities from the previous year.

Firefly larvae can live only in clean water and are quite sensitive to environmental changes. We try to keep the environment around streams untouched as far as possible and do our best to catch thiaridal snails, that release larvae from the storm water ditches inside the plant, as much as possible.

The plant is opened to local residents to enjoy fireflies when the season comes.

Kenji Yamamoto  
Environment Management Group

We have established a network of nationwide business and service bases in Japan so we can handle all our customers' requests and problems rapidly and with care and attention to detail at any time.

**Company Profile**

Corporate Name: Hitachi Air Conditioning Systems Co., Ltd.  
 Head Office: NEW PIER TAKESIBA South Tower, 16-1, Kaigan 1-chome, Minato-ku, Tokyo 105-0022 JAPAN  
 Incorporated: November 26, 1998  
 Capital: 10 Billion Yen (As of March 31, 2005)  
 Representative: Naozumi Ishizu, President and Director  
 Number of Offices and Factories:  
 Domestic Offices and Factories: 35 / Domestic Affiliated Companies: 9 / Overseas Affiliated Companies: 10  
 Main Products: Air Conditioning Control System, Freezing and Refrigerating Control System, Clean Air System, Biological Control System, Environmental Test Equipment, House Use Cooling, Heating and Hot Water System  
 Net Sales: 102.2 Billion Yen (FY2004)  
 Number of Employees: 1,694 (As of March 31, 2005)

NEW PIER TAKESIBA South Tower, 16-1, Kaigan 1-chome, Minato-ku, Tokyo 105-0022 JAPAN

**Headquarters, Sales Divisions, Branches, Marketing Offices**

- Headquarters** Tel: 81-3-6403-4555  
NEW PIER TAKESIBA South Tower, 16-1, Kaigan 1-chome, Minato-ku, Tokyo 105-0022 JAPAN
- International Operation Division** Tel: 81-3-6403-4541  
NEW PIER TAKESIBA South Tower, 16-1, Kaigan 1-chome, Minato-ku, Tokyo 105-0022 JAPAN
- Hokkaido Branch Office** Tel: 81-11-717-5301  
3-chome, Kita Kujo, Nishi Kita-ku, Sapporo 060-0809
- Tohoku Branch Office** Tel: 81-22-266-1321  
9-7 Futsukamachi Aoba-ku, Sendai 980-0802
- Fukushima Marketing Branch** Tel: 81-24-921-5550  
5-15 Midorimachi, Koriyama 963-8023
- Kanto Branch Office** Tel: 81-3-6403-4510  
NEW PIER TAKESIBA South Tower, 16-1, Kaigan 1-chome, Minato-ku, Tokyo 105-0022 JAPAN
- Large Tonnage Chiller Sales Division** Tel: 81-3-6403-4500  
NEW PIER TAKESIBA South Tower, 16-1, Kaigan 1-chome, Minato-ku, Tokyo 105-0022 JAPAN
- Hokuriku Branch Office** Tel: 81-76-429-4051  
627-3 Kurosaki, Toyama 939-8214
- Chubu Branch Office** Tel: 81-52-251-0371  
13-20 3-chome Sakae Naka-ku, Nagoya 460-0008
- Kansai Branch Office** Tel: 81-6-6531-9111  
10-10 1-chome Nishihonmachi Nishi-ku, Osaka 550-0005
- Chushikoku Branch Office** Tel: 81-82-240-6151  
2-31 3-chome Otemachi Naka-ku, Hiroshima 730-0051
- Shikoku Marketing Branch** Tel: 81-87-833-8701  
1-5 1-chome Hanazono-cho, Takamatsu 760-0072
- Kyushu Branch Office** Tel: 81-92-561-4851  
9-17 4-chome Shimizu Minami-ku, Fukuoka 815-0031

**Environmental Solution Division**

Tel: 81-6-6531-9113  
10-10 1-chome Nishihon-cho Nishi-ku, Osaka 550-0005

**Factories**

**Shimizu Works** Tel: 81-543-34-2081  
390 Muramatsu Shimizu-ku, Shizuoka 424-0926

**Affiliated Companies**

- Tokyo Hitachi Air Conditioning and Refrigeration Co., Ltd.
- Osaka Hitachi Air Conditioning and Refrigeration Co., Ltd.
- Kyushu Hitachi Air Conditioning Co., Ltd.
- Kitakanto Hitachi Air Conditioning Co., Ltd.
- Niigata Hitachi Co., Ltd.
- Reinetsu Engineering Co., Ltd.
- Hitachi Air Conditioning SE Co., Ltd.
- Kanagawa Hitachi Air Conditioning Co., Ltd.
- Shizuoka Hitachi Air Conditioning and Refrigeration Co., Ltd.

**Technical Training Facilities**

- Technical Training Facilities (Shimizu)** Tel: 81-543-35-4320  
390 Muramatsu Shimizu-ku, Shizuoka 424-0926
- Technical Training Facilities (Kyushu)** Tel: 81-92-561-4854  
9-17 4-chome Shimizu Minami-ku, Fukuoka 815-0031

**Service Engineering Centers**

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